

INTERSECTIONAL STATUS BELIEFS TRANSFER
IN EMPLOYEE REFERRAL PROCESSES

by

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ABSTRACT

AMANDA CELESTE SARGENT. Intersectional Status Beliefs Transfer in Employee Referral Processes
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Using employee referral programs is generally considered a best practice for organizations seeking top quality talent. However, research on whether or not these programs result in positive outcomes equally for all applicants is mixed. To date, most research examining demographic effects in employee referral programs focuses on how status characteristics of *applicants* (such as race and gender) can result in unequal outcomes (such as being hired or promoted) for applicants with different identities. Little is known, however, about the influence of *referring employee* status characteristics during hiring processes and whether or not decision makers' biases toward certain referring employees may lead to different hiring process outcomes for the applicants they refer. Using status characteristics theory and the theory of status beliefs transfer, hypotheses were tested regarding how status characteristics of referring employees, namely race and gender, might lead to a transfer of evaluators' status beliefs from a referring employee to their referred applicant, thereby affecting subsequent applicant evaluations. Four hundred and thirty-seven U.S. individuals with hiring experience served as participants for an online résumé evaluation experiment where the only difference between résumés was the name of a referring employee noted at the top of the document. Referring employee names were selected via pre-test to signal the referrer was either a White man, Black man, White woman, or Black woman. Results of quantitative analyses revealed a statistically significant difference in average ratings of competence, recommendations for interviews, and starting salary between referred and non-referred

applicants, with participants rating referred applicants more favorably. In addition, a statistically significant effect of race, but not gender, was found in average ratings of competence, commitment, interview recommendations among referred applicants. Specifically, employees referred by Black individuals tended to receive higher average outcome ratings compared to employees referred by White applicants. Additional qualitative thematic analysis of open response data revealed intersectional evaluative differences among applicants referred by employees with different combinations of race/gender statuses. Taken together, and viewed through the lens of intersectional theories, findings suggest evaluations of applicants may have been influenced by a status beliefs transfer process whereby the intersectional status characteristics of referring employees were transferred onto and used to evaluate the applicants they referred. Implications for theory, practice, and future research are discussed.

Keywords: gender and race bias, intersectionality, status characteristics, employee referrals

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CHAPTER 1: INTRODUCTION

Despite promises from leading organizations to make enhanced diversity and inclusion a primary goal (e.g., Stevens, 2020), women and minorities continue to be over-represented in low-status and low paying jobs in the United States and under-represented in powerful leadership positions (Blau et al., 2013; Cook & Glass, 2014; Duffy, 2007; Mandel & Semyonov, 2016; Powell & Butterfield, 2002). These trends persist despite increases in educational attainment for women and minority groups (del Río & Alonso-Villar, 2015; Mandel & Semyonov, 2016). The concentration of women and minorities in low-status positions contributes to other inequalities these groups experience, such as lower income, wealth, and health compared to men and Whites (Assari, 2018; Duffy, 2007; England et al., 2020; Lopez et al., 2021). Although a variety of mechanisms contribute to women's and minorities' lower labor market positions, scholars have identified that unequal hiring practices and outcomes are key mechanisms that perpetuate gender and racial inequality in the workplace (Kmec, 2006; Quillian et al., 2017; Taber & Hendricks, 2003).

The hiring process is a critical component of organizational operations whereby potential employees are selected for and employed in positions (Society for Human Resource Management, 2019b). Hiring processes serve to control individual entry into an organization, thus hiring-related decisions determine who is allowed to move forward into employment and who is dismissed. Consequently, hiring decisions also determine who gains access to wages, benefits, prestige, and upward social, professional, and financial mobility (Tomaskovic-Devey, 1993; Villegas et al., 2019). Accordingly, bias, and resultant discrimination in hiring, are important topics to both scholars and practitioners in a variety of social science disciplines.

An abundance of studies have found that gender and racial biases, specifically, can shape employer decisions about job applicants and negatively impact women's and minorities' chances of being interviewed or hired (Dreher et al., 2011; Kmec, 2006; Kmec et al., 2010; Pedulla, 2014; Powell & Butterfield, 2002; Taber & Hendricks, 2003). Status characteristics theory (Berger et al., 1972; Ridgeway, 2014) offers some possible explanations for why women and minorities may be disadvantaged during the hiring process. Status characteristics theory asserts that shared societal beliefs about the relative competence or value of certain identity groups over others in a given context (called "status beliefs") can guide and shape individual behavior (Berger et al., 1972; Ridgeway, 2014). In workplace contexts, men and Whites generally hold higher status and are assumed more competent than women and minority racial groups (i.e. Blacks, Latinos, Asians, etc.; Ridgeway, 2018). Thus, hiring managers may favor men and Whites during the hiring process.

Importantly, the influence of status characteristics—and the advantages experienced by majority groups—during the hiring process may vary depending on the hiring practices used by organizations. For example, previous research has shown that hiring managers' decisions are more likely to be influenced by explicit or implicit racial and/or gender biases when hiring practices are ambiguous, unstructured, or discretionary (Acker, 2006; Nieva & Gutek, 1980; Powell & Butterfield, 2002; Ridgeway, 2014). Ambiguity in hiring processes, in combination with high levels of decision maker discretion, can provide opportunities for unconscious biases to affect hiring evaluations (Heilman & Haynes, 2008; Nieva & Gutek, 1980). One such hiring practice characterized

by varying levels of ambiguity across organizations, and therefore also having potential to be influenced by status beliefs, is employee referral programs.

Employee referral programs, which encourage current employees to refer people they know from their personal networks to open positions inside their workplace, are ubiquitous in American organizations and are typically considered highly successful in supplying organizations with quality applicants (Breaugh, 2013; Schlachter & Pieper, 2019). Indeed, applicants hired via employee referral have been shown to report lower turnover intentions (Schnake, 2016) and higher levels of job satisfaction post-hire (González & Rivarés, 2018) than non-referrals. Thus, it is not surprising that referred individuals tend to experience more positive hiring and promotion outcomes than non-referred individuals (Brown et al., 2016; González & Rivarés, 2018; Merluzzi & Sterling, 2017; Yakubovich & Lup, 2006). Employee referral practices can be highly influential to decisions to interview and hire individuals (Breaugh, 2013; Schlachter & Pieper, 2019), and the institution of employee referral programs is commonly considered a human resources best practice in organizations (Pieper et al., 2018; Piotrowski & Armstrong, 2006; Schlachter & Pieper, 2019).

What is less clear in the referrals literature is whether and how employee referral practices may contribute to unequal evaluations of job candidates. Referral practices vary in structure and oversight in organizations, as no one way to conduct employee referral programs exists (SHRM, 2019). Thus, organizations may vary from having highly structured referral programs where all employee referrals are given equal weights in a mathematical formula during the hiring process, to simply leaving it up to the hiring manager to decide whether or not one referring employee is better than another and rating

applicants accordingly. Employee referral programs may thus have both structural ambiguity and varying levels of decision-maker discretion, making them susceptible to the influence of implicit or explicit biases (Heilman & Haynes, 2008; Nieva & Gutek, 1980).

While some discrimination and inequality research related to employee referral practices does exist, findings have been mixed and inconclusive as to whether these practices help or disadvantage women and minorities in hiring processes (Powell & Butterfield, 2002; Silva, 2018; Taber & Hendricks, 2003). Furthermore, most studies examining status characteristics and employee referral practices have focused on direct effects of *applicant* race or gender on hiring outcomes (Beugnot & Peterlé, 2018; Merluzzi & Sterling, 2017; Silva, 2018; Taber & Hendricks, 2003), neglecting influences of the *referring employee's* status characteristics. If the status characteristics of referring employees trigger decision makers' race or gender biases in similar ways to applicant status characteristics, it is possible certain applicants will benefit more, and others less from employee referral programs. Further, because employees likely tend to refer applicants who are similar to them in race and/or gender given homophily in personal networks (McPherson et al., 2001; Taber & Hendricks, 2003), certain applicants may be doubly advantaged or doubly disadvantaged if decision makers' race/gender biases are triggered in the hiring process.

Due to the potential for status characteristics of referring employees to bias hiring processes, it is important to identify the mechanisms by which the status beliefs (and resultant explicit or implicit biases) of decision makers might result in unequal hiring process outcomes for applicants. The current study thus investigated the question "Do

status characteristics of referring employees produce unequal evaluations of applicants in the hiring process?” A mixed-methods experimental design was used with a U.S. sample of adults with hiring experience to examine the effect of referral status (i.e., being referred or not referred) and referring employee’s gender, race, and gender-race combination on evaluations of applicants during the initial stages of the hiring process (i.e., résumé review). Status characteristics theory (Berger et al., 1972) and its nascent theoretical extension, theory of status beliefs transfer (Tak et al., 2019) were used as foundational frameworks to design hypotheses and an intersectional lens was applied to interpret findings.

The current study addresses the dearth of research on the effects of referring employee status characteristics by conducting an online experiment examining differences in evaluations of hypothetical job applicants referred by White and Black men and women. The decision to confine the scope of evaluations to applicants referred by Black and White men and women (rather than including other racial minority referring employees) was made as, in the United States, Black and White are generally considered the anchors of race differences (Bonilla-Silva, 2015). This construction of the race continuum has persisted in the United States since times of slavery and continues to manifest in significant anti-Black racism and racial discrimination today (Bonilla-Silva, 2015; Lee et al., 2019; Quillian et al., 2017). Research has shown Black people continue to experience higher levels of racism compared to other racial groups, as well as greater racial discrimination in hiring processes (Quillian et al., 2017). Thus, constraining available racial status characteristics for referring employees to Black and White is both

socially relevant and may have significant utility in a study examining subtle effects of race, gender, and their interactions on applicant evaluations.

The major contributions of this research are fourfold. First, this research extends employee referral research beyond the influence of *applicant* status characteristics and centers instead on *referring employee* status characteristics and their potential to influence evaluations of job candidates in early stages of the hiring process. This study is one of the first to focus on referring employees' status characteristics influences on hiring, thus potentially opening up a novel research direction for management and diversity, equity, and inclusion scholars.

Second, this study extends theoretical knowledge related to both status processes and bias in hiring by examining whether and how status beliefs may transfer between two people, specifically, from a referring employee onto a referred applicant. Recent theoretical work on status beliefs transfer theory (an extension of status characteristics theory) has suggested the possibility of a status beliefs transfer process, whereby one individual's status beliefs about another *person* may lead them to evaluate the *products* that person makes consistent with the status they afforded the maker (Tak et al., 2019). Status beliefs transfer theory is a relatively new theory and has yet to be tested extensively in terms of transfer among people. In reviewing the status characteristics and status beliefs literature, only one study was found examining potential person-to-person status beliefs transfer (Overton, 2021), and this study explored transfer between coworkers. The current research thus extends status beliefs transfer theory by examining whether status beliefs about one person (a referring employee) might transfer onto other

people (the applicants they refer) in a hiring context to create unequal applicant outcomes.

Third, this research allows for causal inferences to be made about whether referring employees' characteristics can influence hiring process outcomes. Much research in the social sciences focuses on observational designs to test hypotheses, but these designs are criticized for their high potential for endogeneity bias (Antonakis et al., 2010). In testing hypotheses with an experimental design, the proposed study will contribute meaningfully to the existing literature on referrals and status in the workplace by providing insight into the causal relationship between referring employees' status characteristics and evaluations of job applicants.

Finally, as an initial test of the theory of status beliefs transfer, findings from this research may provide validation for this theory's propositions, which may then open up new avenues of research. Novel research directions uncovered through this work may lay the foundation for future theory building and testing in addition to providing helpful insight that may inform organizational practices. Given the often hidden and systemic nature of gender and race bias (Acker, 2006; Correll et al., 2017; Nieva & Gutek, 1980; Ridgeway, 2018), organizations may struggle with designing actionable strategies to increase diversity and inclusion that produce meaningful and enduring results (Dobbin & Kalev, 2016). Research has shown that structural approaches to increasing diversity and inclusion (that is, strategies that target specific policies, processes, and practices in organizations) are more effective at producing desirable long-term effects (Chang et al., 2019; Hirsh & Cha, 2017; Sojo et al., 2016). The findings from the current study can

provide insights about a mechanism (status beliefs transfer) with the potential to have real impact on individual hiring outcomes via employee referral processes.

CHAPTER 2: THEORETICAL FRAMEWORK

Referring Employee Status Characteristics and Status Beliefs Transfer

Status Characteristics and Status Beliefs

This research investigates the influence of referring employees' status characteristics on evaluations of job applicants in the early stages of the hiring process. To understand how referring employees' status characteristics might influence applicant outcomes, an understanding of how status characteristics may operate in hiring situations must first be established. Status characteristics theory (SCT) argues certain identifying characteristics, like race and gender, are associated with certain status positions within our society (Berger et al., 1972; Ridgeway, 2018). These status characteristics, which are usually visible or easily ascertained when one person encounters another, trigger peoples' beliefs about an observed person's competence and fit for the performance of particular activities (such as work or childcare; Eagly & Karau, 2002; Ridgeway, 2014). These beliefs, called "status beliefs" are "cultural beliefs that people presume are widely held in the[ir] society that associate greater social esteem and competence with people in one category (e.g., men or Whites) than another category (women, people of color) of a group distinction" (Ridgeway, 2018, p. 301).

Status beliefs have particular power to influence behavior in situations where little other information is known about a person other than their status characteristics (Ridgeway, 2014, 2018). Status beliefs are also more likely to bias decisions when the decision-making environment is ambiguous and lacks structures that ensure equal treatment of people across groups (Ridgeway, 2014, 2018). Hiring situations in organizations may reflect both of these conditions. First, decision-makers often engage in

a résumé evaluation process to initially screen applicants wherein they have limited information about applicants beyond what is ascertainable from their résumé (Wright et al., 2011). Second, to the degree decision-makers are given discretion in their choice to select an applicant for interview or hire, status beliefs triggered by the applicant's disclosed or inferred gender or race (by applicant's name or affiliations listed on a résumé, for example) may bias decisions (Acker, 2006; Bertrand & Mullainathan, 2003; Derous et al., 2012; Ridgeway, 2014).

Status Beliefs Transfer

Extending status characteristics theory, some researchers have begun to investigate whether an evaluator's status beliefs about a person can transfer onto something the observed person makes or produces (Tak et al., 2019). In Tak et al.'s (2019) experimental investigation of this concept, which they called "status beliefs transfer", it was found that products made by men and women were judged differently depending on the gender of the producer and the gender-type of the product (e.g. beer = masculine-typed, cupcakes = feminine-typed). Tak et al. (2019) presented products for judges to sample and asked them to rate the quality of the product. They told the judges, however, that certain items were made by men, and others were made by women, even though, in reality, every item was exactly the same. Judges rated masculine-typed products (beer) they were told had been created by women lower than those supposedly created by men. Notably, the same was not true for feminine-typed products (cupcakes); there was no real difference in judges' ratings for men's versus women's cupcakes. Tak et al.'s (2019) experiment provided evidence that gender status beliefs about a person's competence in a gender-salient context (e.g., masculine trades versus feminine trades)

could be transferred onto the products they make, causing the products to be judged differently depending on the producer's gender and especially in a masculine context.

If status beliefs about a person can be transferred onto the material products they make, might they also be transferred onto the people they recommend for jobs? Though not typically grounded in status characteristics theory, prior research on stigma-by-association suggests status beliefs about one person can be transferred onto a different person who is affiliated with them, as is the case with a referring employee and the applicant they refer (Goffman, 2009; Hernandez et al., 2016; Kulik et al., 2008). *Stigma*, as defined by Goffman (2009) refers to “an attribute that is deeply discrediting” (p.3), in a given context. Applying this idea of stigma to status characteristics, there are contexts in which either race or gender may become a discrediting attribute, such as in the hiring of an individual for a job given societal associations of White men's higher competence and commitment in work contexts (Eagly & Karau, 2002; Ridgeway & Kricheli-Katz, 2013; Rudman & Glick, 2001).

Stigma-by-association theory and research further suggests negative status beliefs associated with a discrediting attribute of one individual in a given context may be transferred onto an affiliated individual in such a way that the affiliated individual, *even if they do not possess the discrediting attribute themselves*, experiences the negative effects of the originally stigmatized individual (Hernandez et al., 2016; Kulik et al., 2008; Neuberg et al., 1994). For example, Rudman et al. (2013) found both men and women viewed men labeled “male feminists” as more feminine and weak (traits that often carry negative social connotations for men in Western society) due to the association of feminism with women. Being associated with women devalued men given women's

relative lower gender status; men who were feminists were thus associated with women and therefore not considered adequate men.

Similarly, but with regard to race, Hernandez et al. (2016) found that leaders of Black-dominated teams received the lowest performance appraisals, competence ratings, and perceived leader market value compared to leaders of teams with other racial compositions, due to negative work-related stereotypes of Black individuals. Notably, these performance-related penalties applied to leaders of various races, including White leaders. Leaders of other minority-dominated teams (e.g., Hispanic or Asian followers) did not receive the same performance appraisal penalties as leaders of Black-dominated teams, supporting the idea that negative work-related stereotypes associated with Black individuals drove the negative leader ratings for Black-dominated teams. In other words, being associated with the lower status racial group in the given work context resulted in negative consequences for leaders' evaluations regardless of the leader's own race.

While status beliefs transfer theory is relatively new and thus, does not appear to have been empirically tested to date, one study does exist that examined status transfer using expectation states theory (a theory related to SCT) as its organizing framework, Overton (2021). Expectation states theory uses status characteristics to explain how people form expectations for others' performance based on assumptions that certain race or gender groups will perform better on certain tasks (Correll & Ridgeway, 2006). Generally, in workplace contexts which are typically viewed as masculine (compared to the feminine domestic domain; Acker, 1990), men and Whites are expected to perform tasks more competently compared to women and racial minorities, thus, Whiteness and masculinity carry higher status in these contexts (Correll & Ridgeway, 2006). Overton

(2021) examined whether the status associated with one worker's perceived ability (i.e., high ability or low ability) would transfer onto an associated coworker resulting in deference to the second coworker's knowledge in a new task. Findings suggested that the status of the first person did "transfer" onto a second person in that people associated with a high-status individual were expected to be more competent and perform better than people associated with a low-status individual. While not a test of status beliefs transfer theory and not examining race or gender, Overton's (2021) findings do suggest status, and thus status beliefs, may transfer between two people.

Taken together, the findings discussed above suggest beliefs associated with certain status characteristics may be transferred from one person to an affiliated other in a context where that status characteristic is salient (e.g., from team members to an evaluated leader in Hernandez et al., 2016 study). Furthermore, status beliefs associated with a particular status characteristic may be transferred onto a person who does not possess that same characteristic, but is somehow affiliated with the characteristic itself (e.g. men and feminism in the Rudman et al., 2013 study). The current research integrates concepts from status characteristics, stigma-by-association, and status beliefs transfer theories to extend theorizing of how the demographic status characteristics of one person might affect outcomes for an affiliated other (i.e., from a referring employee to a job applicant).

CHAPTER 3: HYPOTHESIS DEVELOPMENT

The Effect of Employee Referral Status on Evaluations of Applicants

The term “employee referral” is used to describe a recruitment process by which an individual is recruited to an organization via the recommendation of a current employee (Schlachter & Pieper, 2019). As noted earlier, employee referral programs that encourage or incentivize current employees to refer potential applicants from outside the organization are common recruitment practices generally thought to produce positive results for both individuals and organizations (Schlachter & Pieper, 2019; Stockman et al., 2017).

Several theories exist regarding why applicants recruited via referral processes should be of better quality than those recruited via other methods (Breaugh, 2013; Schlachter & Pieper, 2019). For example, the realism hypothesis suggests applicants referred by current employees should benefit from the first-hand knowledge of a job and/or organization their referring employee offers, reducing information asymmetries and enabling a potential applicant to make a better choice as to whether or not to apply to a position (Breaugh, 2013). Should the referral decide to apply, they should have better quality information than non-referred employees have to match to their own personal needs, desires, and preferences in a job. Therefore, referred employees should have a better chance of being retained if hired due to realistic expectations of the job/organization (Breaugh, 2013). Another example is the individual difference hypothesis, which suggests a successful employee in an organization should refer potential applicants similar to them in the individual qualities due to network homophily (Breaugh, 2013). These similar qualities among individuals already employed with an

organization and the applicants they refer should thus make referred applicants better quality in terms of ability to perform well in the job compared to non-referred applicants (Breugh, 2013).

The present research focused on four primary evaluative outcomes associated with early hiring processes (i.e., résumé evaluation stage): recommendations for interview, ratings of applicant competence, ratings of applicant commitment, and starting salary recommendations. These four evaluative components were selected given their relevance to determining whether or not an applicant is suitable for a particular job role, as well as the likelihood of these factors to be associated with race and gender stereotypes (Eagly & Karau, 2002; Pedulla, 2014; Quadlin, 2018; Quillian et al., 2017; Ridgeway & Kricheli-Katz, 2013; Rosette et al., 2016). Given the perceived benefits to the organization referred applicants potentially offer over non-referrals, and the empirical evidence suggesting referrals are indeed hired more often than non-referrals (Brown et al., 2016), it is hypothesized that referred applicants will be rated higher on evaluative measures compared to non-referred applicants.

H1: Referred applicants will be evaluated more favorably than applicants without referrals.

The Effect of Referring Employee Status Characteristics on Early Hiring Outcomes

Previous studies of bias and discrimination in the initial stages of the hiring process have primarily focused on effects of *applicant* status characteristics on the likelihood of obtaining an interview or being hired (e.g. Bertrand & Mullainathan, 2003; Derous et al., 2012; Yavorsky, 2019). Prior research regarding effects of referral processes, specifically, on hiring and representation of women and minorities in

organizations is mixed, with some studies finding positive outcomes of referrals for certain groups and others showing persistent disadvantage (e.g. (Merluzzi & Sterling, 2017; Taber & Hendricks, 2003). For example, in an 11-year longitudinal study of one organization with 16,000+ members, Merluzzi and Sterling (2017) found that, compared to non-referrals, hiring outcomes for minority racial groups and women were enhanced when candidates were referred by a current employee. In addition, they also found referred Black individuals were more likely to be promoted than non-referred Black individuals (Merluzzi & Sterling, 2017).

On the other hand, Rubineau and Fernandez (2013) found that referral processes in organizations might actually lead to greater gender segregation among employees given that people tend to refer similar others into similar positions to themselves, thereby perpetuating the filtering of women and minorities into lower-status and lower-paying jobs. Using mathematical and computational models based on data from previous organizational case studies, Rubineau and Fernandez (2013) ran multiple simulations to test the effects of different referring behaviors on organizational job segregation in hypothetical organizations. The authors found that certain behaviors (i.e., when one gender group refers more than others or the tendency of referring employees to stay in jobs for which their referrals have also been hired) exacerbate network homophily effects of referral processes leading to even greater gender job segregation. While Rubineau and Fernandez (2013) analyzed simulated data (their simulations were based on gender composition statistics from published empirical case studies), their work provides important evidence for how a variety of components of referral processes in organizations might result in gender or racial inequality. Taken together, their findings suggest referral

processes may result in job segregation by gender (or other status characteristics) via more obvious (e.g., network homophily) or subtle mechanisms (e.g., asymmetry in referring behavior among extant gender/race groups to specific jobs; Rubineau & Fernandez, 2013).

The present study aimed to investigate a more subtle potential mechanism in referral processes that might result in unequal hiring outcomes among applicants. In less structured or unstandardized hiring processes where decision makers are allowed greater discretion in their hiring decisions, it is possible status characteristics of both job applicants *and* their referring employees could trigger decision-makers' explicit or implicit status beliefs that consequently result in unequal evaluations of applicants. As noted earlier, there is no universal standardized employee referral program practice across organizations, employee referral practices may vary in several aspects, such as in how much weight is given to referrals in making hiring decisions, whether or not (and how) current employees are rewarded for referring applicants, and the degree to which different hiring managers use the criteria of being a referral in their ultimate decisions to interview or hire job candidates (Schlachter & Pieper, 2019; Society for Human Resource Management, 2019a). Thus, leveraging status characteristics theory (Berger et al., 1972), hypotheses were developed regarding how a *referring employee's* status characteristics might influence how their referred job applicant is rated on competence or commitment, the likelihood their referred job applicant is recommended for an interview, and the recommended salary selected for the referred job applicant.

Status characteristics theory suggests that if race or gender status beliefs are triggered in an evaluative stage of the hiring process where little is known about the

applicant (i.e., in résumé screening), these beliefs may be used to fill in information gaps about the referred applicant/candidate based on their perceived status. This concept of interpreting information as a signal of suitability or competence for a hiring role is also demonstrated in signaling theory (Spence, 1973). Signaling theory argues that the hiring context is ambiguous and uncertain given that, in beginning stages of hiring especially, employers know very little about the applicant beyond what information is provided to them in applications or interviews. Thus, employers use information provided by applicants, such as education level, in initial hiring stages as signals indicating their potential job performance. However, other pieces of information found on résumés, such as the name of the applicant, can also serve as signals of race and gender of the applicant, which then, according to status characteristics theory, trigger status beliefs about the applicant. Status beliefs about competence and commitment are particularly tied to race and gender (Eagly & Karau, 2002; Ridgeway, 2018), thus in signaling race or gender, names may also serve as signals of competence or commitment and influence applicant evaluations.

Indeed, prior research has shown how the names listed on applicant résumés can trigger status beliefs and bias decisions in the hiring process (Bertrand & Mullainathan, 2003; Quillian et al., 2017). In employee referral programs, referred applicants are generally required to supply the name of their referring employee in the initial job application so that the referring employee may be consulted or awarded any associated bonuses if the referral is hired (Pieper et al., 2018, 2018; Society for Human Resource Management, 2019a). The provision of the referring employee's name in the early evaluation stages of the hiring process may thus also signal race and/or gender (of the

referring employee) and therefore trigger race- and/or gender-based status beliefs about the referring employee which may transfer onto the applicant they refer.

Combining assumptions from stigma-by-association and status characteristics theory, if a referring employee's status characteristic(s) is stigmatized and/or evokes negative stereotypes in a hiring situation (as might be expected for applicants that do not fit prototypical ideal worker norms, i.e., women and racial minorities; Acker 1990), it is possible the applicant may be penalized as decision-makers' status beliefs about the referring employee are transferred onto the applicant. Thus, the employee referral process may introduce yet another source of potential bias in the hiring process that can lead to unequal hiring outcomes for job applicants referred by individuals of different gender and racial groups.

Very little research currently exists examining the role of referring employee race or gender status characteristics on applicant hiring outcomes. One study that does take employee status characteristics into account in referral outcomes is Silva (2018). Silva (2018) examined the combination of applicant race and referring employee race to examine whether or not referring employee's race had differential effects on hiring for Black and White applicants. Using an experimental methodology, results suggested that while White applicants benefitted from referrals from both Black and White employees, Black applicants only benefitted from referrals when their referring employee was White and had low anti-Black prejudice. These findings suggest that the status characteristics of referring employees can matter for applicant outcomes, and that the higher statuses of referring employees (e.g., being White and likely also being a man; Acker, 1990) may result in greater benefits than the referring employees with lower status characteristics

(i.e., Black or women referring employees). Notably, Silva (2018) did not include the gender of referring employees as a variable of interest in their research.

Given the high relative status men and White individuals carry in work organizations (Acker, 2006; Ridgeway, 2014, 2018), referring employee's race and gender may operate in the following ways to influence hiring outcomes:

H2: Applicants referred by women will be less likely to be recommended for interviews, rated lower in competence and commitment, and receive lower salary recommendations compared to applicants referred by men.

H3: Applicants referred to by Black individuals will be less likely to be recommended for interviews, rated lower in competence and commitment, and receive lower salary recommendations compared to applicants referred to by White individuals.

Referring Employees' Intersecting Status Characteristics and Evaluations of Applicants

While a large body of research exists suggesting men and White individuals are perceived to have higher social status than women and minority individuals (see Ridgeway, 2018), much of this research tends to ignore the fact that individuals possess multiple (possibly counter-acting or amplifying) status characteristics. For example, a person can be both a man and Black, a woman and White, etc. Although no one unifying theory of intersecting status characteristics at work currently exists (though see, Collins, 2015; Crenshaw, 1989), scholars have argued that a person's intersecting status characteristics can either compound or reduce disadvantages depending on the context

that a person's multiple status characteristics are perceived (Castro & Holvino, 2016; Choo & Ferree, 2010; Crenshaw, 1989; Hall et al., 2019; Rosette et al., 2016).

Scholars, especially Black feminist scholars (e.g., Patricia Collins, Kimberle Crenshaw, etc.), have demonstrated the importance of examining intersectional experiences for some time in the literature. Much of the extant empirical work examining effects of intersectionality has been conducted via qualitative investigations (e.g., Atewologun et al., 2016; Smith et al., 2019; Wingfield & Taylor, 2016), though some quantitative studies also exist (e.g., Kmec, 2006). Together, this research has revealed substantial within-group differences in workplace experiences for individuals within gender and race categories depending on their other intersectional statuses (Atewologun et al., 2016; Kmec, 2006; Smith et al., 2019). This suggests intersecting status characteristics may result in different experiences/outcomes for people contingent on which combination of status characteristics is perceived by others and how salient/relevant those characteristics are in a given context. For example, Rosette et al. (2016) found people associated different qualities with women depending on their race: respondents stereotyped Black women as dominant and strong, Asian women as competent and mild-mannered, and White women as attractive and communal.

Rosette and colleagues' (2016) findings are important as they provide clues as to how specific combinations of status characteristics may lead to different outcomes for intersectional job applicants. If status beliefs related to referring employees' gender or race may be transferred onto job applicants, then status beliefs related to referring employees' specific gender-race combination likely complicates how, and which, applicants are preferred by decision makers for certain jobs. Regarding how a referring

employee's gender-race combination will influence applicant outcomes in the hiring process, societal beliefs about White men's relatively higher status in work contexts overall compared to individuals of different races, genders, and race/gender combinations (Acker, 1990, 2006; Ridgeway, 2018) likely results in more positive evaluations of applicants referred by White men.

How status hierarches of intersecting race/gender status are organized after White men, and how this might matter for outcomes of employee referrals, is unclear in the literature. Notably, status characteristics theory stops short of theorizing how different combinations of status characteristics might nuance judgements of a person's fitness for a task or, in the context of this research, a job. On the one hand, Black men serving as referring employees maintain the high-status gender characteristic of being men. Societal status beliefs associated with men's competence in the workplace may transfer onto Black men's referrals resulting in assumptions that their referrals are of higher quality compared to referrals made by Black and White women.

On the other hand, White women serving as referring employees also maintain the high-status race characteristic of being White, which is also associated with higher relative competence in the workplace to other racial groups (Ridgeway, 2018). Thus, both Black men and White women referring employees have one high-status characteristic and one low-status characteristic, making it difficult to determine which combination might hurt (or benefit) their referrals in hiring evaluations. Adding further complexity, Black women represent two low-status characteristics in the U.S. (being a woman and being Black; Purdie-Vaughns & Eibach, 2008), which might lead to the assumption their referrals would be viewed as of the lowest quality. However, research suggests Black

women may share some stereotypes with White men (e.g., that they are assertive; Ghavami & Peplau, 2013), suggesting Black women's referrals may also benefit from the transfer of positive status-beliefs in certain hiring contexts.

Still other research and theory on how intersecting status characteristics may influence behavior in hiring contexts suggests prototypicality of a person for the role or task in question may be of particular importance. White men and White women are considered prototypical of men and women gender categories, respectively, and Black men are generally considered the prototype of the Black racial category (Ridgeway & Kricheli-Katz, 2013). Accordingly, individuals may be more likely to be treated according to stereotypical beliefs about the gender/race category for which they are viewed as prototypical (Ridgeway & Kricheli-Katz, 2013). Thus, in a hiring context where competence and commitment are being evaluated, applicants referred by White men may be viewed more positively than those referred by White women or Black men, as status beliefs about the referring employee are transferred onto the referral. In contrast, individuals referred by Black men may be particularly penalized in hiring contexts given that prototypes of Black individuals (and men specifically) in U.S. culture tend to assign the lowest competence and commitment evaluations to this group (Ridgeway & Kricheli-Katz, 2013). Such assignment may lead decision makers to assume a Black man's referral is of low quality. Black women, on the other hand, do not fit prototypes of either Blacks or women (Purdie-Vaughns & Eibach, 2008; Ridgeway & Kricheli-Katz, 2013). As a result, the salience of race/gender may be reduced in the referral process for Black women, thus suppressing any negative biasing effects on evaluations of their referrals.

Still other intersectional theories, such as the more recently proposed MOSAIC Model by Hall et al. (2019) suggest that evaluators integrate the intersectional identities of those they evaluate by first considering a foundational identity and then integrating stereotype content (assumptions about how a certain group is or behaves) of that identity with other associated identities characterizing the person being evaluated. In their 2019 theoretical paper published in *Academy of Management Review*, Hall and colleagues specifically describe workplace contexts where individuals may be evaluated by intersecting gender and race. They argue that, in the case of Black and White women in workplace contexts, Black women may be evaluated higher because the stereotype content associated with being Black is masculine (a privileged workplace status characteristic), therefore Black women's stereotype content will contain one positive masculine content associated with being Black as well as negative content from being a Black woman. White women, on the other hand, are only associated with stereotype content of being a White woman, which makes them less prototypical of masculine ideal workers norms compared to Black women, who have some masculine stereotype content.

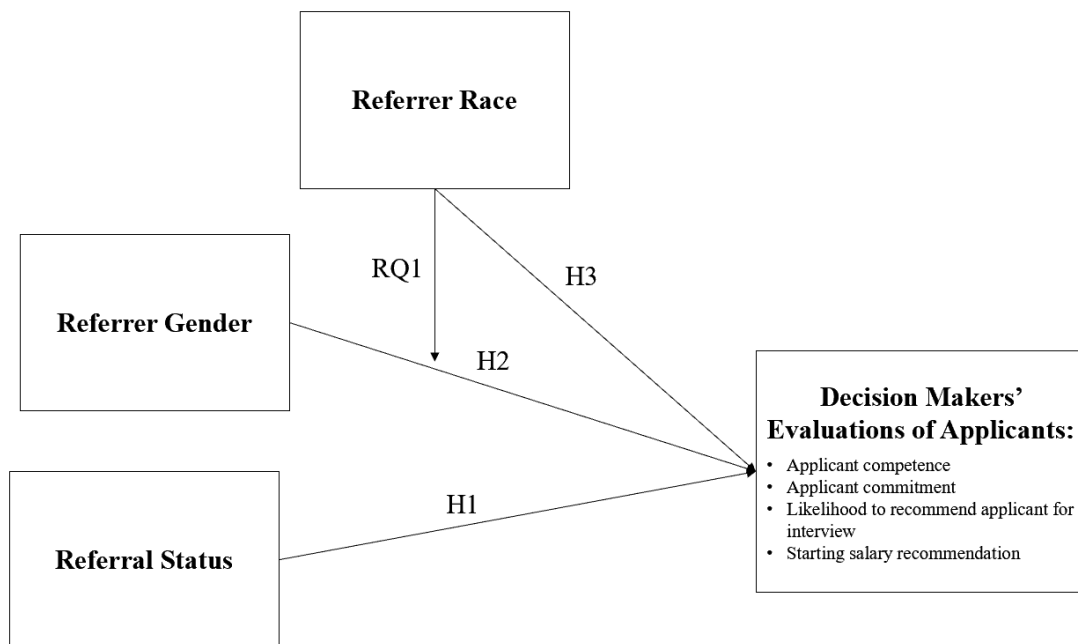
In sum, much ambiguity remains in the current literature surrounding how intersectional gender/race hierarchies are organized after White men. Extant theory regarding the propensity for intersecting status characteristics to influence hiring outcomes suggests gender/race hierarchies should vary by context but does not specify how or to what degree. Thus, specific hypotheses regarding how decision-makers' preferences for White men, White women, Black women, or Black men will be organized are not provided. Instead, the following research question is posed, the investigation of which may provide insight into how hiring contexts may shape race/gender hiring

preference hierarchies, which, in turn, may build theory and aid future research investigations into this topic.

RQ: How do intersecting race and gender status characteristics of referring employees (i.e., Black and White men and women referring employees) influence how their referred job applicants are evaluated in the early stages of the hiring process?

Figure 1 depicts the current study's theoretical model with hypothesized relationships.

Figure 1
Theoretical Model for the Current Research



CHAPTER 4: METHOD

Pre-Test: Test of Names and Job Roles for Experimental Materials

A pre-test study was conducted to test the race, gender, and class associations with referring employee names as well as gender associations with job titles. This was an important step in determining which names should be listed as referrals on résumés to represent race/gender combination conditions of Black men, Black women, White women, and White men. It was also important to select a job title for the job description that is perceived as relatively gender-neutral to reduce the potential for participants' associations of certain jobs with a specific gender to influence their evaluations of applicants (e.g., favoring applicants referred by women for a nursing position).

Pre-Test Procedure

Findings from Gaddis's (2017) study of the racial associations of men's and women's first and surnames were used to identify names to pre-test test as representing the different race/gender combinations. Gaddis (2017) used birth records from 1994 to 2012 from the New York State Department of Health and Census data from the year 2000 to generate and test the racial associations people make with common names. His results from analyses of over 7,000 responses suggested several first and last names led a greater percentage of participants to associate the same racial label with a specific name as its population-level race association (Gaddis, 2017). In other words, certain names signaled race more precisely than others. Thus, the first names used in the present study's pre-test were a subset of those used in the Gaddis (2017) study scoring 90% or more congruent with population-level naming practices (see Appendix A for a full list of both first and surnames used in the pre-test). The last names used were also obtained from Gaddis

(2017) and included those names identified as representing the most congruence between participant racial identification and actual race of individuals represented in the census data.

Participants were asked to review the list of names provided and indicate whether they associated the name with a specific race/gender combination (Black man, Black woman, White woman, White man, or none) and if they associated the name with a specific social class (working, middle/upper middle, or upper class, or none). Participants were asked about class associations as class perceptions of individuals may influence the status beliefs of decision-makers when evaluating a candidate for a job, thereby confounding effects of race or gender with class status (Gaddis, 2017). Thus, names selected for the primary study's résumés were those found to be most associated with a specific race/gender combination and least associated with a particular social class (See Table 1).

The Bureau of Labor Statistics' most recent reports on gender of employed persons in the U.S. were referenced to identify job titles to pre-test test for the job description. Job titles were extracted representing entry-level occupations that had roughly equal numbers of men and women represented. Similar to the questions about race, gender, and class of names, participants were asked to review the list of job titles and indicate whether they perceive a job as more masculine, feminine, or gender neutral. The job title perceived to be the most gender-neutral was retained for the primary study.

Pre-Test Measures

Name Gender and Race. Racial and gender associations with first names were captured using one question modified from Gaddis' (2017) study of racial associations

with names: ““Drag and drop each of the following first names into the box that best describes the race and gender you associate with that name (White/Caucasian woman, White/Caucasian man, Black/African American woman, or Black/African American man). If you do not see a clear racial/gender association with a name, or if the race/gender combination you feel describes the name is not listed, move that name into the box titled ‘none/not listed’” (p.476). Associations for last names were captured separately, and gender associations were tested with first names only given that surnames are generally gender neutral.

Name Class. Class associations with names were captured using the same first names used to capture racial and gender associations above and the same question from Gaddis (2017) modified to reflect social class: ““Drag and drop each of the following [first/last] names into the box that best describes the social class you associate with that name (working, middle/upper middle, upper). If you do not see a clear social class association with a name, move that name into the box labeled ‘none’” (p. 476).

Job Role Gender. Regarding job roles, participants were asked to respond to the question: ““Drag and drop the following occupations into the box that best describes the gender you most associate with that occupation. If you do not associate the occupation with any gender, move that occupation into the box labeled “gender-neutral”” (also modified from Gaddis, 2017; p.476).

Pilot and Primary Study

A fully within-subjects experimental design using an online survey format (via Qualtrics data collection platform) was implemented to test hypotheses. A pilot study was performed prior to the primary data collection to ensure measures produced the expected

variation in responses and that the content of résumés did not inadvertently signal gender or race.

Pilot and Primary Study Procedure

Once participants consented to participate, they were randomly sorted into one of five groups (representing different résumé format to referring employee matches) and given instructions for the experimental task where they were asked to review a job description followed by a series of five résumés from hypothetical applicants. The task instructions explained that participants should review each applicant résumé and any accompanying information regarding the applicant's referral status, after which they were to rate the applicant on a number of criteria (i.e., competence, commitment, likelihood to recommend for interview, and recommended salary; see measures subsection for scale details). Participants were also informed that they would be asked to provide a short explanation for their recommendations to interview and starting salary.

Next, participants were presented with the job description of an entry-level buyer position (constructed from real job announcements posted on internet job boards and verified for gender-neutrality in the pre-test, see Appendix B) followed by the five deidentified résumés, labelled with the name of the applicant's referring employee (see Appendix C for an example résumé). Résumés contained no clues about the race or gender of the applicant; only the referring employee's status characteristics were presented via their pre-tested names highlighted at the top of the page. Résumés were presented in random order and reflected average quality candidates to reduce the potential for perceived over or underqualification to influence evaluations. The types of

experiences, amount of experience, skills presented, and number of words per experience description were held constant across all résumés.

After viewing the résumés and referral information, participants were asked to indicate ratings for the four study outcome variables (competence, commitment, likelihood to recommend for interview, and salary recommendation) followed by text boxes to explain the rationale behind their selections for likelihood to interview and salary recommendations. Finally, participants responded to demographic questions and were provided a debrief message explaining the true purpose of the study.

Measures: Independent Variables

Referral Status. Referral status was represented as a categorical variable with five levels: four categories representing the four possible race-gender combinations of referring employees (Black man, White man, Black woman, White woman) for résumés with referrals and one category “none” to represent no referral.

Referring Employee Gender. Referring employee gender was indicated by the referring employee’s name on each résumé, selected to signal the referring employee was either a man or a woman.

Referring Employee Race Referring employee race was indicated by the referring employee’s name on each résumé, selected to signal the referring employee was either Black or White.

Measures: Dependent Variables

Competence. Competence was measured with the seven items used in Quadlin (2018) to capture this construct. Participants observed the sample stem “How do you think most people would view this applicant?” followed by seven descriptors that will be

rated on 7-point Likert-type scale where 1 = “Not at all” and 7 = “Extremely”. The seven descriptors were: Competent, Capable, Efficient, Organized, Skilled, Self-confident, and Independent. Internal consistency coefficients ranged from $\alpha = .94$ to $\alpha = .97$ for this scale across occasions.

Commitment. Competence was measured with the four items used in Quadlin (2018) to capture this construct. Item one had the question stem “How do you think most people would view this applicant?” and the characteristic presented will be “committed” followed by a response scale of 1 = Not at all to 7 = Extremely. The remaining items and response scales were as follows: “Compared to similar employees who already work at your company, how committed do you think this applicant would be to their job if hired?” (1 = Not committed at all; 7 = Very committed); “If your company needed to ask this applicant to work extra hours, how likely is it that they would meet that request?” (1 = Extremely unlikely; 7 = Extremely likely); and “If this applicant were hired at your company, how long do you think they would stay? (1 = Less than 1 year; 5 = More than 4 years). Internal consistency coefficients ranged from $\alpha = .81$ to $\alpha = .88$ for this scale across occasions.

Likelihood to Recommend for Interview. Likelihood to recommend for interview was measured using the question “How likely would you be to recommend this applicant for an interview for this position?” Participants will be asked to respond using an 11-point Likert-type scale reflecting percentage likely to recommend in increments of 10% anchored at 0% and 100%, in line with previous studies examining this outcome (Quadlin, 2018). The Likert-type question was followed by an open-ended response item

asking, “In a few sentences, please explain why you selected the answer above regarding your recommendation.” Answers to this question were analyzed qualitatively.

Recommended Salary. Recommended salary was measured with a similar question to that used in Pedulla (2014) to capture the same variable. Participants were given the instruction “The annual salary range typically allowed for this position is \$35,000 to \$50,000, however the salary offered can be lower or higher than this range depending on applicant qualifications” followed by the question, “If hired, what yearly starting salary would you recommend for this applicant?” Responses were presented in a drop-down list starting at “Less than \$35,000” and ending at “More than \$50,000” in increments of \$1,000¹. The Likert-type question was followed by an open-ended response item asking, “In a few sentences, please explain why you selected the answer above regarding your recommendation.” Answers to this question were analyzed qualitatively.

Measures: Additional Variables

Demographic Information. Information about the participant’s gender, race, age, education level, and job title/industry was obtained to examine the demographic breakdown of the sample.

Manipulation Salience Question. To ensure participants noticed the referring employee’s and name, prior to entering their ratings, participants were asked to “If this applicant was referred by a current employee, please type the name of the referring employee below. If the applicant was not referred by a current employee, type ‘NA’.”

¹ The instructions and response options for this item were changed from the pilot response items given pilot participants’ tendency to fall back on personal philosophies of what constitutes an appropriate entry level salary. The revised instruction and response items were put in place to limit participants’ preconceived ideas of “appropriate” salary ranges for entry level employees.

Response Bias Check Question. Respondents were asked to write a sentence or two about what they thought the research study was investigating. Responses were coded as a 1 if they guessed the study purpose (to see the effect of race and/or gender of referring employees on outcomes) and a 0 if they did not guess the purpose.

CHAPTER 5: RESULTS

Pre-Test

Pre-Test Participants

The pre-test sample consisted of 269 participants recruited via the UNCC research list-serv with responses for each individual rating on the ranging from $N = 235$ to $N = 269$. The sample was 68% women and 56% White with an average age of 26.2 years.

Pre-Test Results

The four names of the possible referring employee gender/race combinations were selected based on the combination of highest “correct” association with race and gender and lowest association with upper or middle class (See Table 1). Thus, the four names selected are as follows: Luke Decker (White man), Lamar Booker (Black man), Carrie Larsen (White woman), and Tyra Jackson (Black woman). Occupations were ranked by the percentage of participants associating the job title with the neutral category and most even split for remaining ratings among associations with men compared to women. This resulted in the occupation of “buyer” being selected for as the subject of the job description.

Pilot Study

Pilot Study Participants

A snowball sample of adult volunteers from the primary researcher’s network who had hiring experience were obtained as participants to pilot the survey. The primary researcher posted a recruitment announcement to their social media accounts (Facebook and LinkedIn) and also reached out to professors teaching MBA students at their university to post the announcement to their online course pages. The final pilot sample

was comprised on 61 participants and was 71% White, 54% women, and had an average age of 37.8 years (range 23 – 80 years). All participants had at least some college; 5% some college but did not graduate, 18% had a bachelor’s degree, 28% had some graduate education, and 49% had a graduate degree suggesting the sample is highly educated. A wide variety of industries were represented by the participants including natural resources and mining (2%), construction (3%), manufacturing (7%), information (3%), financial activities (5%), business and professional services (20%), education and health services (33%), leisure and hospitality services (2%), and other (25%). Participants also demonstrated high levels of hiring experience with 66% of participants having at least 3 years of hiring experience (range was less than 1 year of experience to 10+ years). It took participants an average of 33 minutes to complete the survey.

Table 1

Percent of Participants Correctly Inferring Race/Gender Indicated in Census Data and Class Associations with Retained Names for Referring Employees

<i>Name</i>	<i>%Correct</i>	<i>Class - % None Middle</i>	<i>Class - % Upper</i>	<i>Class - % Working</i>
<u>First Names</u>				
Black Man – “Lamar”	96.4%	60.2%	9.6%	30.1%
Black Woman – “Tyra”	91.9%	56.3%	23.0%	20.6%
White Man – “Luke”	91.7%	62.6%	22.0%	15.4%
White Woman – “Carrie”	91.5%	68.0%	19.2%	12.8%
<u>Last Names</u>				
Black - Booker	58.8%	67.4%	15.7%	16.9%
Black - Jackson	53.0%	65.8%	19.4%	14.8%
White - Decker	68.7%	72.3%	15.7%	11.9%
White - Larsen	67.0%	61.9%	26.3%	11.9%

Pilot Study Results

Means, standard deviations, and ranges of rating scores by résumé and referring employee race and gender may be found in Tables 2 and 3, and correlations among study variables for all rating occasions may be found in Appendix D. Given the very small sample size, no quantitative conclusions may be drawn from quantitative analyses of the pilot data, but general trends appeared to reflect a good level of equivalence among résumés in terms of quality.

No errors were found in the survey instrument itself save for a typo reported in open text responses by only handful of participants on one résumé where the job title did not match the duties described (this was adjusted for the primary study). Participants were randomized into five possible groups representing different résumé -to-referring employee name matches, and then the presentation order of résumés was randomized within each group. Generally, means and standard deviations for study variables indicated sufficient variation in all outcome measures across résumé formats with means generally falling around the midpoint of scales and standard deviations being around a point for all scales.

In addition to the questions included in measures for the primary study, participants were asked to guess what race and gender they believed the applicant submitting the résumé without a referring employee might be. The purpose of this question was to see if résumé formats inadvertently signaled race or gender to participants. The vast majority of responses fell into the “cannot determine” category, but when participants did associate race or gender with a résumé, they tended to assume the hypothetical applicant was either White or a woman. Analysis of participants’ qualitative

Table 2*Pilot means, standard deviations, and ranges for dependent variables across all résumés*

Treatment					
Résumé No.	<i>N</i>	<u>Competence</u>	<u>Commitment</u>	<u>Interview Rec</u>	<u>Salary Recommendation</u>
1	41 - 43	4.27 (.96)	4.80 (1.18)	8.28 (2.33)	6.12 (2.37)
2	52 - 53	4.07 (.91)	4.60 (1.24)	7.75 (2.70)	5.79 (2.24)
3	41 - 43	3.97 (.76)	4.60 (.98)	8.19 (2.00)	5.88 (2.08)
4	48 - 50	4.33 (.75)	4.89 (.84)	8.50 (1.97)	6.06 (2.19)
5	41 - 42	4.31 (.73)	4.79 (.88)	8.57 (2.03)	6.17 (2.30)
<i>Range of Means</i>		.36	.29	.82	.38
Control					
Résumé No.	<i>N</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
1	15	4.51 (.60)	4.93 (.92)	8.87 (2.07)	5.80 (1.42)
2	5	4.33 (.64)	4.50 (1.16)	9.00 (1.22)	7.25 (3.86)
3	15	4.65 (.77)	4.45 (.83)	7.80 (1.78)	6.00 (2.62)
4	8	3.96 (.98)	4.31 (1.67)	7.38 (3.25)	5.62 (1.69)
5	15 - 16	4.27 (.84)	4.55 (1.14)	7.56 (2.48)	5.47 (2.33)
<i>Range of Means</i>		.69	.62	1.68	1.78
All Conditions					
Résumé No.	<i>N</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
1	56 - 58	4.33 (.88)	4.84 (1.11)	8.43 (2.26)	6.04 (2.15)
2	57 - 58	4.10 (.89)	4.60 (1.22)	7.86 (2.62)	5.89 (2.37)
3	56 - 58	4.15 (.82)	4.56 (.94)	8.09 (1.94)	5.91 (2.21)
4	56 - 58	4.28 (.79)	4.81 (1.00)	8.35 (2.19)	6.00 (2.12)
5	56 - 58	4.30 (.75)	4.72 (.96)	8.29 (2.18)	5.98 (2.31)
<i>Range of Means</i>		.23	.28	.57	.15

Note: *M* and *SD* indicate means and standard deviations (represented in parentheses), respectively.

responses suggested applicants who made race and gender associations did so based on the location of university listed (all were imaginary and set in Midwestern states) and the fine arts extracurricular activity. Thus, for the primary study, the locations of universities were varied to represent different regions of the United States and the extra-curricular activity was changed to be a business-related club for all résumés.

Table 3*Pilot means and standard deviations for dependent variables by referrer race and gender*

Referrer Identity Group	Competence	Commitment	Interview Rec	Salary Recommendation
	<u><i>M (SD)</i></u>	<u><i>M (SD)</i></u>	<u><i>M (SD)</i></u>	<u><i>M (SD)</i></u>
<i>Race</i>				
White	4.09 (.85)	4.68 (1.04)	8.23 (2.30)	5.99 (2.29)
Black	4.30 (.80)	4.81 (1.03)	8.28 (2.19)	6.01 (2.15)
Not Referred	4.39 (.79)	4.56 (1.08)	8.00 (2.26)	5.82 (2.23)
<i>Gender</i>				
Man	4.12 (.82)	4.73 (.97)	8.29 (2.16)	6.04 (2.20)
Woman	4.26 (.83)	4.75 (1.10)	8.22 (2.33)	5.96 (2.24)
Not Referred	4.39 (.79)	4.56 (1.08)	8.00 (2.26)	5.82 (2.23)
<i>Race + Gender</i>				
White man	3.97 (.87)	4.59 (1.07)	8.17 (2.21)	6.04 (2.26)
White Woman	4.20 (.83)	4.77 (1.02)	8.29 (2.41)	5.95 (2.35)
Black Man	4.28 (.74)	4.88 (.86)	8.41 (2.13)	6.04 (2.17)
Black Woman	4.32 (.86)	4.74 (1.19)	8.14 (2.34)	5.98 (2.14)
Not Referred	4.39(.79)	4.56 (1.08)	8.00 (2.26)	5.82 (2.23)

Note: *M* and *SD* indicate means and standard deviations (represented in parentheses), respectively.

Primary Study

Primary Study Participants

Participants were recruited via the Prolific online data collection platform for the primary study. To be included in the study, participants needed to be at least 18 years of age, reside in the United States, and have some hiring experience. A total of 555 individuals accessed the survey, and the final sample was comprised of 437 participants

after respondents were removed for not finishing (67 respondents), failing to meet inclusion criteria (21 respondents), failing manipulation checks (23 respondents), insufficient effort responding as determined by a combination of low completion time (less than 3 minutes) and gibberish or repeated answers to qualitative response items (4 respondents). The retained sample was 49% women, 82% White, and had an average age of 40.5 years.

While the racial makeup of the sample was largely dominated by White individuals, the percentage represented in the sample is almost identical to the most recent data on racial composition for individuals in management occupations in the United States according to the U.S. Bureau of Labor Statistics, which indicates 82.2% of individuals in these occupations are White (U.S. Bureau of Labor Statistics, 2022). The same report indicates that 40.9% of individuals in management occupations are women, which is lower than that which is represented by the study sample, though only by around 8%. Thus, the current study uses a reasonably representative sample of participants for the target population of interest (individuals with authority in organizations and hiring experience).

Participants were also highly educated with 70% having completed at least a bachelor's degree. A wide variety of industries were represented including natural resources/mining, construction, manufacturing, trade, transportation, utilities, information, financial activities, professional and business services, educational and health services, leisure and hospitality, and "other." The largest industries represented were "other" (37% of the sample), educational and health services (18% of the sample), and business and professional services (11% of the sample). Regarding hiring experience,

15% of participants had less than one year, 32% had 1-3 years, 17% had 3-5 years, 16% had 5-10 years, and 20% had 10+ years. Ninety-two percent of participants had at least one year of supervision experience, with the largest group of the sample having 1-3 years of experience (28%), followed more than 10 years of supervisory experience (25%), 5-10 years of supervisory experience (20%), 3-5 years of supervisor experience (19%), less than 1 year of experience (8%).

Primary Study Quantitative Results

Tables illustrating the means, standard deviations, and correlations among study variables for each of the five ratings are presented in Appendix E. Means and standard deviations follow similar patterns across occasions and correlations are generally in the expected directions. No participant demographic variables correlated with both the independent and dependent variables, as expected, thus no covariates were included in ANOVA models testing hypotheses (Spector & Brannick, 2011). Guessing the purpose of the study demonstrated a small positive correlation with competence ratings at occasion two for referred résumés and a small negative correlation with competence ratings for non-referred résumés at occasion four, but no significant relationships with outcome variables for any other occasions regardless of referral status of résumés, thus participants guessing the purpose of the study were retained for analyses. Confirmatory factor analyses (CFA) were conducted for the two outcome measures captured using multi-item scales (competence and commitment), the results of which suggested the two-factor model fit the data best; all items had loadings of .40 or higher onto their respective factors (see Appendix F for CFA results for all occasions).

Repeated measures ANOVA models with planned comparisons and post-hoc pairwise comparisons were employed to test the study hypotheses involving competence and commitment. Data screening procedures revealed that recommendations for interviews and salary recommendations had non-normal residual distributions, thus Friedman's test with post-hoc Wilcoxon's signed rank tests and ANOVA-Type models using the nonpar.LD package in R statistical software were used to test hypotheses involving these outcomes. Table 4 presents the raw mean scores for applicants on each outcome by referring employee race/gender combination.

Table 4

Applicants' Mean Scores on Study Outcomes by Referring Employee Race/Gender Combination

<i>Employee Race/Gender</i>	<i>Competence</i>	<i>Commitment</i>	<i>Recommendation for Interview</i>	<i>Salary Recommendation</i>
Back Women	5.31	4.97	8.33	6.57
Black Men	5.30	4.97	8.25	6.44
White Women	5.24	4.93	8.10	6.28
White Men	5.20	4.90	8.09	6.09
None	5.16	4.88	8.02	6.02

Note: n = 437 for all variables except Salary Recommendation, where n = 436

Test of Hypothesis 1. To test hypothesis one with competence and commitment as the dependent variables, separate one-way repeated measures ANOVA models were run using a referral status variable (5 levels: not referred, Black woman referred, White woman referred, Black man referred, White man referred) as the independent variable. Results revealed that there was a statistically significant difference in mean competence ratings between at least two groups ($F(4, 1744) = 4.77, p < .001, \eta^2 = .003$). Four planned comparisons were conducted to compare each intersectional referral group (i.e., White Men, Black Men, Black Women, and White Women) to the non-referred group.

Results indicated a statistically significant difference ($F(1, 1744) = 11.55, p < .01$) in mean competence ratings for individuals referred by Black men ($M = 5.30$) and those not referred ($M = 5.16$), as well as a statistically significant difference ($F(1, 1744) = 4.28, p < .05$) for those referred by Black women ($M = 5.31$) and those not referred ($M = 5.16$). No significant difference between referred and non-referred applicants was found for commitment ($F(4, 1744) = 2.15, p > .05, \eta^2 = .002$).

To test hypothesis 1 for recommendations for interviews and salary recommendations, Friedman's test was conducted, given that the residuals for these outcomes were non-normally distributed, using referral status as the independent variable. Results of Friedman's test revealed a significant difference in recommendation for interview scores between at least two referral status groups ($\chi^2(4) = 18.1, p < .01$), and Kendall's W test for the effect size was $W = .01$, suggesting a small effect. Results of Friedman's test of the effect of referral status on salary recommendations also revealed a significant difference in salary recommendation scores between at least two referral status groups ($\chi^2(4) = 11.4, p < .05$). Kendall's W test also indicated a small effect ($W = 0.01$).

Wilcoxon's signed rank tests with Bonferroni correction were performed to view pairwise comparisons between referral status groups after running the Friedman's tests for both interview and salary recommendations. In similar pattern to the results of the one-way ANOVA model for competence ratings, results revealed significant differences between median scores on interview recommendations between those referred by Black men and individuals not referred (small effect, $r = .17, p < .05$) and those referred by Black women and those not referred (small effect, $r = .12, p < .05$). Wilcoxon's signed

rank tests with Bonferroni correction also revealed that median scores on salary recommendation for individuals referred by Black women only were significantly higher than those who received no referral (small effect, $r = .16$, $p < .05$), again.

Taken together, these results provide mixed support for hypothesis 1; while some referred groups had statistically significant higher average scores compared to applicants who were not referred (i.e., Black men and women), this was not true for all referred applicant groups. Further, the small generalized eta squared and small effects found after Friedman's tests suggest effects of referral status on outcomes are very small.

Test of Hypothesis 2 and 3. Two-way ANOVA models examining the effects of referring employee race and employee referrer gender, as well as the interaction between employee race and gender, were conducted to test hypothesis 2 and 3 for competence and commitment using only data for referred applicants (see Tables 5 and 6). Results revealed a significant difference in both competence ($F(1, 3.15) = 8.994$, $p < .01$, $\eta^2 = .002$) and commitment ($F(1, 1.56) = 4.44$, $p < .05$, $\eta^2 = .001$) scores by referring employee's race however these effects were contrary to hypothesis 3 in that the average competence and commitment scores for those referred by Black individuals (competence: $M = 5.30$; commitment: $M = 4.97$) was significantly higher than the average score for those referred by White individuals (competence: $M = 5.22$; commitment: $M = 4.91$). Thus, neither hypothesis 2 nor 3 were supported for competence or commitment evaluations. Further, in reference to the research question regarding intersectional effects, the non-significant coefficient for the interaction of race and gender in both models suggested no statistically significant intersectional effects on referring employee's race and gender on competence ratings.

Table 5
Results of Two-Way ANOVA for Competence as the Dependent Variable

Predictor	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	η^2_g
Referring Employee Race	3.15	1	3.15	8.904	.003	.002
Referring Employee Gender	0.24	1	0.24	0.643	.423	.000
Referring Employee Race *	0.17	1	0.17	.493	.483	.000
Error	149.80	436	0.3436			

Note: *n* = 437. *df* = degrees of freedom, η^2_g = generalized eta squared.

Table 6
Results of Two-Way ANOVA for Commitment as the Dependent Variable

Predictor	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	η^2_g
Referring Employee Race	1.56	1	1.56	4.44	.036	.001
Referring Employee Gender	0.08	1	0.79	0.183	.669	.000
Referring Employee Race *	0.11	1	0.11	.304	.582	.000
Error	155.08	435	0.3565			

Note: *n* = 437. *df* = degrees of freedom, η^2_g = generalized eta squared.

To test hypotheses 2 and 3 regarding the direct effects of referring employee race and gender on interview recommendations, an ANOVA-type nonparametric test was conducted using the *ld.f2* function in the R statistical software package *nonpar.LD*. This procedure is recommended by Feys (2016) for tests of factorial repeated measures designs with non-normal data. Results of the ANOVA-type test were consistent with results of the Wilcoxon signed rank tests above, revealing a statistically significant effect

of referring employee's race on recommendations for interview (ANOVA-type estimate = 9.95907344, $p < .01$), suggesting, contrary to the effects proposed in hypothesis 2, that individuals referred by Black employees scored higher on recommendations for interviews ($M = 8.29$) compared to those referred by White employees ($M = 8.10$). The direct effect of referring employee's gender was not significant (ANOVA-type estimate = 0.58, $p < .05$). Thus, again, neither hypothesis 2 nor 3 were supported for interview recommendations. Regarding the research question about potential intersectional effects on applicant outcomes, no significant interaction between race and gender of the referring employee was found for recommendations for interviews (ANOVA-type estimate = 0.028, $p < .05$). As a robustness check, a two-way ANOVA model was run with interview recommendations as the dependent variable, despite the non-normally distributed residuals, and the results of the ANOVA-type non-parametric test were replicated: a statistically significant effect was found for race ($F(1, 436) = 6.94$, $p < .01$, $\eta^2 = .002$), but not gender or the interaction of race and gender.

To directly test Hypotheses 2 and 3 for salary recommendations, the same non-parametric ANOVA-type test procedure was employed as was used above when interview recommendations was the dependent variable. Results followed the same pattern as demonstrated for both interview recommendations and commitment evaluations: the effect of referring employee race on salary recommendations was significant (ANOVA-type estimate = 4.4135807, $p < .05$) and the direct effect of referring employee gender was not significant (ANOVA-type estimate = 1.496916009, $p > .05$). Again, results suggested the average salary recommendation for individuals referred by Black employees ($M = 6.5$) was significantly higher than the average salary

recommendation for those referred by White employees ($M = 6.18$), and no significant interaction was found between referring employee race and gender on salary recommendations (ANOVA-type estimate = 0.01, $p > .05$). As a robustness check, again, a two-way ANOVA model was run with salary recommendations as the dependent variable, despite the non-normally distributed residuals. Again, results of the ANOVA-type test were replicated: a significant effect of race was found ($F(1, 435) = 8.73, p < .01, \eta^2 = .001$), but the effect of gender and interaction between race and gender were not significant. Thus, Hypotheses 2 and 3, again, received no support, and in response to the current study's research question, there is no evidence suggesting that a referring employee's intersecting race/gender combination impacts salary recommendations for the applicants they refer.

Taken together, results provide lack of support for hypotheses 2 and 3 in that applicants referred by Whites and men were not rated higher compared to applicants referred by Blacks and women. The opposite of the hypothesized effect for hypothesis 3 was found in that applicants referred by Black employees had significantly higher average ratings on all outcome variables compared to applicants referred by White employees. No significant effects were found for any outcome variables related to the interaction between referring employee race and gender.

Primary Study Qualitative Findings

Qualitative Analysis Procedure. In addition to quantitatively exploring the possible effects of a referring employee's race and gender on evaluations of referred applicants, the current study sought to better understand the possible mechanisms behind any observed quantitative effects. Thus, qualitative thematic analysis (Braun & Clarke,

2012) was applied to the text responses obtained for the question “In a few sentences, please explain why you selected the answer above regarding your recommendation,” which followed participant ratings of both recommendations for interviews and starting salary. The primary researcher and two trained research assistants (one graduate student) and one senior undergraduate lab assistant served as coders for the initial rounds of data coding, which encompassed 4,370 unique text responses.

Research assistants met for a training meeting prior to the coding process where they were provided a coding manual and instructions for the coding task were reviewed. Research assistants also practiced coding the first few lines of text together with the primary researcher to ensure all coders were clear on the coding task and any questions about the process were answered. Coders focused coding at the phrase level and made coding decisions based on what was assessed to be significant rationale for participant rating decisions on the interview recommendation or salary recommendation items. Once training concluded, both the research assistants and primary researcher proceeded with open coding of the first 437 responses to the interview recommendation question, after which a meeting was held to review initial findings, answer questions, and discuss coding decisions. Open coding, where no theoretical framework is imposed on the coding process *a priori* was applied in order to let themes emerge from the data in inductive fashion (Corbin & Strauss, 1990).

The researchers engaged in open coding of the data over an-eight-week period. Data were split into separate spreadsheets by response question (interview recommendation and salary recommendation explanations) and race/gender combination of the referring employee (i.e., Black woman, White woman, Black man, White man, not

referred). Thus, ten total spreadsheets were coded, each with 437 open text participant responses. The primary researcher coded all 4,370 text responses across all ten sheets. Research assistants coded the same first three spreadsheets together with the primary researcher and then coded randomly assigned half-spreadsheets for the remainder of the data.

The decision to have research assistants code subsets of the full data set rather than the full data set was made due to time constraints of the research assistants and because the primary function for the additional coders was to serve as triangulation for the primary researcher (Braun & Clarke, 2012; Tracy, 2012). In other words, research assistants were engaged in the qualitative coding for this project to ensure credibility of the coding process and reduce any bias that may occur if data were interpreted through the lens of just one researcher (Nowell et al., 2017; Tracy, 2012). Open coding generally became saturated at around the 200th response reviewed on each sheet, information which the primary researcher used to support the decision to allow research assistants to code subsets of the data after sufficient practice with the coding process. Thus, all spreadsheets were coded by at least two coders, the primary researcher and one or both research assistants, however, only the primary researcher coded all participant responses. Approximately 65% of the data were coded by multiple coders and 35% was coded only by the primary researcher.

Research assistants were kept blind to which race/gender combination was represented on each sheet as sheets were labeled by numbers only (e.g., “1”, “2”, “3”, etc.). This was done to keep knowledge of the referring employee’s intersectional identity from influencing how the research assistants coded their data and to serve as a second

form of bias check for the primary researcher, who could not be blinded to the race/gender of the referring employee represented on each résumé. Weekly coding meetings were held throughout the open coding process to discuss findings, review any themes that appeared to be emerging, and answer any questions among the coding team. The coding team went back and forth between the coding schemes and the data in iterative fashion to conduct sensemaking regarding suspected emerging themes (Braun & Clarke, 2012). Open codes were not identical but were very consistent in meaning among all three coders at each check-in, suggesting high credibility of the identified codes. Reliability estimates were not conducted for open coding given the purpose of open coding is to code freely and independently without a shared coding scheme among coders (Corbin & Strauss, 1990; Tracy, 2012).

Once open coding was completed, the process of constructing second order or “axial” codes was conducted by each member of the coding team separately, then discussed together in a team meeting (Braun & Clarke, 2006; Tracy, 2012). This process facilitated the emergence of primary themes from the data as the researchers discussed their organizing processes, definitions of axial codes, and possible names for the themes derived. The primary researcher conducted the final stages of the thematic analysis process, refining the identified themes and going back to the data to confirm themes with evidence from participant responses (Braun & Clarke, 2012). Similar to Quadlin (2018), a counting approach to evidencing themes was also applied to identify the frequency of both codes and major themes in the data at both the phrase and participant response levels to compare across evaluations by race/gender categories of the hypothetical referring employee (Miles et al., 2018). To begin discussion of qualitative findings, first, the major

emergent themes will be reviewed and described in the following section. Thematic descriptions will then be followed by discussion of findings regarding thematic differences among applicants referred by employees with different race/gender combinations.

Qualitative Findings: Description of Identified Themes. Thematic analysis revealed several meaningful patterns in the qualitative response data that both offer some possible explanations for the quantitative findings reviewed earlier in this manuscript, and also add complexity to the overall findings of the current research (see Table 2). Superordinate thematic categories of positive and negative evaluative themes were highly visible in the data encompassing seven major evaluative themes, five of which cut across both interview recommendation and salary recommendation responses, and two which emerged from only the salary recommendation responses (see Tables 7 and 8). The superordinate categories of evaluative themes describe the valence of applicant evaluations (positive or negative): responses were deemed positive if participants described applicants favorably and negative if participants described applicants critically. For example, the response “I feel like they could become a great and reliable employee” was categorized as a positive evaluation due to the favorable descriptors of “great” and “reliable” used to explain the participant’s higher interview recommendation. On the other hand, the response “This person does not seem exceptional in any way” was categorized as negative due to the unfavorable description of the candidate as “not...exceptional in any way” which the participant used to justify a lower interview recommendation rating.

The five major evaluative themes present in responses to both interview and salary recommendations refer to the following: applicant experiences, applicants' competence, global evaluations of applicants, assumptions about applicant personal qualities, and applicant referrals. The two additional major evaluative themes that emerged from salary recommendation responses described participants' need for applicants to "prove themselves" before they would award them greater salary and participants' use of their "own rules" or philosophies for determining salary recommendations rather than applicant evaluations. Table 9 presents the frequencies of each major evaluative theme in the data at both the phrase level (i.e., number of total coding instances; could have multiple per response) and the response level (i.e., which major evaluative theme appeared to drive outcome ratings). Each major evaluative theme is reviewed below, followed by the two additional themes unique to salary recommendation responses.

Experience-Related Evaluations. Participants frequently focused on "experience" when deciding both how likely they would be to interview applicants, as well as what starting salary an applicant should be awarded if hired. Participants considered a variety of applicant experiences as relevant evaluative criteria, including internship, work, and extra-curricular involvement, and they were particularly concerned with both the amount of experience an applicant possessed as well as how relevant experiences were to the job applicants were applying for (entry level buyer). Notably, all résumés contained exactly the same amount of experience (in years/months) via internship, work, and extracurricular involvement, and all résumés showed candidates had one relevant internship performing similar duties to those listed in the job description, one unrelated

Table 7*Interview Recommendation Themes*

<i>Major Theme</i>	<i>Valanced Subtheme</i>	<i>Definition</i>	<i>Sample Codes Included</i>	<i>Example</i>
Positive Evaluations: Rationale explaining why the candidate should advance to an interview.				
Experience-Related	Good Experience	Evaluations that candidates had strong work history or types of employment	<ul style="list-style-type: none"> • Relevant experience • Experience (positive) • Tenure (positive) 	"The person's internship is relevant to the position. The person's work history is relevant to the position."
Competence-Related	Competence	Evaluations that a candidate is qualified and capable of doing the job	<ul style="list-style-type: none"> • Skilled • Qualified • Competence 	"This employee seems capable and has the degree and skills that would suit the job well"
Global Evaluation	Global Positive Evaluation	General overall positive evaluations of a candidate	<ul style="list-style-type: none"> • Committed • Good Fit • Good Potential 	"I feel like they could become a great and reliable employee."
Personal Characteristics	Positive Personal Characteristics	Positive assumptions about who a candidate is as an employee or a person	<ul style="list-style-type: none"> • Hardworking • Motivated • Dedicated/Driven 	"I just get a sense of strong motivation from this persons resume."
Referrals	Positive Referrals	Statements indicating that the referral status of the candidate positively influenced interview recommendation ratings	<ul style="list-style-type: none"> • Referred (positive) • Not referred (positive) 	"Would recommend based on internal referral."
Negative Evaluations: Rationale explaining why candidate should NOT advance to an interview.				
Experience-Related	Poor Experience	Evaluations that candidates had weak work history, not enough experience, or not the right kind of experience to prepare them for the job	<ul style="list-style-type: none"> • Still in school/too green • Tenure (negative) • Not enough/not relevant experience 	"I don't think that this person had enough experience with being a buyer."
Competence-Related	Not Competent	Evaluations that a candidate is not qualified for or capable of doing the job	<ul style="list-style-type: none"> • Not enough knowledge • Not qualified • Would need extra training 	"I'm not sure they possess the skills necessary to complete the job well"
Global Evaluation	Global Negative Evaluation	General overall negative evaluations of a candidate	<ul style="list-style-type: none"> • Unsure of Fit • Commitment Risk • Not special 	"This person does not seem exceptional in any way"
Personal Characteristics	Negative Personal Characteristics	Negative assumptions about who a candidate is as an employee or a person	<ul style="list-style-type: none"> • Not dedicated • Not motivated • Don't trust them 	"I would say that this person is personally not motivated enough for this job"
Referrals	Negative Referrals	Statements indicating that the referral status of the candidate negatively influenced interview recommendation ratings	<ul style="list-style-type: none"> • Not referred (negative) 	"Because they were not referred I have no prior knowledge of them from my employees."

work experience in a service position (e.g., server, desk assistant, etc.), and one club membership in a business-related student association; the duration of each experience was held constant across all résumés as well.

Regardless of the similarity in experience between the hypothetical candidates represented in each résumé, participants reported various evaluations of applicants that ranged from very positive to very negative. One example of a positive evaluation of applicant experience in response to the interview recommendation question was "This person has both

Table 8*Salary Recommendation Themes*

<i>Major Theme</i>	<i>Valenced Subtheme</i>	<i>Definition</i>	<i>Sample Codes Included</i>	<i>Example</i>
Positive Evaluations: Rationale participants used to explain favorable* salary recommendations.				
Experience-Related	Good Experience	Evaluations that candidates had strong work history or types of employment/activities that merit higher salary	<ul style="list-style-type: none"> • Extra-curriculars • Good experience • Tenure (positive) 	“Their experience shows a high quality choice. I chose a higher salary to match.”
Competence-Related	Competence	Evaluations that a candidate is qualified and capable of doing the job, thus deserves a higher salary.	<ul style="list-style-type: none"> • Skilled • Good knowledge • Competent 	“They seem like a competent person who did well in school, so I did not want to start them at the minimum.”
Global Evaluation	Global Positive Evaluation	General overall positive evaluations of a candidate	<ul style="list-style-type: none"> • High quality • Good fit • Potential 	“Top talent = top dollar, I would want this candidate on my team based on their experience and drive, potential.”
Personal Characteristics	Positive Personal Characteristics	Positive assumptions about who a candidate is as an employee or a person that merits a	<ul style="list-style-type: none"> • Hardworking • Dedicated 	“I expect this person to be very dedicated and hardworking when it
Negative Evaluations: Rationale participants used to explain unfavorable* salary recommendations.				
Experience-Related	Needs More Experience	Evaluations that candidates had weak work history, not enough experience, or not the right kind of experience to merit higher salary.	<ul style="list-style-type: none"> • New grad/entry level/extra training • Not enough/needs more experience • Tenure (negative) 	“This is a college student with little experience going into an entry level position.”
Competence-Related	Minimally Qualified/Questionable Competence	Evaluations that a candidate has only the most basic level of qualification or may not be competent enough to perform the job, and so should receive a lower salary.	<ul style="list-style-type: none"> • Bare minimum/basic qualifications • Not qualified • Not competent 	“This person has the bare minimum qualifications. They get the bare minimum offer.”
Global Evaluation	Global Negative Evaluation	General overall negative evaluations of a candidate	<ul style="list-style-type: none"> • Poor fit • Low quality • Not special 	“I would not offer the job to the applicant. They did not appear to be a good match.”
Personal Characteristics	Negative Personal Characteristics	Negative assumptions about who a candidate is as an employee or a person	<ul style="list-style-type: none"> • Not dedicated • Not motivated • Don't trust them 	“I feel that he lacks the necessary dedication and experience to fill this position at standard entry level pay.”
Referrals	Negative Referrals	Statements indicating that the referral status of the candidate negatively influenced salary recommendation ratings	<ul style="list-style-type: none"> • Not referred (negative) 	“I would have a slight concern that they may not know the organization since they weren't referred...”
Prove Themselves	NA	The sentiment that the applicant is not worthy of higher pay as they are, first they must prove their worth	<ul style="list-style-type: none"> • Prove themselves 	“The applicant would need to prove the stated qualifications and experiences through demonstrated job performance before being accelerated into the standard pay track.”
Own Rules	Own Rules - Negative	When participants fall back on their own ideas of what a “bad” salary is, what they think is a “living wage”, or other personal philosophies of how salary should be determined without considering anything about the applicant being reviewed.	<ul style="list-style-type: none"> • Own Rules (Negative, resulting in recommendations in the lowest third of the available salary range) 	“This is the lowest typical salary...would be good starting salary.” (\$35K recommendation)

buyer experience and administrative experience at their college,” where the participant noted they would be 100% likely to recommend the applicant for an interview. On the other hand, a different participant stated, “not much experience in a real job or training” and selected that they would be only 20% likely to recommend the applicant for an interview based on the résumé they

reviewed. Indeed, a total of 1,410 coding instances (36% of all coding instances for the interview recommendation open response question) identified experience-related criteria as important to participants' interview recommendation ratings. Further, 605 responses (28%) described experience as the primary justification for an interview rating.

Similar findings emerged for the salary recommendation explanations, where 1,070 coding instances (52% of all coding instances for this question) mentioned experience-related criteria as a primary motivator for starting salary ratings, and 710 responses (32%) indicated experience was the primary justification for their salary recommendation. An example of a positive experience-related comment in the salary rating explanation data was "...this person brings a degree of experience and so should be at the higher end of the range" for a starting salary recommendation of \$48,000 annually (rating of 15 out of a possible 18-point scale). On the other hand, one participant said "I would probably pay them the base rate as well because they have never held a job in this field" to justify a \$35,000 annual salary (rating of 2 out of possible 18).

Competence-Related Evaluations. Participants also focused a great deal on evaluations of mastery of the knowledge, skills, and abilities assumed to make the applicant qualified to perform the entry level buyer job well. Participants frequently noted the skills described as desirable in the provided entry level buyer job description (e.g., communication, organization, problem-solving, etc., see Appendix B) and mentioned assessments of participants as being "capable," "competent," or "not competent" to perform the job.

In addition to presenting the same type and duration of experiences, all résumés contained exactly the same number of words to describe exactly the same skills in their experience descriptions (e.g., budgeting, customer service, multitasking, etc.) and all résumés

Table 9*Frequencies of Major Evaluative Themes*

Theme	# Coding Instances (Phrase Level)	% of All Coding Instances (Phrase Level)	# Responses Using This Theme as Primary Justification for Rating (Response Level)	% of All Responses (Response Level)
<i>Interview Recommendation Explanations</i>				
Experience-Related	1,410	36%	605	28%
Good Experience	894	23%	310	14%
Poor Experience	516	13%	295	14%
Competence-Related	1,589	41%	340	16%
Competent	1,398	36%	288	13%
Not Competent	191	5%	56	3%
Global Evaluation	357	9%	153	7%
Positive	230	6%	102	5%
Negative	127	3%	51	2%
Personal Qualities	298	8%	72	3%
Positive	254	7%	57	2%
Negative	44	1%	15	<1%
Referrals	241	6%	28	1%
Positive	207	5%	21	<1%
Negative	34	1%	7	<1%
More than One Theme			805	37%
Positive	--	--	739	34%
Negative			66	3%
<i>Salary Recommendation Explanations</i>				
Experience-Related	1,070	52%	710	32%
Good Experience	349	17%	192	9%
Poor Experience	721	35%	518	23%
Competence-Related	452	22%	174	8%
Competent	305	15%	129	5%
Not Competent	147	7%	84	3%
Global Evaluation	282	14%	190	9%
Positive	168	6%	98	5%
Negative	114	4%	92	4%
Personal Qualities	88	3%	30	1%
Positive	77	3%	20	<1%
Negative	11	<1%	10	<1%
Referrals	46	2%	3	<1%
Positive	31	1%	2	<1%
Negative	15	1%	1	<1%
Prove Themselves	123	5%	49	2%
Own Rules	--	--	647	30%
Positive	--	--	104	5%
Negative	--	--	295	14%
Neutral	--	--	248	11%
More than One Theme			226	10%
Positive	--	--	182	8%
Negative			44	2%

cited the same 3.6 grade point average (GPA) at their hypothetical university, indicating a generally competent, though not overqualified, applicant. Again, despite the similarity between résumés regarding qualifications, skills, and knowledge, participants varied greatly in their evaluations of applicant competence.

For example, one participant providing a recommendation for interview rating of 100% likely to interview said of an applicant “Sounds capable and meets the job requirements.” In contrast, a different participant reporting they would only be 20% likely to recommend an applicant for an interview provided the rationale “I don't know if this person has the requisite skills to get this job done.” Competence-related rationale was also used by participants in their starting salary determinations. For example, one participant stated their reason for recommending a starting salary of \$50,000 (rating of 17 out of a possible 18) was that the applicant “seem[s] like they would be able to handle the job really well,” while a different participant justified their recommendation of a \$37,000 starting salary (rating of 4 out of a possible 18) with the statement “I wonder if the applicant can keep up with the workload.” Competence-related rationale was coded 1,589 times in the interview recommendation responses (41% of all coding instances for this question) and was used as primary rationale for interview ratings 340 times (16%). For salary recommendations, competence-related rationale was coded 452 times (22% of all coding instances) and was used as primary rationale for a salary recommendation 174 times (8% of responses to the salary recommendation question).

Global Evaluations. Another key evaluative theme observed in the open response data reflected overall assessments of applicants as either generally good or generally poor in quality. These assessments were sometimes accompanied by additional evidence for the global evaluation of the candidate, and other times the global evaluations were provided as the sole

rationale for a rating. Examples of these themes found in the interview recommendation responses include “This person exhibits what I think would be a good fit for the position” (70% likely to recommend for an interview) and “Doesn't wow me” (20% likely to recommend for an interview). In the salary recommendation responses, this theme can be seen in the examples “Seems like a good fit” (\$50,000 starting salary recommendation, rating of 17 out of possible 18) and “I don't think the applicant is worth the pay” (Below \$35,000 starting salary recommendation, rating of 1 out of possible 18). Global evaluations were observed 357 times in responses to the interview recommendation question (9% of all coding instances for this question) and were used as primary rationale for interview recommendation ratings 153 times (7% of responses). For salary recommendations, global evaluations were coded 282 times in (14% of all salary recommendation coding instances) and were used 190 times as the primary justification for a salary recommendation rating (9% of responses).

Personal Characteristics Evaluations. The fourth major evaluative theme identified in the data was participants’ tendency to assume candidates had certain qualities that were not explicitly stated in résumés. Descriptors of applicants as “hardworking,” “motivated,” “dedicated,” “lazy,” and “lacking passion” were commonly used in justifications for both interview and salary recommendation ratings, despite the fact that none of these descriptors were explicitly listed on the résumés presented to participants. These descriptors indicated assessments of who participants believed applicants to be as people or workers. Examples of statements reflecting personal characteristics evaluations from the data include “...I just get a sense of strong motivation from this person’s résumé” (100% likely to interview) and “I also fear that the lack of passion could possibly result in mediocre work...” (\$40,000 starting salary, rating of 7 out of possible 18). Personal characteristic evaluations were coded 298 times (8% of coding

instances) and were used as primary justification for an interview recommendation rating 72 times (3% of responses). For salary recommendations, personal characteristics were coded 88 times (3% of coding instances) and were used as primary justification for a salary recommendation 30 times (1% of responses).

Referrals. The “Referrals” theme reflects the observed trend in some participant responses to identify the fact that an applicant was or was not a referral as an important factor in their interview or salary recommendation rating. Participants’ reactions to referrals varied, though the majority viewed referrals as a positive attribute for applicants, with 238 of 292 (82%) coding instances recorded under the “Referrals” theme across both open-ended questions (interview and salary recommendations) indicating a referral increased applicant desirability and 49 coding instances (17%) indicated not being referred reduced applicant desirability. Some examples of referral-related statements regarding from the interview recommendation data include “The biggest reason I would interview them is because they have been recommended by a current employee” (100% likely to recommend for an interview) and “This candidate was not personally referred by a company employee” (30% likely to recommend for an interview).

Examples of the “Referrals” theme from the salary recommendation open responses include “Having a referral always helps” (\$48,000 salary recommendation, rating 15 out of a possible 18) and “This person was not referred by anyone so we really don’t know how good (or bad) they are as an employee/person” (\$36,000 starting salary, rating 3 out of a possible 18). A total of 241 coding instances were recorded under the “Referrals” theme in the interview recommendation open response data (6% of all coding instances for this question), with 28 responses indicating referral was the primary reason for their interview recommendation rating. Forty-six coding instances were recorded for this theme in the salary recommendation data (2%

of all coding instances for this question) and only three responses indicated referrals were the primary reason for their salary recommendation rating (<1% of responses), suggesting the referrals theme was salient in the interview recommendation data, but not very salient to participants' salary recommendations.

Salary Recommendations: Prove Themselves. The first additional evaluative theme to emerge only in the salary recommendation participant responses is called “prove themselves” and reflects negative participant sentiments that certain applicants needed to demonstrate their value before they would be considered for or deserving of higher salary recommendations. Prior research examining women and racial minority experiences in the workplace have revealed common perceptions of having to “prove” oneself over and over again in order to be taken seriously or rewarded in comparison to men and White individuals (e.g., Williams et al., 2016). If applicants referred by certain referring employees, specifically those who are racial minorities and/or women, have greater numbers of “prove themselves” coding instances identified in their evaluations, this may aid in understanding how a referring employee's race and/or gender can influence applicant evaluations. Some examples of the “prove themselves” theme include, “She needs to prove herself more to obtain a higher salary” (salary recommendation of \$35,000, rating of 2 out of a possible 18) and “This candidate would have to prove a lot to me to get a raise” (salary recommendation of less than \$35, 000, rating of 1 out of a possible 18). This theme was indicated in a total of 123 coding instances (5% of total coding instances) and was indicated as the primary justification for participants' salary recommendation rating 49 times (2% of responses).

Salary Recommendations: Own Rules. The second additional theme observed only in the salary open text responses only is called “own rules” and refers to applicant reliance on their

own personal philosophies of how salary should be awarded as rationale for salary recommendation ratings. Statements coded under this theme reflected participants' disregard for applicant qualifications or attributes in favor of using their personal opinions about "good," "bad," or "appropriate" salaries to justify their ratings. Ratings justified by the "own rules" theme were coded as either positive (resulting in a rating in the top third of the available salary range), neutral (resulting in ratings in the middle third of the salary range) or negative (resulting in ratings in the lowest third of the salary range). Notably, even when salary recommendations were at the lowest or lower end of the salary range, the overall valence of a response could be positive. For example, one participant who gave a salary recommendation of \$35K (the second lowest possible recommendation) justified their rating with "This applicant's stated experience for the most part meets the requirements of the entry level position." Thus, the coding of the "own rules" themes as "positive," "neutral," or "negative" reflect the actual outcome of the participants' philosophy, not the tone of the response.

The "own rules" theme suggests not all salary recommendations are based on evaluations of candidate worth, rather, they reflect individual differences in participants' personal preferences for salary recommendations. Yet, participants did not always apply their "own rules" rationale consistently across applicants, as will be discussed in the following section. This theme was noticed during the open coding process but was re-coded in-depth at the response level (rather than the phrase level) after the open coding process as the context of a participants' entire response was often necessary to determine if "own rules" were being used as rationale for ratings. Examples of statements coded under the "own rules" theme include "That seems like a fair entry level salary" (\$40,000 salary recommendation, rating of 7 out of a possible 18, Own Rules - Neutral), "You cannot start a job and make the high level pay" (\$35,000 salary

recommendation, rating of 2 out of a possible 18, Own Rules - Negative), and “This seems like a fair and reasonable starting salary for this position.” (\$50,000 salary recommendation, rating of 17 out of a possible 18, Own Rules - Positive). The “own rules” theme was used as primary justification for participant salary recommendations 647 times (30% of responses).

Additional Theme: Reservations. For both interview and salary recommendation open responses, participants often described a variety of positive qualifications or attributes of the applicant they reviewed, but then added the qualifier “but...” and explained why they had reservations about the applicant. In open coding, the content of these dual-valanced phrases was recorded in existing open codes that later became associated with evaluative themed (e.g., “She has some experience, but not too much” would be recorded under both a positive experience code and a negative experience code). However, as this pattern of responding happened frequently in the data and was observed to affect ratings in the response-level coding process, a theme titled “reservations,” was created in addition to the seven major evaluative themes.

Some examples of the “reservations” theme from the data include “They have the right educational requirements and have learned some relevant skills at their past jobs, but are very early in their career” (10% likely to recommend for an interview) and “The candidate lacks a variety of true job experience, but has the drive to learn and grow with the company.” (60% likely to recommend for an interview). Additional examples include “I believe the candidate has potential, but lack[s] specific skills and experience to warrant a higher salary” (\$35,000 salary recommendation, rating of 2 out of possible 18) and “Their experience isn't truly relevant. However- they mentioned leadership on their résumé which makes me believe they could excel in the company.” (\$40,000 salary recommendation, rating of 7 out of possible 18). Reservations-related rationale was identified 313 times in the interview recommendation responses (14% of all

responses for this question) and 168 times in the salary recommendation responses (8% of all coding instances for this question).

Qualitative Findings: Thematic Patterns By Referring Employee Race and Gender.

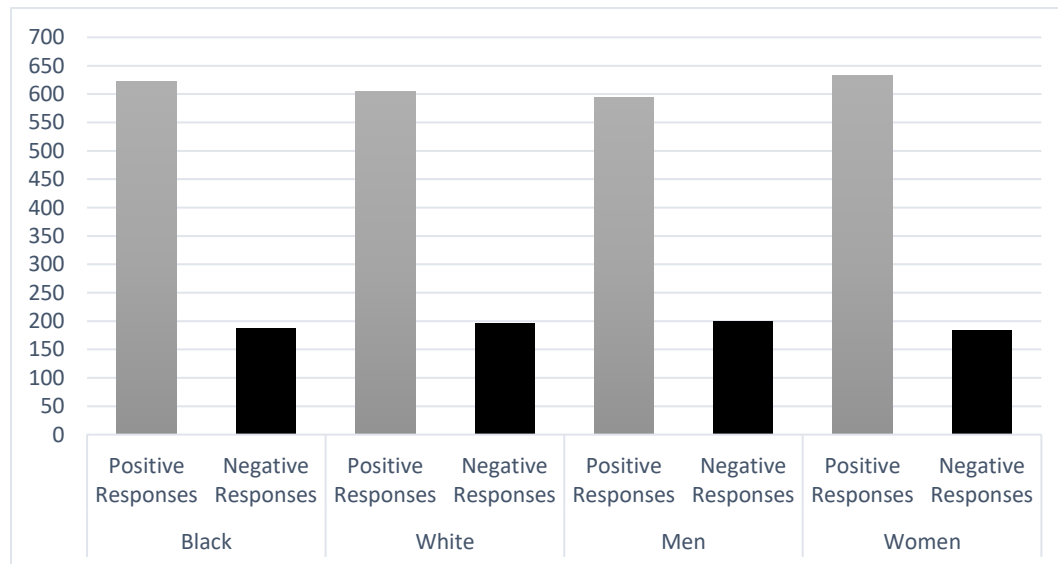
Consistent with findings from previous research on employee referrals, findings from the current study's investigation of the quantitative data obtained suggest a statistically significant difference in average ratings between referred and non-referred applicants on three out of four outcomes. Specifically, those referred by Black individuals had significantly higher average scores compared to those who were not referred on competence evaluations, interview recommendations, and recommendations for starting salaries. Further, when examining only the scores of referred applicants, statistically significant differences were found between applicants referred by Black employees compared to those referred by White employees on all outcome variables. Notably, when examining the prevalence of major themes in the qualitative data, additional differences among applicants were found when comparing evaluations grouped by race and gender of referring employees.

As noted earlier, a counting method was performed for confirming the prevalence of major themes in the data. Specifically, coding instances were totaled and then summed according to their thematic category to determine how many times a particular theme occurred in the data (i.e., there could be multiple themes present in each response). After determining the prevalence of codes in the data, each participant response was coded again at the response level to determine the theme primarily responsible for a participant's interview or salary recommendation. Thus, the data revealed information about both the kinds of themes used to describe applicants as well as the most important reasons for participants' ratings, both of which may be evaluated to explore differences across applicant ratings by their referring employee's race and gender.

Figures 2 and 3 depict total numbers of positive and negative participant responses for interview and salary recommendations broken down by referring employee race and gender. Qualitative findings regarding differences in evaluations for applicants by race of their referring employee generally aligned with quantitative findings. Applicants referred by Black employees received the largest number of overall positive responses and lowest number of overall negative responses in terms of the primary motivating theme for their interview and salary recommendations ratings. Participant descriptions of applicants referred by White employees were slightly more effusive than their descriptions of applicants referred by Black employees, however, as both more positive and more negative coding instances were recorded for applicants referred by White employees compared to individuals referred by Black employees.

Figure 2

Valence of Overall Rationale for Interview Recommendation Ratings in Participant Responses



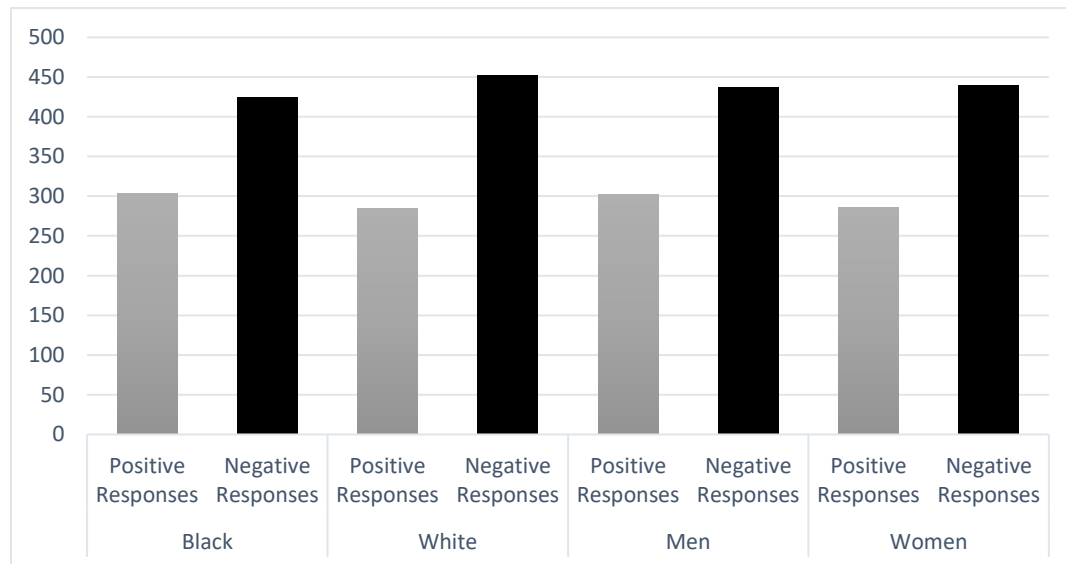
Notably, while no statistically significant effect of referring employee gender was found on applicants' evaluations in quantitative analysis, the qualitative data do reveal some evaluative differences based on referring employee gender. Specifically, applicants referred by women

received more overall positive evaluations and slightly less overall negative evaluations compared to applicants referred by men in responses to the interview recommendation question. Additionally, applicants referred by women received slightly less overall positive evaluations and slightly more overall negative evaluations compared to applicants referred by men in responses to the salary recommendation question. Participant descriptions of applicants referred by women also tended to be more effusive as both more positive and more negative coding instances were recorded for applicants referred by women compared to applicants referred by men.

Applicants Referred by Black Men and Women. Thematic analysis of the qualitative responses for interview and salary recommendations revealed some patterns that may shed light

Figure 3

Valence of Overall Rationale for Salary Recommendation Ratings in Participant Responses



on potential reasons why those referred by Black individuals were the only group to meaningfully benefit from employee referrals in the quantitative data (See Figures 4 through 7). Applicants referred by Black women, received the most qualitative positive responses from

participants for interview recommendations and applicants referred by Black men received the highest number of positive responses for salary recommendations, with applicants referred by Black women receiving the second highest number of positive responses to the salary recommendation question, only three responses less than applicants referred by Black men. Applicants referred by Black women also had less overall negative participant responses than applicants referred by employees with any other race/gender combination. Indeed, applicants referred by Black women had the highest quantitative average rating scores for both outcome variables, followed by Black men, so the quantitative and qualitative findings well-aligned.

Looking at the specific themes within positive and negative evaluative responses, applicants referred by Black women had the highest number of responses justifying interview recommendation ratings based on positive global evaluations and positive personal characteristics of all referred applicant groups. In terms of salary recommendation themes, applicants referred by Black women had the highest number of positive responses indicating that competence and global evaluations were the main rationale for ratings, and the lowest number of negative responses indicating low competence or prove themselves themes were the primary rationale for ratings. One exemplary response for an applicant referred by a Black woman under the positive global evaluation theme from the salary data is, “This applicant seems to be exactly what the company is looking for in a candidate,” giving the applicant referred by a Black woman a \$50,000 salary recommendation (rating of 17 out of 18). Thus, Black women appear to have been perceived as highly competent and more overall good candidates at higher rates compared to other applicants.

Applicants referred by Black men were also mostly evaluated positively by participants in terms of the major evaluative themes. Applicants referred by Black men had the highest

number of positive responses justifying interview recommendations based on good experience and competence compared to all other referred applicant groups. An exemplary response highlighting good experience for an applicant referred by a Black man is, “Very impressive experience...focused not only on performing his role but improving processes” (100% likely to recommend). This group of applicants also had the lowest number of negative responses highlighting negative global evaluations or negative personal characteristics as the primary reason for ratings. Regarding salary recommendations, applicants referred by Black men had the highest number of responses indicating positive global evaluations and positive own rules themes were the main rationale for ratings. This group also had the highest number of positive responses invoking more than one positive theme to justify salary recommendations. The one negative trend reflected in the qualitative data for applicants referred by Black men was that this group of applicants had the highest number of negative responses describing poor experience as justification for interview recommendations, neutralizing the high number of positive experience evaluations these applicants experienced to some extent. Taken together, findings suggest applicants referred by Black men were generally viewed to be of comparable (high) quality to applicants referred by Black women.

Applicants Referred by White Women. Applicants referred by White women had mixed qualitative evaluations according to thematic analyses. For example, on the one hand, this group of applicants received the lowest number of positive responses indicating competence was the main rationale for interview recommendations. On the other hand, applicants referred by White women had among the lowest number of negative responses indicating poor experience was the primary reason for interview recommendation ratings, similar to applicants referred by Black

women. Further, applicants referred by White women had the highest number of responses indicating that, while the applicant had good qualities, participants had reservations that lowered their evaluations of applicants referred by White women for both interview and salary recommendations (i.e., the “reservations” theme). Examples of the reservations theme found in responses for applicants referred by White women include, “I’ve got a feeling [they] might like to be present in a room, based on the key features described of their internship...but the language does seem a little reachy or overstated...” (30% likely to recommend for an interview) and “He/she would likely be sufficient at the job but I would not expect him/her to go above and beyond” (salary recommendation of \$37,000, rating of 4 out of 18).

Mixed evaluations of applicants referred by White women were also present in the salary recommendation data. On the one hand, applicants referred by White women received the highest number of responses indicating positive competence was primary rationale for ratings, as well as the highest number of responses invoking multiple positive themes as justification for ratings. However, on the other hand, applicants referred by White women received the lowest number of responses indicating positive global evaluations or positive personal characteristics were the main rationale for salary recommendation. Further, applicants referred by White women had the highest number of responses indicating “prove themselves” was the primary rationale for ratings. One example of a “prove themselves” response for an applicant referred by a White woman is “This person would need to prove to me that [she] is dedicated and works at an efficient pace for me to adjust her salary to be higher” (\$37,000 salary recommendation, rating of 4 out of a possible 18). Finally, in total across all evaluative themes, applicants referred by White women received the lowest number of positive responses and highest number of negative

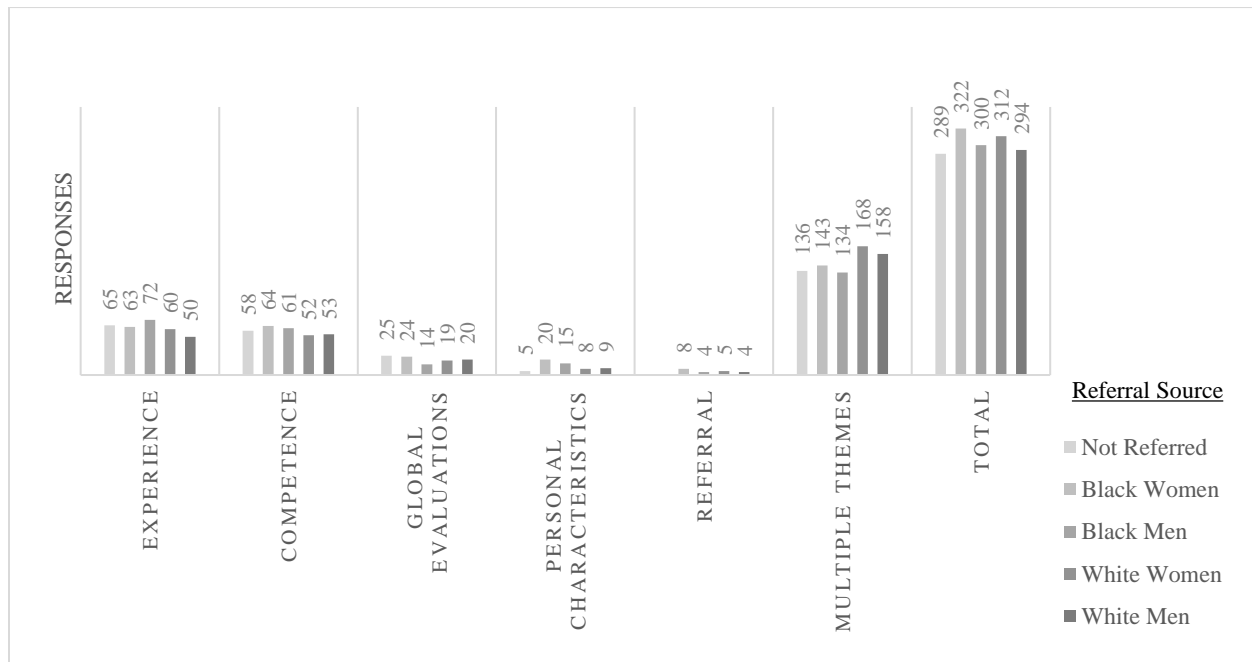
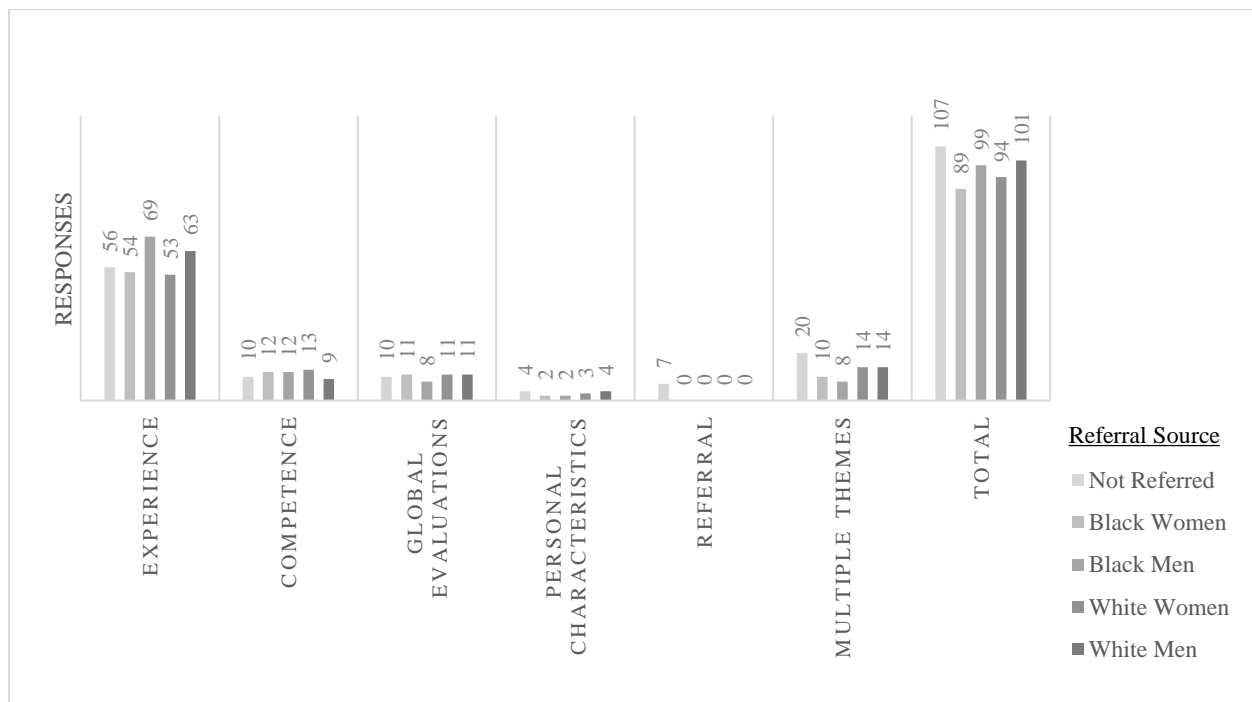
Figure 4*Participants' Primary Justification for Interview Ratings (Positive)***Figure 5***Participants' Primary Justification for Interview Recommendation Ratings (Negative)*

Figure 6
Participants' Primary Justification for Salary Recommendation Ratings (Positive)

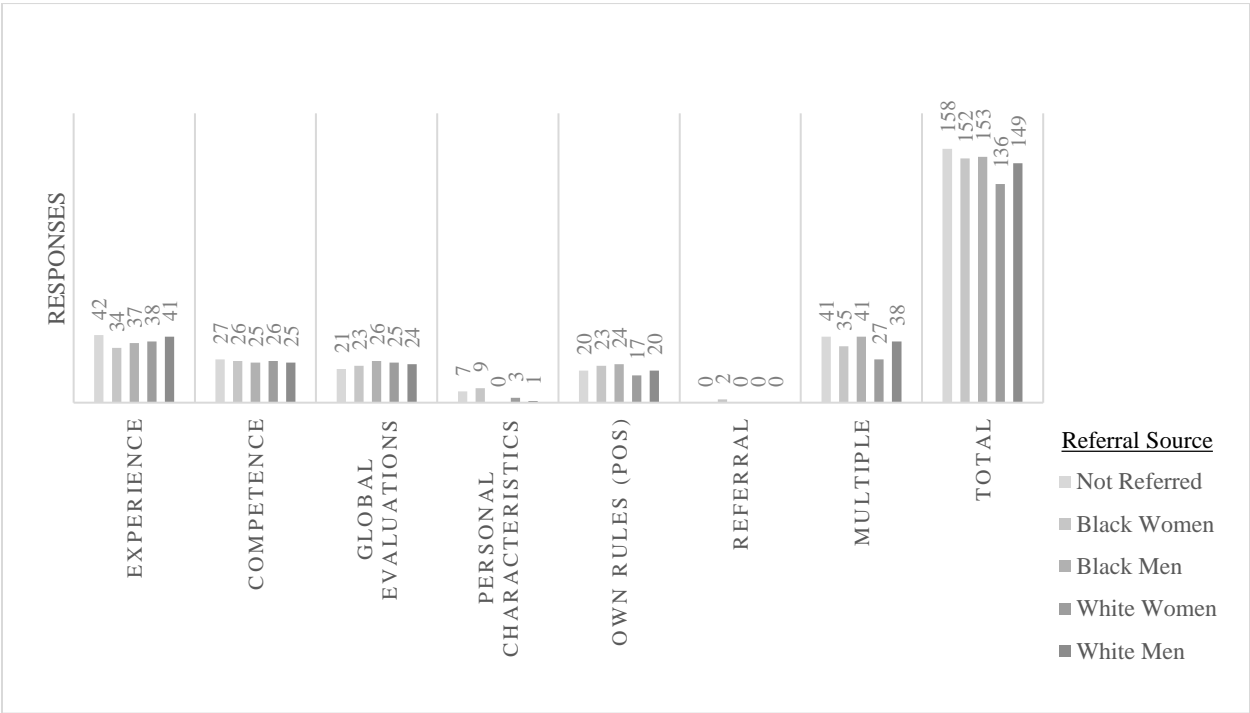
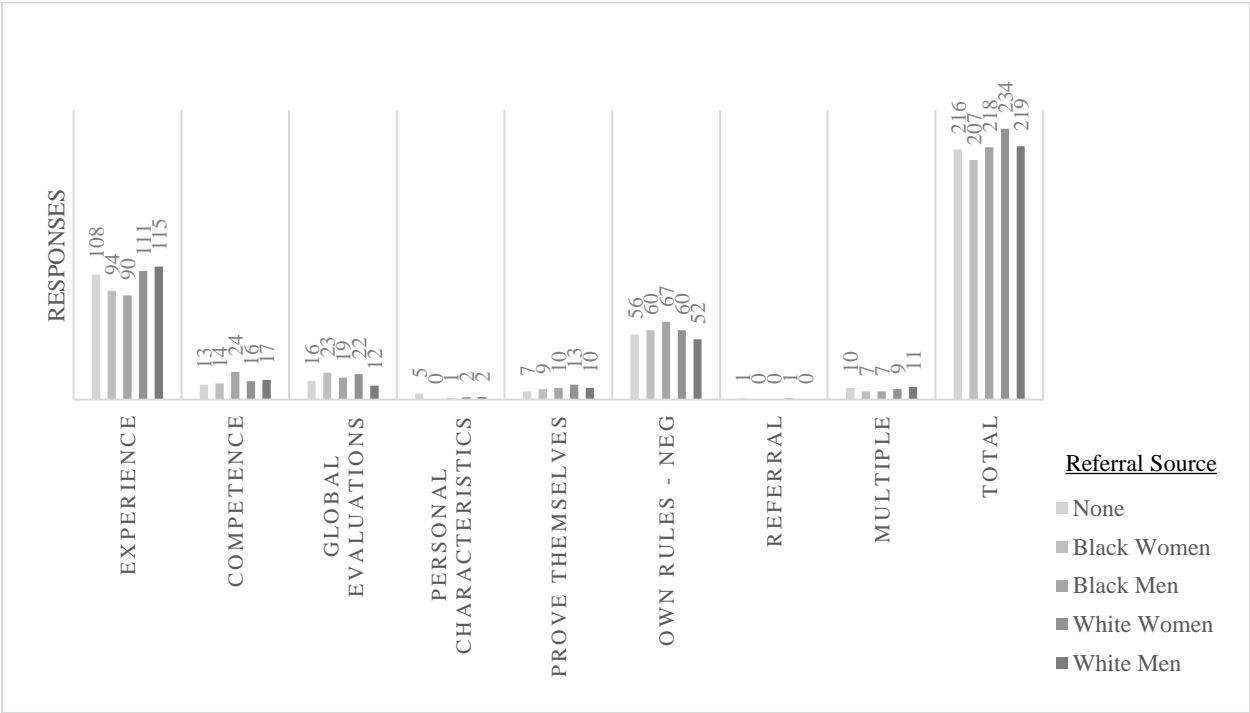


Figure 7
Participants' Primary Justification for Salary Recommendation Ratings (Negative)



responses for salary recommendations, making this group the least favored of all referred applicant groups in terms of qualitative descriptions for salary recommendations.

Applicants Referred by White Men. Applicants referred by White men had the lowest number of positive responses and highest number of negative responses for interview recommendations. Participants indicated that good experience was the rationale for their interview recommendation the least number of times for applicants referred by White men, and while they did not score the highest, nor the lowest on any other positive evaluative theme for interview recommendations, their total number of positive responses was closest to the number of positive responses for the not-referred applicant group. Regarding salary recommendations, participants indicated good experience was the primary rationale for ratings more times for applicants referred by White men compared to all other referred applicant groups. An example of a positive “good experience” themes response for an applicant referred by a White man is “The relevant experience should boost this employee upwards in the range” (\$45,000 salary recommendation, rating of 12 out of possible 18). However, applicants referred by White men also received the highest number of negative responses indicating poor experience was the primary rationale for salary recommendations, an example of such a response is “This person has very little experience in buying. Not worth offering the job at even the low end” (less than \$35,000 salary recommendation, rating of 1 out of possible 18). Applicants referred by White men did receive the lowest negative responses indicating that global evaluations or own rules themes motivated their salary recommendation ratings, though they also received the highest number of responses indicating multiple negative themes were responsible for salary recommendations.

CHAPTER 6: DISCUSSION

The quantitative and qualitative findings from the current study align with some findings from previous research on employee referral processes and challenge others. While the present research supports prior research suggesting referrals are evaluated more positively on important hiring outcomes compared to non-referrals (Brown et al., 2016; Schlachter & Pieper, 2019), it was individuals referred by Black employees that received the greatest benefit from employee referrals, a result inconsistent with prior research findings that Black individuals typically experience substantive disadvantage in hiring processes (e.g., Quillian et al., 2017). Notably, observed differences in both quantitative ratings and qualitative evaluations were small, with applicants across referral status and race/gender employee referral groups receiving very similar ratings and numbers/amounts of positive and negative evaluations. However, when it comes to race and gender effects in hiring processes, even very small differences can lead to inequality in hiring outcomes (Hardy et al., 2022), thus the findings of this research remain meaningful.

The finding that employees recommended by Black employees were viewed more positively than both not referred and referred White applicants challenges some theories of how racial and intersectional biases and stereotypes affect workplace outcomes. For example, several theorists have asserted how stereotypes of Black men in the United States often associate Black men with aggression and laziness (e.g., Devine & Baker, 1991; Taylor et al., 2019), two qualities typically considered undesirable in the workplace. Thus, scholars have suggested that stereotypes of Black men may aid in the creation of anti-Black biases that could potentially affect hiring decisions (Bertrand & Mullainathan, 2003; Taylor et al., 2019). However, contrary to thinking from theories such as social dominance theory (Sidanius et al., 2004) and stigma-by-association theory (Goffman, 2009) that suggest negative views of Black men should hurt outcomes for

Black men and those associated with them, in the current research, applicants referred Black men (and Black women) fared better than both non-referred applicants and applicants referred by White employees.

One possible explanation for why applicants referred by Black employees were viewed more positively than applicants referred by White employees may have to do with the kinds of status beliefs participants associated with the hypothetical Black man and Black woman referring employees in this study, “Lamar Booker” and “Tyra Jackson.” Regarding Black men, while aggression and laziness are two negative stereotypes often associated with Black men that contribute to lower evaluations of Black men’s relative status, research suggests that these stereotypes are not necessarily shared by certain “sub-types” of Black men (Devine & Baker, 1991). Specifically, some research suggests that subtypes of Black men such as “Black male athletes” and “Black businessmen” are associated with more positive stereotype content (the assumptions about groups that make up stereotypes) than other subtypes. For example, in their study of racial stereotypes by subtype, Devine and Baker (1991) found the “Black businessmen” racial subtype was highly associated with descriptors such as “ambitious,” “intelligent,” and “successful.”

It is possible that participants pictured “Lamar Booker” as a “Black businessman” given he was already employed with the hypothetical hiring organization. The legitimacy Lamar’s employed status conferred on him may have thus evoked more positive “Black businessman” stereotypes for some participants, leading them to have high positive status beliefs about “Lamar” which then may have transferred onto his referred applicants. For example, one participant reviewing a résumé referred by “Lamar Booker” stated “I peg this [applicant] as a left brain detail-oriented self-motivated Black male,” descriptors that align more with the positive

stereotype content associated with the “Black businessmen” racial subtype than with negative stereotype content associated with Black individuals in the workplace. This participant provided a 90% likely to interview recommendation and salary recommendation of \$38,000 annually (rating of 5 of a possible 18) for the applicant referred by “Lamar.” If this participant made assumptions about their applicants based on “Black businessman” stereotypes evoked by “Lamar’s” referral, and if other participants did the same, the higher evaluations of applicants referred by Black men not only make sense, but they also further support the assertions of status beliefs transfer theory that the status associated with one individual can, indeed, transfer onto an associated other.

If “Lamar” was viewed not as simply a Black *person*, but as a “Black *businessman*,” and the positive status beliefs associated with the “Black businessman” transferred onto his referred applicants, this may help explain why applicants referred by “Lamar” received higher average scores on the current study’s outcome measures compared to non-referrals. No status-based transfer of beliefs, positive or negative, could occur for non-referred employees because there was no-one for status beliefs to transfer from. Thus, non-referred employees received neither a bonus in evaluations from having an organizationally legitimized employee refer them, nor from having a referring employee that was associated with positive status beliefs based on race, gender, or race/gender combination. Applicants referred by “Lamar,” however, may have received a boost in ratings due to both 1) having a legitimate employee refer them, and 2) being referred by a “Black businessman” who was associated with success and intelligence due to his status as an employed “Black businessman.”

Status beliefs associated with the “Black businessmen” racial subtype may also help explain why applicants referred by Black women received higher average ratings on study

outcomes compared to non-referred employees. While this may seem counter-intuitive, recent theoretical work on how associations between intersectional stereotypes may influence employee evaluations from the MOSAIC Model (Hall et al., 2019) suggests that when two individuals share a foundational demographic group (e.g., Black men and women are both Black) that has a secondary association with a different “intersectional” demographic group (e.g., the “Black” demographic group is often implicitly associated with masculinity or being a man), individuals often project the stereotypes associated with the foundational demographic group onto all members of the second intersectional demographic group (e.g., masculine stereotypes associated with being Black would carry over onto, and affect evaluations of, both Black men and Black women).

In their article on the MOSAIC Model, Hall et al. (2019) use the example of Black men and women to explain how intersectional stereotype associations between race and gender demographic categories can lead individuals to project the stereotypes for Black men onto both Black men *and Black women*, which they support with theory and research from cognitive and social psychology. The MOSAIC model suggests that, because stereotypes of Black individuals include content that is also associated with masculinity, Black women’s stereotype content will include not only content associated with being Black and being a woman, but also content associated with being a man (specifically a Black man) in a process they call “stereotype integration.” If this is the case, and this stereotype integration did occur for participants in the current study, then it might explain why applicants referred by both Black men *and Black women* received statistically significant higher average ratings on outcome measures compared to non-referred applicants.

Considering assertions of the MOSAIC Model in the context of the current study, “Black businessman” stereotypes associated with “Lamar Booker” may have also been associated with “Tyra Jackson” if the foundational category by which participants categorized these referring employees was race (i.e., Black). The more positive masculine stereotype content associated with being a “Black businessman” would also be associated with “Tyra” due to her status as a Black (masculine) employee (masculine). Further, the MOSAIC Model suggests “Tyra’s” stereotype content associated with being a woman (feminine) would be diluted given the masculinity associated with being both Black (specifically, the masculinity associated with the “Black businessman” racial subtype in this study) and a Black woman. “Tyra” would thus be viewed as having high-status in a work-related context as the stereotype content evoked by “Tyra’s” intersectional identities aligns well with common prototypes of ideal workers (Acker, 1990; Hall et al., 2019). As a result, any status beliefs transfer participants made from “Tyra” to her referred applicant should be positive.

The MOSAIC model of intersectionality may also help explain findings related to applicants referred by White women. If race was the foundational demographic participants used to categorize referring employees, and gender and employment status were two intersectional demographic categories used to further understand the referring employee, “Carrie Larsen” (the name of the White woman referring employee in this study) would occupy two high-status categories in the context of the workplace (being White and being employed) and one lower status demographic category (being a woman). Thus, according to the MOSAIC model, Carrie ought to be evaluated by participants as having the positive qualities and abilities associated with being White and an employed person (as these demographics generally tend to hold higher status

in the workplace), but also as having negative qualities or abilities associated with being a woman (a demographic typically devalued in the workplace) and specifically a White woman.

White women are characteristically viewed as the prototypical woman in Western society and, thus, are most associated with the domestic domain rather than the workplace (Eagly & Karau, 2002; Rosette et al., 2016). As such White women's stereotype content tends to contain many negative assumptions about work-related competence and commitment that can negatively affect their workplace evaluations (Hall et al., 2019; Rosette et al., 2016). According to the MOSAIC model, White women's feminine identity would be amplified in a hiring context as, unlike Black women, they do not evoke additional masculine stereotype content to counteract the strength of their feminine stereotypes. As a result, White women may be expected to receive mixed or lower evaluations compared to White men and Black men and women who all evoke relatively more high-status stereotype content. Applying the MOSAIC model to "Carrie" in the present study, it would be expected that participants would have mixed evaluations of "Carrie" as a referring employee given her status as a White woman. These mixed positive and negative status beliefs associated "Carrie" may then transfer onto any applicants she referred, resulting in mixed and possibly lower evaluations compared to applicants referred by employees with more amplified positive status (e.g., White men and "Black businessmen").

Indeed, the qualitative responses from participants showed mixed evaluations of applicants referred by White women. Further, applicants referred by White women received the lowest positive and highest negative qualitative responses for salary recommendation ratings. In addition, while applicants referred by White women were not found to have statistically significant quantitative differences in average outcome ratings from other intersectional employee referral groups, their raw average scores place them third in the ranking hierarchy

among referred applicant groups behind Black women and Black men, and ahead of White men for all four study outcomes. It is possible that the greater salience of “Carrie’s” gender overpowered positive stereotype content associated with her race, as evidenced by the high prevalence of “reservations” and “prove themselves” themes recorded for applicants referred by White women. Indeed, as discussed in the qualitative findings section above, applicants referred by White women received the highest number of responses indicating “reservations” compared to applicants referred by other referring employees with different race/gender combinations. One particularly notable response from a participant reviewing an applicant referred by a White woman stated:

“Young, academic, enthusiastic, all true but will a young woman be interested in staying in the job long term? If I train this employee and she leaves within a year or two, that's a loss for the company resources.”

This participant went on to give the applicant a 50% likely to interview rating based due to their reservations about a “young woman’s” likelihood to commit to an organization. This statement reflects both a possible homophily effect (the participant assumed that because the referring employee was a woman, so also might be the applicant) as well as gender stereotypes about women suggesting they are less committed in the workplace (Acker, 1990; Eagly & Karau, 2002). While the participant acknowledged many good qualities in the applicant, the reservation was strong enough to temper their inevitable evaluation of the applicant.

The one group of applicants whose quantitative ratings and qualitative evaluation patterns did not seem to fit any existing models of intersectionality were those referred by White men. According to both SCT and the MOSAIC model, given the fact that the White man referring employee, “Luke Decker,” occupied what is traditionally viewed as the highest status categories in the context of the workplace (White, man, employed), participants should view him as having

the highest status of all referring employees. It would thus be expected that the highest status beliefs would transfer onto any of Luke's referred applicants, resulting in these applicants receiving the highest ratings from participants. This was not the case, however, in the quantitative or qualitative findings of the current research. In fact, applicants referred by White men received the lowest raw average scores (though not statistically significantly different) of all applicant groups. Further, applicants referred by "Luke" received the least favorable qualitative responses for interview recommendations compared to other referred groups, and neither the highest nor lowest positive or negative responses for salary recommendation responses.

What might be responsible for applicants referred by White men performing so unremarkably given their assumed higher status? Some might be quick to jump to assumptions of backlash against White men due to recent social movements that highlight gender and racial inequities that privilege White men. Backlash against White men seems an unlikely explanation for how applicants referred by White men were qualitatively evaluated in the current research, however. Applicants referred by White men did receive the highest number of responses for the positive experience theme in the interview recommendations open text data. Further, it is also important to keep in mind that the quantitative findings returned no significant differences in ratings of applicants between groups referred by employees with different race/gender identity combinations.

What may be more likely is that, since White men are considered the dominant group in both Western society and the workplace, "Luke's" race and gender identities were not salient enough in participants' minds to influence their ratings or qualitative evaluations. Hall et al. (2019) note that "An employee must first be visible, noticed, or attended to before an evaluator can form an accurate evaluation" (p.654); perhaps "Luke's" dominant group status made him

effectively indistinguishable from no referral at all – effectively invisible. Black individuals and women are not considered prototypical “ideal workers” (Acker, 1990), and thus, perhaps referring employees who evoked these race and gender statuses for participants stood out more as different from the norm to participants, making status beliefs about these employees more likely to transfer onto their referred applicants.

The theory of status beliefs transfer contains assertions supporting the idea that status beliefs about “Luke” were less impactful to evaluations of his referred applicants due to the lower salience of his race/gender combination in a workplace context. In fact, Tak et al.’s (2019) study testing theory of status beliefs transfer found that while additional positive status information (i.e., an award) enhanced evaluations of women selling masculine products, it did not meaningfully impact evaluations of men selling the same product. The authors explain why this may have happened by referencing expectation states theory concepts of the “inconsistency” and “attenuation” principles.

Both the attenuation and inconsistency principles of expectation states theory may help explain why “Luke’s” applicants were not distinguished from non-referred applicants despite their association with Luke’s majority status characteristics. The attenuation principle suggests that “additional information about status has more impact on evaluations when the information is novel than when the information is redundant” (Tak et al, 2019, p.553). In the current study, all baseline status information about *applicants* was held constant (i.e., no information about applicant race or gender, all were college student in the last year, etc.). The novel status information came from *employee referrals* in the form of their organizationally legitimized status as already employed workers. Findings of the current research suggest additional status was conferred on referred applicants compared to those who were not referred, as evidenced by the

statistically significant difference in average ratings between referred and non-referred applicants. However, given that White men serve as the template for the prototypical ideal worker (Acker, 1990), “Luke’s” status information may have been viewed by participants as less novel than the additional status information participants received from “Lamar”, “Tyra” or “Carrie,” (the non-prototypical ideal employees). Therefore, status beliefs about “Luke” may have been less impactful to participant evaluations of applicants, leading them to view applicants referred by White men as essentially the same as applicants who were not referred.

The inconsistency principle, on the other hand, asserts that additional positive status information will be most powerful when it is considered in the context of a field of status beliefs that are conventionally considered negative (Correll & Ridgeway, 2006). In other words, positive status information benefits those commonly associated with negative characteristics, qualities, or stereotypes more than people who are commonly associated with positive characteristics, qualities, or stereotypes. Considering the inconsistency principle in the context of the current research, it is possible that applicants referred by “Luke” did not benefit from referrals the same way that applicants referred by “Tyra” and “Lamar,” and to some extent “Carrie” did (given the mixed qualitative findings for applicants referred by White women) because “Luke” is already associated with positive characteristics. Thus, his being employed by the organization was not considered meaningful status information. However, because Black men’s, and Black and White women’s race and/or gender status characteristics are more conventionally associated with negative workplace stereotypes, the additional status information that “Tyra,” “Lamar,” and “Carrie” were already employed by the organization may have attributed these referring employees’ higher status in the eyes of evaluators. The positive information of being already employed with the organization contradicted negative workplace stereotypes about Black

individuals and women for “Lamar,” “Tyra,” and “Carrie.” Thus, higher status beliefs would have been transferred onto applicants referred by these hypothetical employees compared to the status transfer that may have occurred for employees referred by “Luke.”

Overall, findings from the current research may elucidate how status beliefs transfer may operate among humans in a hiring context. Integrating status characteristics theory, theory of status beliefs transfer, and logic asserted by the MOSAIC Model (which aligned well with a majority of both qualitative and quantitative findings), *how* status beliefs transfer influences employee evaluations should depend on which of the employee’s (or in this case, referring employee’s) multiple status characteristics evaluators deem foundational (i.e., the most salient) *and* how an employee’s intersecting status group affiliations combine with the foundational status characteristic to determine specific status beliefs and/or stereotypes evoked for an evaluator. If the foundational and most important demographic category participants used to categorize referring employees was race in this study, and the racial stereotypes evoked were positive for both Black and White referring employees (but more salient for applicants referred by Black employees given attenuation and inconsistency principles), then applicants referred by Black employees should have been rated higher compared to applicants referred by White employees (which they were). Further, despite common associations of Blackness and femininity with negative workplace outcomes, applicants referred by Black women would receive benefits from referrals in addition to applicants referred by Black men given that “Tyra’s” stereotype content from her multiple positive masculine status characteristics (Black “businessman,” current employee, Black woman) would have diluted negative stereotypes associated with her femininity and amplified positive stereotype content.

In addition, results of the current study suggest that the extent to which the additional status is conferred on referred applicants compared to non-referred applicants may depend on how much referring employees stand out and/or disconfirm negative *intersectional* status beliefs or stereotypes, as described by expectation states theory's attenuation and inconsistency principles. Quantitative findings suggesting that only applicants referred by Black women's salary recommendations (not Black men's) were statistically significantly higher than non-referred employees suggest an intersectional status beliefs transfer effect is possible. Further, nuances in evaluations provided by qualitative findings for White women, specifically, suggest intersectional stereotype content may have been used to evaluate candidates.

Applicants referred by White women received the highest number of responses indicating that multiple positive evaluative themes were responsible for their interview recommendations, but this result was attenuated by high numbers of critical responses for interview recommendation justifications in addition to the lowest number of positive and highest number of negative evaluative responses for salary recommendations. If race alone were impacting evaluations, we would expect to see similar patterns of evaluations for White women as White men, however, White men fared better than White women in qualitative evaluations overall, despite the non-significant difference in their average quantitative ratings. This suggests that evaluations of applicants referred by White women may have been affected by the negative stereotype content associated with their gender, not just ignored due to the non-novel and non-stereotype disconfirming Whiteness. Indeed, taken together, the qualitative and quantitative findings from the current research suggest that not only can status beliefs transfer happen between two people in hiring contexts, but that intersecting status characteristics of one person may affect evaluations of another.

CHAPTER 7: CONTRIBUTIONS, LIMITATIONS, AND FUTURE RESEARCH

Theoretical Contributions

The current research provides several key contributions to the selection, intersectionality, and status characteristics literatures. First, by integrating theories of intersectionality with theories of employee referrals, the current research suggests additional boundary conditions may exist regarding the circumstances under which referrals benefit job applicants. Specifically, by examining outcomes of employee referrals in an experimental context, greater insight into whether, how, and for whom employee referrals can *cause* higher applicant evaluations could be gained. Findings from the current research demonstrated, both quantitatively and qualitatively, that employee referrals did not benefit all applicants to the same extent, as is generally proposed by theories of employee referrals (Brown et al., 2016; Schlachter & Pieper, 2019). Rather, employee referrals benefited some applicants more than others, namely those referred by Black employees and especially those referred by Black women. This suggests existing theories that advocate for employee referral programs should receive greater and more nuanced testing to refine propositions so that consideration of referring employee characteristics (specifically status characteristics) is included.

Second, in extending the theory of status beliefs transfer from a product market context to an employment context, insights into the mechanisms of how status beliefs transfer occurs among humans and in employment contexts were gained. The current research provided unique test of the theory of status beliefs transfer, a nascent theoretical extension of status characteristics theory, demonstrating that status beliefs can transfer from one person onto an associated other. Further, findings from the current research suggest that which specific status beliefs transfer

from one person to another, as well as the degree to which beliefs impact evaluations, depends on nuanced evaluations of the first individual's intersectional status characteristics.

The majority of findings are consistent with the MOSAIC model of intersectionality whereby evaluations are determined not by only the most salient identity perceived by an evaluator, but by how the evaluator integrates information related to a target person's combination of foundational and associated identities. In addition, findings suggest that multiple majority statuses held by one individual may not always confer benefits to associated others if status information provided by that individual is not considered novel by evaluators (i.e., the "attenuation principle" from status characteristics theory) and/or does not contradict widely held negative status beliefs (i.e., the "inconsistency principle"). Thus, intersectional status characteristics not only matter for how status beliefs transfer from one person to another, but also the degree to which status beliefs impact evaluative outcomes of the individual receiving the status beliefs transfer.

Practical implications

In addition to the theoretical contributions offered above, this study has some practical implications for organizations considering the use of employee referral programs. First, the current research suggests that negative racial biases may be mitigated in employee referral processes to some extent. Black employees, having an additional positive status characteristic as employed members of an organization, are perhaps legitimized in the eyes of decision-makers, counteracting and maybe even replacing negative Black stereotypes with more positive stereotype content. The result of this legitimizing process may be that Black referring employees are viewed as particularly exemplary, which can benefit the applicants they refer. Given that both personal networks and employee referrals tend to be homophilous (i.e., people tend to socialize

with and thus refer people who are similar to them demographically; (McPherson et al., 2001; Rubineau & Fernandez, 2013), it is possible Black *applicants* may be able to overcome some of the anti-Black discrimination common in hiring processes (Quillian et al., 2017) when they are referred by Black employees that help to diffuse negative Black stereotypes. Findings from the current study suggest organizations seeking to increase racial diversity in their organizations, at least at the entry level, might see some success if they encourage racial minority employees to participate in employee referral programs.

As a caveat to the above implication, additional research is essential to understanding how status beliefs transfer operates in real organizations and the circumstances under which different applicants benefit from employee referrals. As noted earlier in this paper, Silva (2018) found that Black applicants did *not* benefit from Black employee referrals in a hypothetical online experiment similar to the experiment conducted in the current study. However, Silva (2018) used a smaller all-White sample and the evaluation task focused on effects of referring employee race only (not intersecting gender) on applicant outcomes when applying for a management position. Taken together with the findings from the current study, it is possible that status beliefs transfer operates differently for higher-status positions and when intersectionality of applicants and referring employees is accounted for. In addition, evaluative ratings may vary more with a more diverse sample of participants, though hiring professionals in the U.S. remain predominantly White (U.S. Bureau of Labor Statistics, 2021). Nevertheless, both the present research and Silva (2018) suggest status beliefs transfer can happen in employee referral processes and that when it does, several factors of employees and applicant status characteristics may be meaningful in different ways in different contexts when it comes to applicant evaluations. Additional research is needed to understand how different aspects of the referring

employee and employment context affect the outcomes of employee referrals for different groups of applicants. Until more is known, organizations should consider both creating structured employee referral programs and monitoring the outcomes of their referrals processes to limit the potential effects of racial bias.

Another practical implication of the current study relates to fairly small differences in applicant ratings by referring employee race/gender combination. The fact that average ratings of applicants grouped by employee race/gender combination did not significantly differ across 437 raters may lead practitioners to believe intersectional biases are not problematic in employee referral programs. However, it is essential to note that in qualitative descriptions of applicants, both positive and negative status beliefs about the referring employee's race/gender combination influenced participant evaluations of applicants. Specifically, applicants referred by White women were qualitatively described the least positively compared to all other groups, especially when it came to salary recommendation explanations. Further, applicants referred by White women had widely mixed evaluations with high prevalence of reservations about their abilities despite recognition of positive qualities. These findings suggest that, while race and gender biases did not appear to meaningfully affect quantitative ratings of applicants when 437 raters' scores were averaged, they still exist and can affect applicant evaluations.

That 437 unique hiring decision makers would all evaluate the same pool of candidates in a real-world organization is highly unlikely; most hiring decisions are made by one or a few individuals at most in real organizations. Thus, if the one or few individuals charged with making hiring decisions happen to be the same individual(s) with higher levels of implicit or explicit race and/or gender biases, the likelihood negative intersectional biases (perhaps transferred from their referring employees) will disproportionately advantage or disadvantage

certain applicants would increase substantially. Taken together, the findings of the current study suggest that intersectional biases of evaluators can be reduced when multiple raters are used to evaluate applicants.

Limitations and Future Research

While several contributions were made in conducting the current research study, it was not without limitations. For example, only two referring employee status characteristics were examined in terms of their main and intersectional effects on applicant evaluations. Beyond that, for the status characteristic of “race,” only White and Black categories were included. The full intersectional constellation of any individual is incredibly complex and can include a large number of varying characteristics (e.g., race, gender, class, age, religion, ability, etc.). Thus, the current research is limited in that considering just two intersecting characteristics, and only two categories of one characteristic of many, provides an incomplete picture of how intersectional status characteristics of one person may transfer onto a target person and ultimately affect evaluations of the target.

Future research should not only explore how other racial categories of referring employees’ may intersect with gender identities to affect outcomes of status beliefs transfer, but also the effects of referrals on applicant evaluations based on how other status characteristics of referring employees intersect. Outcomes may vary substantially depending on how evaluators integrate different foundational and associated status characteristics, as asserted by the MOSAIC model of intersectionality. The MOSAIC model is still a very new intersectional theory but may provide a guiding framework for future studies examining how intersectionality influences outcomes of status beliefs transfer.

A second limitation exists in that the target job for hypothetical applicants was selected to be relatively race, gender, and class-neutral so as to avoid confounding applicant evaluations with participant perceptions of suitability for the job. Of course, jobs are often gendered, racialized, and classed, which can influence evaluators hiring decisions based on whether or not an applicant's status characteristics are perceived a good match for the gendered, racialized, or classed nature of the job in question (or in the case to this research, the match between the job and the transferred beliefs about an applicant based on a referring employees status characteristics). It is possible referring employees' status characteristics transfer differently (or don't transfer at all) for different kinds of jobs. For example, for feminized jobs, like nursing, it is possible that status information from a White man referring employee will be considered more novel and disconfirming of negative status beliefs (e.g., that men are not good caretakers) than it was in the current study, because men are not prototypical in the nursing occupation. Thus, given the attenuation and inconsistency principles, perhaps ratings and/or qualitative evaluations of applicants referred by White men would be higher if the job in question was for a nursing job. Future research should examine intersectional status beliefs transfer using jobs that carry greater association with status characteristics to see if effects align or diverge with the current study's findings. This would help refine the boundary conditions of the theory of status beliefs transfer.

A third limitation exists to the current study in the form of potential history effects. Social desirability responding may have led some participants to rate participants higher than they would have in a real-world situation. Efforts were made to reduce the temptation of social desirability responding in the current study, specifically, data were collected anonymously, and participants were made aware of this in the informed consent. However, social justice movements related to racial injustice and gender equality/sexual harassment and abuse have

recently taken up a meaningful presence in the socio-political landscape of the United States. These highly contentious and emotionally charged social movements have raised a great deal of awareness around social inequities for American women and racial minorities (Anderson & Toor, 2018; Olin, 2021) especially during the extreme stress of the global COVID-19 pandemic outbreak in 2020.

Data collection for the current study occurred in late 2021, one year into the pandemic and during a time when social justice movements related to race and gender were highly salient in the American media and social discourse. It is possible that Americans, as a society, have become more attuned to and developed heightened sensitivity to any circumstances where their actions may be scrutinized as racist or sexist in the current socio-political environment. As a result, some participants may have been particularly careful to ensure their quantitative ratings were equal across résumés, regardless of differences in actual evaluations reflected in qualitative responses. If social movements did impact participant responses, it is possible greater intersectional biases exist that were not captured by the current data collection. On the other hand, it is also possible that Americans are actually becoming more aware of racial and gender inequalities, as well as their own biases, and thus are genuinely interested in eliminating unfair practices and making concerted efforts to treat others fairly. It will be interesting to see if more equal hiring evaluations persist in studies conducted in the post-pandemic, post-#BlackLivesMatter and #MeToo world.

Finally, the findings from the current study can really only speak to whether or not status beliefs transfer *can* happen in employee referral processes, not whether or not it *does*. While using participants with hiring experience adds to the external validity of the current research, the evaluation task was hypothetical and had no real-world consequences for either the participants

or organizations. Establishing that status beliefs transfer can occur from one person to another, both at all and, specifically, in an employment context is an important first step in testing and validating the theory of status beliefs transfer. However, additional research might examine real organizational referral data to test whether or not status characteristics of referring employees do have an impact on referred applicants, both controlling for and in combination with applicant status characteristics. If intersectional status characteristics of referring employees are found to have incremental effects on applicant evaluations above and beyond the effects of applicant characteristics, or even interact to affect evaluations, this would be a meaningful test of the validity and utility of the theory of status beliefs transfer, both for scholars and practitioners.

Conclusion

The current research provides a critical first step in testing the theory of status beliefs transfer and extends theory related to employee referral programs in organizations by integrating status characteristics theory and theories of intersectionality. Findings suggest that status beliefs transfer can occur between one person and another target person, and that both how the transfer happens, as well as the magnitude of its influence on the target, may depend on the intersectional status characteristics of the first person. This research suggests the theory of status beliefs transfer may open up novel and meaningful avenues of scholarship, both in terms of the potential for theory building as well as practical implications. Status beliefs transfer research and scholarship may both enhance our understanding of how perceptions of status can affect hiring outcomes and subsequent equality of opportunity in organizations, and help provide guidance for organizations in how to create more equal hiring practices for applicants regardless of their, or their referring employees', status characteristics.

References

- Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society*, 4(2), 139–158.
- Acker, J. (2006). Inequality regimes: Gender, class, and race in organizations. *Gender & Society*, 20(4), 441–464. <https://doi.org/10.1177/0891243206289499>
- Anderson, M., & Toor, S. (2018). How social media users have discussed sexual harassment since #MeToo went viral. *Pew Research Center*. <https://www.pewresearch.org/fact-tank/2018/10/11/how-social-media-users-have-discussed-sexual-harassment-since-metoo-went-viral/>
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, 21(6), 1086–1120. <https://doi.org/10.1016/j.leaqua.2010.10.010>
- Assari, S. (2018). Blacks' Diminished return of education attainment on subjective health; mediating effect of income. *Brain Sciences*, 8(9), 176. <https://doi.org/10.3390/brainsci8090176>
- Atewologun, D., Sealy, R., & Vinnicombe, S. (2016). Revealing intersectional dynamics in organizations: Introducing 'Intersectional Identity Work.' *Gender, Work & Organization*, 23(3), 223–247. <https://doi.org/10.1111/gwao.12082>
- Berger, J., Cohen, B. P., & Zelditch, M. (1972). Status characteristics and social interaction. *American Sociological Review*, 37(3), 241–255. <https://doi.org/10.2307/2093465>
- Bertrand, M., & Mullainathan, S. (2003). *Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination*. National Bureau of Economic Research. <https://www.nber.org/papers/w9873.pdf>

- Beugnot, J., & Peterlé, E. (2018). Gender bias in job referrals: An experimental test. *Journal of Economic Psychology*, 76, 102209. <https://doi.org/10.1016/j.joep.2019.102209>
- Blau, F. D., Brummund, P., & Liu, A. Y.-H. (2013). Trends in occupational segregation by gender 1970–2009: Adjusting for the impact of changes in the occupational coding system. *Demography*, 50(2), 471–492. <https://doi.org/10.1007/s13524-012-0151-7>
- Bonilla-Silva, E. (2015). The structure of racism in color-blind, “Post-Racial” America. *American Behavioral Scientist*, 59(11), 1358–1376. <https://doi.org/10.1177/0002764215586826>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Breaugh, J. A. (2013). Employee recruitment. *Annual Review of Psychology*, 64(1), 389–416. <https://doi.org/10.1146/annurev-psych-113011-143757>
- Brown, M., Setren, E., & Topa, G. (2016). do informal referrals lead to better matches? Evidence from a firm’s employee referral system. *Journal of Labor Economics*, 34(1), 49.
- Castro, M. R., & Holvino, E. (2016). Applying intersectionality in organizations: inequality markers, cultural scripts and advancement practices in a professional service firm. *Gender, Work & Organization*, 23(3), 328–347. <https://doi.org/10.1111/gwao.12129>

- Choo, H. Y., & Ferree, M. M. (2010). practicing intersectionality in sociological research: a critical analysis of inclusions, interactions, and institutions in the study of inequalities. *Sociological Theory*, 28(2), 129–149. <https://doi.org/10.1111/j.1467-9558.2010.01370.x>
- Collins, P. H. (2015). Intersectionality's definitional dilemmas. *Annual Review of Sociology*, 41(1), 1–20. <https://doi.org/10.1146/annurev-soc-073014-112142>
- Cook, A., & Glass, C. (2014). Women and top leadership positions: Towards an institutional analysis. *Gender, Work & Organization*, 21(1), 91–103. <https://doi.org/10.1111/gwao.12018>
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21.
- Correll, S. J., & Ridgeway, C. L. (2006). Expectation states theory. In *Handbook of Social Psychology* (pp. 29–51). Springer.
- Crenshaw, K. (1989). demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989, 139.
- del Río, C., & Alonso-Villar, O. (2015). The evolution of occupational segregation in the United States, 1940–2010: Gains and losses of gender–race/ethnicity groups. *Demography*, 42, 967–988.
- Deros, E., Ryan, A. M., & Nguyen, H.-H. D. (2012). Multiple categorization in resume screening: Examining effects on hiring discrimination against Arab applicants in field and lab settings. *Journal of Organizational Behavior*, 33(4), 544–570. <https://doi.org/10.1002/job.769>

- Devine, P. G., & Baker, S. M. (1991). Measurement of racial stereotype subtyping. *Personality and Social Psychology Bulletin*, 17(1), 44–50.
<https://doi.org/10.1177/0146167291171007>
- Dreher, G. F., Lee, J.-Y., & Clerkin, T. A. (2011). Mobility and cash compensation: The moderating effects of gender, race, and executive search firms. *Journal of Management*, 37(3), 651–681. <https://doi.org/10.1177/0149206310365728>
- Duffy, M. (2007). Doing the dirty work: Gender, race, and reproductive labor in historical perspective. *Gender & Society*, 21(3), 313–336.
<https://doi.org/10.1177/0891243207300764>
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598. <https://doi.org/10.1037/0033-295X.109.3.573>
- England, P., Levine, A., & Mishel, E. (2020). Progress toward gender equality in the United States has slowed or stalled. *Proceedings of the National Academy of Sciences*, 117(13), 6990–6997. <https://doi.org/10.1073/pnas.1918891117>
- Feys, J. (2016). Nonparametric tests for the interaction in two-way factorial designs using R. *The R Journal*, 8(1), 367–378.
- Gaddis, S. M. (2017). How Black are Lakisha and Jamal? Racial perceptions from names used in correspondence audit studies. *Sociological Science*, 4, 21.
- Ghavami, N., & Peplau, L. A. (2013). An intersectional analysis of gender and ethnic stereotypes: Testing three hypotheses. *Psychology of Women Quarterly*, 37(1), 113–127.
<https://doi.org/10.1177/0361684312464203>
- Goffman, E. (2009). *Stigma: Notes on the Management of Spoiled Identity*. Simon and Schuster.

- González, L., & Rivarés, L. (2018). Analysis of the impact of referral-based recruitment on job attitudes and turnover in temporary agency workers. *Employee Relations*, 40(1), 89–105. <https://doi.org/10.1108/ER-11-2016-0212>
- Hall, E., Hall, A., Galinsky, A., & Phillips, K. (2019). MOSAIC: A model of stereotyping through associated and intersectional categories. *Academy of Management Review*, 44. <https://doi.org/10.5465/amr.2017.0109>
- Hardy, J. H., Tey, K. S., Cyrus-Lai, W., Martell, R. F., Olstad, A., & Uhlmann, E. L. (2022). Bias in context: Small biases in hiring evaluations have big consequences. *Journal of Management*, 48(3), 657–692. <https://doi.org/10.1177/0149206320982654>
- Heilman, M. E., & Haynes, M. C. (2008). Subjectivity in the appraisal process: A facilitator of gender bias in work settings. In *Beyond Common Sense: Psychological science in the courtroom* (1st ed., pp. 127–155). Blackwell Publishing Ltd. <https://doi.org/10.1002/9780470696422>
- Hernandez, M., Avery, D. R., Tonidandel, S., Hebl, M. R., Smith, A. N., & McKay, P. F. (2016). The role of proximal social contexts: Assessing stigma-by-association effects on leader appraisals. *Journal of Applied Psychology*, 101(1), 68–85. <https://doi.org/10.1037/apl0000030>
- Kmec, J. A. (2006). White hiring agents' organizational practices and out-group hiring. *Social Science Research*, 35(3), 668–701. <https://doi.org/10.1016/j.ssresearch.2005.06.001>
- Kmec, J. A., McDonald, S., & Trimble, L. B. (2010). Making gender fit and “correcting” gender misfits: Sex segregated employment and the nonsearch process. *Gender & Society*, 24(2), 213–236. <https://doi.org/10.1177/0891243209360531>

- Kulik, C. T., Bainbridge, H. T. J., & Cregan, C. (2008). Known by the company we keep: stigma-by-association effects in the workplace. *The Academy of Management Review*, 33(1), 216–230. <https://doi.org/10.2307/20159384>
- Lee, R. T., Perez, A. D., Boykin, C. M., & Mendoza-Denton, R. (2019). On the prevalence of racial discrimination in the United States. *PLoS ONE*, 14(1). <https://doi.org/10.1371/journal.pone.0210698>
- Lopez, L., III, Hart, L. H., III, & Katz, M. H. (2021). Racial and ethnic health disparities related to COVID-19. *JAMA*, 325(8), 719–720. <https://doi.org/10.1001/jama.2020.26443>
- Mandel, H., & Semyonov, M. (2016). Going back in time? Gender differences in trends and sources of the racial pay gap, 1970 to 2010. *American Sociological Review*, 81(5), 1039–1068. <https://doi.org/10.1177/0003122416662958>
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27(1), 415–444. <https://doi.org/10.1146/annurev.soc.27.1.415>
- Merluzzi, J., & Sterling, A. (2017). Lasting effects? referrals and career mobility of demographic groups in organizations. *ILR Review*, 70(1), 105–131. <https://doi.org/10.1177/0019793916669507>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2018). *Qualitative data analysis: a methods sourcebook*. SAGE Publications.
- Neuberg, S. L., Smith, D. M., Hoffman, J. C., & Russell, F. J. (1994). When we observe stigmatized and “normal” individuals interacting: Stigma by association. *Personality and Social Psychology Bulletin*, 20(2), 196–209. <https://doi.org/10.1177/0146167294202007>

- Nieva, V. F., & Gutek, B. A. (1980). Sex effects on evaluation. *Academy of Management Review*, 5(2), 267–276. <https://doi.org/10.5465/amr.1980.4288749>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847. <https://doi.org/10.1177/1609406917733847>
- Olin, A. (2021). *The killing of George Floyd altered views of racial discrimination in Houston*. The Kinder Institute for Urban Research. <https://kinder.rice.edu/urbanedge/2021/05/12/killing-george-floyd-altered-houston-area-views-racial-discrimination>
- Overton, J. (2021). When does status transfer between people? A crowdsourced experiment on the scope of status by association. *Social Psychology Quarterly*, 84(4), 309–330. <https://doi.org/10.1177/01902725211042313>
- Pedulla, D. S. (2014). The positive consequences of negative stereotypes: race, sexual orientation, and the job application process. *Social Psychology Quarterly*, 77(1), 75–94. <https://doi.org/10.1177/0190272513506229>
- Pieper, J. R., Greenwald, J. M., & Schlachter, S. D. (2018). Motivating employee referrals: The interactive effects of the referral bonus, perceived risk in referring, and affective commitment. *Human Resource Management*, 57(5), 1159–1174. <https://doi.org/10.1002/hrm.21895>
- Piotrowski, C., & Armstrong, T. (2006). Current recruitment and selection practices: A national survey of Fortune 1,000 firms. *North American Journal of Psychology*, 8, 489–496.

- Powell, G. N., & Butterfield, D. A. (2002). Exploring the influence of decision makers' race and gender on actual promotions to top management. *Personnel Psychology*, 55(2), 397–428. <https://doi.org/10.1111/j.1744-6570.2002.tb00115.x>
- Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles*, 59, 377–391. <https://doi.org/10.1007/s11199-008-9424-4>
- Quadlin, N. (2018). The mark of a woman's record: Gender and academic performance in hiring. *American Sociological Review*, 83(2), 331–360. <https://doi.org/10.1177/0003122418762291>
- Quillian, L., Pager, D., Hexel, O., & Midtbøen, A. H. (2017). Meta-analysis of field experiments shows no change in racial discrimination in hiring over time. *Proceedings of the National Academy of Sciences*, 114(41), 10870–10875. <https://doi.org/10.1073/pnas.1706255114>
- Ridgeway, C. L. (2014). Why status matters for inequality. *American Sociological Review*, 79(1), 1–16. <https://doi.org/10.1177/0003122413515997>
- Ridgeway, C. L. (2018). Status construction theory. In *Contemporary social psychological theories*, 2nd ed (pp. 315–339). Stanford University Press.
- Ridgeway, C. L., & Kricheli-Katz, T. (2013). intersecting cultural beliefs in social relations: gender, race, and class binds and freedoms. *Gender & Society*, 27(3), 294–318. <https://doi.org/10.1177/0891243213479445>
- Rosette, A. S., Koval, C. Z., Ma, A., & Livingston, R. (2016). Race matters for women leaders: Intersectional effects on agentic deficiencies and penalties. *The Leadership Quarterly*, 27(3), 429–445. <https://doi.org/10.1016/j.leaqua.2016.01.008>

Rubineau, B., & Fernandez, R. M. (2013). Missing links: Referrer behavior and job segregation.

Management Science, 59(11), 2470–2489. <https://doi.org/10.1287/mnsc.2013.1717>

Rudman, L. A., & Glick, P. (2001). prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues*, 57(4), 743–762. <https://doi.org/10.1111/0022-4537.00239>

Rudman, L. A., Mescher, K., & Moss-Racusin, C. A. (2013). Reactions to gender egalitarian men: Perceived feminization due to stigma-by-association. *Group Processes & Intergroup Relations*, 16(5), 572–599. <https://doi.org/10.1177/1368430212461160>

Schlachter, S. D., & Pieper, J. R. (2019). Employee referral hiring in organizations: An integrative conceptual review, model, and agenda for future research. *Journal of Applied Psychology*, 104(11), 1325–1346. <https://doi.org/10.1037/apl0000412>

Schnake, M. (2016). An exploratory investigation of explanations for the relative effectiveness of employee recruitment methods. *American Journal of Management*, 16(2), 40–45.

SHRM. (2019, March 20). *Designing and Managing Successful Employee Referral Programs*. SHRM. <https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/tk-designingandmanagingsuccessfulemployeereferralprograms.aspx>

Sidanius, J., Pratto, F., Laar, C. V., & Levin, S. (2004). Social dominance theory: Its agenda and method. *Political Psychology*, 25(6), 845–880. <https://doi.org/10.1111/j.1467-9221.2004.00401.x>

Silva, F. (2018). The strength of whites' ties: how employers reward the referrals of black and white jobseekers. *Social Forces*, 97(2), 741–768.

Smith, A. N., Watkins, M. B., Ladge, J. J., & Carlton, P. (2019). Making the invisible visible: Paradoxical effects of intersectional invisibility on the career experiences of executive

Black women. *Academy of Management Journal*, 62(6), 1705–1734.

<https://doi.org/10.5465/amj.2017.1513>

Society for Human Resource Management. (2019a, March 20). *Designing and managing successful employee referral programs*. SHRM.

<https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/tk-designingandmanagingsuccessfulemployeereferralprograms.aspx>

Society for Human Resource Management. (2019b, August 16). *Hiring policy and procedures*.

SHRM. https://www.shrm.org/resourcesandtools/tools-and-samples/policies/pages/cms_001677.aspx

Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, 14(2), 287–305.

<https://doi.org/10.1177/1094428110369842>

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355.

<https://doi.org/10.2307/1882010>

Stevens, P. (2020, June 11). *Companies are making bold promises about greater diversity, but there's a long way to go*. CNBC. <https://www.cnbc.com/2020/06/11/companies-are-making-bold-promises-about-greater-diversity-theres-a-long-way-to-go.html>

Stockman, S., Van Hoya, G., & Carpentier, M. (2017). The dark side of employee referral bonus programs: Potential applicants' awareness of a referral bonus and perceptions of organisational attractiveness. *Applied Psychology*, 66(4), 599–627.

<https://doi.org/10.1111/apps.12100>

- Taber, M. E., & Hendricks, W. (2003). The effect of workplace gender and race demographic composition on hiring through employee referrals. *Human Resource Development Quarterly*, 14(3), 303–319. <https://doi.org/10.1002/hrdq.1068>
- Tak, E., Correll, S. J., & Soule, S. A. (2019). Gender inequality in product markets: When and how status beliefs transfer to products. *Social Forces*, 98(2), 548–577. <https://doi.org/10.1093/sf/soy125>
- Taylor, E., Guy-Walls, P., Wilkerson, P., & Addae, R. (2019). The historical perspectives of stereotypes on African-American males. *Journal of Human Rights and Social Work*, 4(3), 213–225. <https://doi.org/10.1007/s41134-019-00096-y>
- Tomaskovic-Devey, D. (1993). *Gender & racial inequality at work: the sources and consequences of job segregation*. Cornell University Press.
- Tracy, S. J. (2012). *Qualitative research methods: collecting evidence, crafting analysis, communicating impact*. Wiley.
- U.S. Bureau of Labor Statistics. (2021). *Employed persons by occupation, race, Hispanic or Latino ethnicity, and sex*. <https://www.bls.gov/cps/cpsaat11.htm>
- Villegas, S., Lloyd, R. A., Tritt, A., & Vengrouskie, E. F. (2019). human resources as ethical gatekeepers: Hiring ethics and employee selection. *Journal of Leadership, Accountability and Ethics*, 16(2), Article 2. <https://doi.org/10.33423/jlae.v16i2.2024>
- Williams, J. C., Phillips, K. W., & Hall, E. V. (2016). Tools for change: Boosting the retention of women in the STEM pipeline. *Journal of Research in Gender Studies*, 6(1), 11–75.
- Wingfield, A. H., & Taylor, T. (2016). Race, gender, and class in entrepreneurship: Intersectional counterframes and Black business owners. *Ethnic and Racial Studies*, 39(9), 1676–1696. <https://doi.org/10.1080/01419870.2016.1178789>

Wright, E. W., Domagalski, T. A., & Collins, R. (2011). improving employee selection with a revised resume format. *Business Communication Quarterly*, 74(3), 272–286.

<https://doi.org/10.1177/1080569911413809>

Yakubovich, V., & Lup, D. (2006). Stages of the recruitment process and the referrer's performance effect. *Organization Science*, 17(6), 710–723.

<https://doi.org/10.1287/orsc.1060.0214>

Yavorsky, J. E. (2019). Uneven patterns of inequality: An audit analysis of hiring-related practices by gendered and classed contexts. *Social Forces*, 98(2), 461–492.

<https://doi.org/10.1093/sf/soy123>

APPENDIX A: NAMES AND OCCUPATIONS USED FOR PRE-TEST

1. First Names:

- | | | |
|------------|-------------|------------|
| • Aaliyah | • Tremayne | • Ethan |
| • Terrell | • Tenisha | • Meredith |
| • Lamar | • Carrie | • Brett |
| • Darnell | • Joan | • Dustin |
| • Keisha | • Charlotte | • Hillary |
| • Denisha | • Aubrey | • Jill |
| • Ebony | • Greg | • Molly |
| • Tyra | • Spencer | • Scott |
| • Rasheed | • Madeline | • Sarah |
| • Shanice | • Brad | • Ryan |
| • Deshawn | • Cody | • Emily |
| • Latonya | • Paul | • Kristen |
| • Keyana | • Erin | • Megan |
| • Latoya | • Graham | • Matthew |
| • Jayvon | • Luke | • Laurie |
| • Latrell | • Anne | • Todd |
| • Keyshawn | • Steven | • Zachary |
| • Tyrone | • Allison | • Seth |
| • DeAndre | • Susan | • Claire |
| • Lakisha | • Heidi | • Hunter |
| • Daquan | • Connor | |
| • Jamal | • Amy | |

2. Last Names

- | | |
|--------------|-------------|
| • Washington | • Andersen |
| • Jefferson | • Hartman |
| • Booker | • Orozco |
| • Banks | • Velazquez |
| • Jackson | • Gonzalez |
| • Mosley | • Hernandez |
| • Becker | |
| • Meyer | |
| • Walsh | |
| • Larsen | |
| • Nielsen | |
| • McGrath | |
| • Stein | |
| • Decker | |

3. List of Occupations:

- Marketing Manager
- Financial Manager
- Training and Development Manager
- Purchasing Manager
- Restaurant Manager
- Hotel Manager
- Real Estate Manager
- Buyer
- Compliance Officer
- Training and Development Specialist
- Project Manager
- Budget Analyst
- Market Research Analyst
- Business Operations Analyst
- Loan Officer
- Credit Counselor
- Accountant Graphic Designer
- Statistician

APPENDIX B: ENTRY LEVEL BUYER JOB DESCRIPTION

This is a great opportunity for a detail-oriented and organized individual. The ideal candidate would exhibit complex problem solving skills, enjoy multitasking, and is someone looking for a fast-paced career.

Job Responsibilities

- Purchasing materials per job specifications; Reading and analyzing documents to successfully administer online order systems.
- Maintain constant communication with vendors and project managers to expedite supply chain processes
- Process order acknowledgements for product correctness, quantity accuracy, pricing verification, and invoice compliance
- Communicate daily with project management group relative to any issues that might negatively impact customers' satisfaction

Job Requirements

- Must have Bachelor's degree by start date (June 2022)
- Computer proficiency required, including strong background in Microsoft Office Suite
- Possess good organizational skills, problem solving abilities, have a strong attention to detail, be self-motivated
- Excellent communication skills and be able to interact professionally with contacts, internal and external, at all levels and possess a high sense of urgency

APPENDIX C: RÉSUMÉ EXAMPLE

REFERRED BY CURRENT EMPLOYEE: Tyra Jackson

EDUCATION:

Bachelor of Business Administration
Southbridge University, Southbridge, California
GPA: 3.6

May 2022

RELEVANT EXPERIENCE:

Intern, Baird Source Supply
Collins, California

May 2021 – August 2021

- Assisted manager with tracking of weekly sales revenues and reconciling budgets
- Initiated/created Blanket Purchase Orders where appropriate for routine unit purchases
- Participated in face-to-face client/vendor meetings
- Conducted market research to identify current trends and opportunities to enhance store's brand recognition/competitive advantage over competitors

ADDITIONAL EXPERIENCE:

Server, Lakeside Tavern
Redvine, California

September 2020 – Present

- Provide courteous customer service to patrons to ensure a quality dining experience
- Exhibit strong multi-tasking skills while delivering meticulous and efficient service to up to eight parties simultaneously
- Reconcile end-of-shift sales reports and cash-on-hand

ACTIVITIES:

Member, Southbridge University Student Business Association
Southbridge, California

September 2019 – Present

TECHNICAL SKILLS:

- Microsoft Office Suite
- QuickBooks
- ConstantContact

APPENDIX D: CORRELATION TABLES FOR PILOT STUDY

Table D1*Résumé 1 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Referrer Race	--	--	--									
2. Referrer Gender	--	--	--	--								
3. Competence	4.27	0.96	.13	-.13	.97							
4. Commitment	4.80	1.18	-.02	-.08	.79**	.91						
5. Interview Rec	8.28	2.33	.04	-.12	.71**	.81**	--					
6. Salary Rec	6.12	2.37	.01	-.10	.31*	.48**	.33*	--				
7. Gender (participant)	--	--	--	--	.21	.21	.19	.10	--			
8. Age	37.63	13.73	--	--	.10	.08	.12	-.14	.16	--		
9. Race (participant)	--	--	--	--	-.03	.08	.07	.23	-.11	-.21	--	
10. Education	5.14	1.01	--	--	.03	.04	-.08	.02	.07	.20	.03	--
11. Hiring Experience	4.42	1.38	--	--	.06	-.08	-.04	-.23	.24	.55**	.06	-.08

Note. $N = 43$ for all correlations except those with salary recommendations, where $N = 41$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Referrer gender was coded such that 1 = White and 2 = Black, referrer gender was coded such that 1 = man and 2 = woman. Participant race was coded such that 1 = White and 2 = not White, participant's gender was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D2*Résumé 1 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Competence	4.51	0.60	.97							
2. Commitment	4.93	0.92	.58*	.91						
3. Interview Rec	8.87	2.07	.32	.65**	--					
4. Salary Rec	5.80	1.42	-.33	-.42	-.45	--				
5. Gender	--	--	-.07	.04	-.06	-.14	--			
6. Age	37.07	10.60	-.40	.03	.41	-.28	.18	--		
7. Race	--	--	-.46	-.41	-.07	.34	-.42	.30	--	
8. Education	5.13	0.99	.46	-.13	-.17	.07	-.15	-.48	-.05	--
9. Hiring Experience	4.27	1.49	-.27	.09	.48	-.45	.08	.77**	.47	-.27

Note. $N = 15$. *M* and *SD* are used to represent mean and standard deviation, respectively.

* indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Race (of participant) was coded such that 1 = White and 2 = not White, gender (of participant) was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D3*Résumé 2 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Referrer Race	--	--	--									
2. Referrer Gender	--	--	--	--								
3. Competence	4.07	0.91	.22	.05	<i>.96</i>							
4. Commitment	4.60	1.24	.15	.04	.83**	<i>.92</i>						
5. Interview Rec	7.75	2.70	.03	.08	.72**	.84**	--					
6. Salary Rec	5.79	2.24	-.02	-.10	.33*	.45**	.28*	--				
7. Gender (participant)	--	--	--	--	-.07	-.03	-.11	-.04	--			
8. Age	37.51	12.91	--	--	.08	.15	.17	-.17	.13	--		
9. Race (participant)	--	--	--	--	-.12	-.09	-.06	.12	-.10	-.10	--	
10. Education	5.17	0.94	--	--	.29*	.23	.20	.09	-.01	.04	.12	--
11. Hiring Experience	4.40	1.43	--	--	-.21	-.18	-.21	-.43**	.22	.60**	.01	-.08

Note. $N = 53$ for all correlations except those with salary recommendations, where $N = 52$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Referrer gender was coded such that 1 = White and 2 = Black, referrer gender was coded such that 1 = man and 2 = woman. Participant race was coded such that 1 = White and 2 = not White, participant's gender was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D4*Résumé 2 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Competence	4.33	0.64	.96							
2. Commitment	4.50	1.16	.99**	.92						
3. Interview Rec	9.00	1.22	.92*	.97**	--					
4. Salary Rec	7.25	3.86	.84	.90	.94	--				
5. Gender	--	--	-.08	-.20	-.37	-.22	--			
6. Age	37.20	14.27	-.37	-.34	-.27	.79	.47	--		
7. Race	--	--	.24	.30	.37	.52	-.67	-.30	--	
8. Education	5.20	0.84	-.05	.06	.24	.74	-.22	.71	.33	--
9. Hiring Experience	4.20	1.10	.08	.20	.37	.52	-.17	.59	-.17	.76

Note. $N = 5$ for all correlations except those with Salary Recommendations, where $N = 4$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$.

** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Race (of participant) was coded such that 1 = White and 2 = not White, gender (of participant) was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D5*Résumé 3 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Referrer Race	--	--	--									
2. Referrer Gender	--	--	--	--								
3. Competence	3.97	0.76	-.06	.20	.95							
4. Commitment	4.60	0.98	-.14	.09	.73**	.88						
5. Interview Rec	8.19	2.00	.07	.11	.56**	.74**	--					
6. Salary Rec	5.88	2.08	.17	.08	.41**	.47**	.29	--				
7. Gender (participant)	--	--	--	--	.11	.21	.32*	-.15	--			
8. Age	37.02	12.59	--	--	-.09	.11	.24	-.28	.32*	--		
9. Race (participant)	--	--	--	--	-.33*	-.17	-.03	.17	-.21	-.11	--	
10. Education	5.23	0.87	--	--	.28	.29	.23	.30	.07	.02	-.05	--
11. Hiring Experience	4.28	1.44	--	--	-.19	-.13	-.09	-.40**	.10	.62**	-.09	-.15

Note. $N = 43$ for all correlations except those with salary recommendation, where $N = 41$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Referrer gender was coded such that 1 = White and 2 = Black, referrer gender was coded such that 1 = man and 2 = woman. Participant race was coded such that 1 = White and 2 = not White, participant's gender was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D6*Résumé 3 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Competence	4.65	0.77	.95							
2. Commitment	4.43	0.83	.76**	.88						
3. Interview Rec	7.80	1.78	.73**	.83**	--					
4. Salary Rec	6.00	2.62	.06	.20	.20	--				
5. Gender	--	--	-.02	.21	-.09	.17	--			
6. Age	38.80	14.13	-.07	.07	-.03	-.03	-.16	--		
7. Race	--	--	-.33	-.61*	-.81**	-.18	-.03	-.17	--	
8. Education	5.00	1.07	-.07	-.30	-.45	-.54*	-.21	.25	.58*	--
9. Hiring Experience	4.67	1.29	-.30	-.22	-.53*	-.27	.49	.52*	.28	.31

Note. $N = 15$. *M* and *SD* are used to represent mean and standard deviation, respectively.

* indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Race (of participant) was coded such that 1 = White and 2 = not White, gender (of participant) was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D7*Résumé 4 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Referrer Race	--	--	--									
2. Referrer Gender	--	--	--	--								
3. Competence	4.33	0.75	.21	.35*	.96							
4. Commitment	4.89	0.84	.17	.11	.65**	.89						
5. Interview Rec	8.50	1.97	-.09	.04	.60**	.60**	--					
6. Salary Rec	6.06	2.19	-.06	.13	.23	.20	.13	--				
7. Gender (participant)	--	--	--	--	-.04	.13	-.10	-.06	--			
8. Age	39.14	13.12	--	-.05	-.14	.18	.13	-.14	.20	--		
9. Race (participant)	--	--	--	--	-.03	.02	-.06	.16	-.28*	-.11	--	
10. Education	5.12	0.96	--	--	.13	.16	.19	.11	-.01	.15	.12	--
11. Hiring Experience	4.50	1.39	--	--	-.19	.03	-.16	-.34*	.27	.58**	.05	.02

Note. $N = 50$ for all correlations except those with salary recommendation, where $N = 48$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Referrer gender was coded such that 1 = White and 2 = Black, referrer gender was coded such that 1 = man and 2 = woman. Participant race was coded such that 1 = White and 2 = not White, participant's gender was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D8*Résumé 4 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Competence	3.96	0.98	.96							
2. Commitment	4.31	1.67	.92**	.89						
3. Interview Rec	7.38	3.25	.91**	.98**	--					
4. Salary Rec	5.62	1.69	.46	.58	.66	--				
5. Gender	--	--	.69	.81*	.86**	.47	--			
6. Age	27.12	2.75	-.26	-.23	-.13	-.17	.04	--		
7. Race	--	--	-.03	.26	.24	.18	.60	-.04	--	
8. Education	5.50	0.53	-.29	-.32	-.45	-.71*	-.26	-.34	.26	--
9. Hiring Experience	3.62	1.30	-.42	-.35	-.30	-.27	-.24	.89**	-.19	-.31

Note. $N = 8$. *M* and *SD* are used to represent mean and standard deviation, respectively.

* indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Race (of participant) was coded such that 1 = White and 2 = not White, gender (of participant) was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D9*Résumé 5 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Referrer Race	--	--										
2. Referrer Gender	--	--	--	--								
3. Competence	4.31	0.73	-.04	.02	.96							
4. Commitment	4.79	0.88	.07	-.05	.74**	.89						
5. Interview Rec	8.57	2.03	.01	-.17	.62**	.73**	--					
6. Salary Rec	6.17	2.30	-.06	-.06	.18	.25	.20	--				
7. Gender (participant)	--	--	--	--	.18	.24	.19	.08	--			
8. Age	35.69	12.06	--	--	-.09	-.16	.01	-.09	.02	--		
9. Race (participant)	--	--	--	--	-.36*	-.23	-.22	.10	-.10	-.08	--	
10. Education	5.19	0.92	--	--	-.15	-.05	-.20	-.14	-.21	-.02	.29	--
11. Hiring Experience	4.31	1.35	--	--	-.16	-.18	-.12	-.26	.13	.65**	.15	-.05

Note. $N = 42$ for all correlations except for those with salary recommendations where $N = 41$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Referrer gender was coded such that 1 = White and 2 = Black, referrer gender was coded such that 1 = man and 2 = woman. Participant race was coded such that 1 = White and 2 = not White, participant's gender was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

Table D10*Résumé 5 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Competence	4.27	0.84	.96							
2. Commitment	4.55	1.14	.61*	.89						
3. Interview Rec	7.56	2.48	.59*	.83**	--					
4. Salary Rec	5.47	2.33	.72**	.70**	.50	--				
5. Gender	--	--	-.11	-.11	-.09	-.25	--			
6. Age	42.19	14.22	-.42	-.07	.11	-.56*	.50*	--		
7. Race	--	--	-.11	.03	.07	.10	-.31	-.27	--	
8. Education	5.12	0.96	.34	.59*	.56*	.30	.52*	.36	-.24	--
9. Hiring Experience	4.56	1.55	-.45	-.40	-.24	-.68**	.38	.49	-.34	-.01

Note. $N = 16$ for all correlations except those with salary recommendation, where $N = 15$. *M* and *SD* are used to represent mean and standard deviation, respectively. * indicates $p < .05$. ** indicates $p < .01$. Interview Rec = recommendation for interview, Salary Rec = recommended salary. Race (of participant) was coded such that 1 = White and 2 = not White, gender (of participant) was coded such that 1 = man and 2 = woman. Reliabilities for relevant scales appear on the diagonal in italics.

APPENDIX E: PRIMARY STUDY CORRELATION TABLES BY TIME
(RATING OCCASION)

Table E1

Time 1 means, standard deviations, and correlations for treatment conditions

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Referrer Race	--	--	--											
2. Referrer Gender	--	--	--	--										
3. Competence	5.34	0.91	.07	-.02	<i>.94</i>									
4. Commitment	4.93	0.85	.10	-.01	<i>.56**</i>	<i>.81</i>								
5. Interview Rec	8.39	2.16	.12*	.08	<i>.58**</i>	<i>.62**</i>	--							
6. Salary Rec	12.12	5.97	.02	-.00	.12*	-.01	.12*	--						
7. Guessed Purpose	0.25	0.43	-.05	.01	-.03	-.03	.12*	.05	--					
8. Gender	1.47	0.50	.08	-.11*	-.05	.04	-.02	-.00	-.01	--				
9. Age	40.56	13.78	-.01	-.06	-.11*	.06	-.06	-.13*	.00	.08	--			
10. Race	1.83	0.38	.05	.03	-.04	.04	-.04	-.04	.07	-.00	.20**	--		
11. Education	4.04	1.17	-.05	.09	-.08	-.00	.04	-.07	.12*	-.12*	-.03	.03	--	
12. Sup Exp.	4.17	1.35	.07	-.04	.01	.10	-.01	-.07	.03	.23**	.55**	.08	-.05	--
13. Hiring Exp.	3.89	1.35	.03	-.03	-.04	.04	-.03	-.05	.04	.15**	.53**	.05	.01	.79**

Note. $n = 356$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent scale reliabilities for all conditions in time 1. Referrer race was scored such that 1 = White and 2 = Black. Referrer gender was scored such that 1 = man and 2 = woman. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E2*Time 1 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Competence	5.14	0.90	<i>.94</i>									
2. Commitment	4.95	0.89	.53**	<i>.81</i>								
3. Interview Rec	8.07	2.10	.75**	.51**	--							
4. Salary Rec	13.23	6.12	.13	.13	.13	--						
5. Guessed Purpose	0.26	0.44	-.12	-.05	.06	.14	--					
6. Gender	1.52	0.50	.04	.05	-.02	.23*	.12	--				
7. Age	40.58	13.40	-.05	-.03	-.04	.08	.29**	.29**	--			
8. Race	1.75	0.43	-.03	-.04	.08	.03	.21	-.04	.25*	--		
9. Education	4.25	1.37	-.06	-.03	.08	.05	.25*	.19	.22*	-.00	--	
10. Sup. Exp.	4.51	1.32	-.02	.01	-.00	.11	.11	.26*	.68**	.11	.06	--
11. Hiring Exp.	4.23	1.43	-.10	.00	-.03	.13	.24*	.26*	.66**	.20	.00	.86**

Note. $n = 81$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent reliabilities for all conditions in time 1. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E3*Time 2 means, standard deviations, and correlations for treatment conditions only*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Referrer Race	--	--	--											
2. Referrer Gender	--	--	--	--										
3. Competence	5.26	0.95	.11*	-.03	<i>.96</i>									
4. Commitment	4.94	0.88	.11*	.04	<i>.63**</i>	<i>.86</i>								
5. Interview Rec	8.18	2.29	.02	-.02	<i>.69**</i>	<i>.67**</i>	--							
6. Salary Rec	12.85	5.91	.03	.10	.03	.06	.10	--						
7. Guessed Purpose	0.23	0.42	.02	.04	-.07	-.11	-.02	-.06	--					
8. Gender	1.47	0.50	-.02	.07	-.06	.03	-.04	.01	-.03	--				
9. Age	40.38	13.59	.06	.11*	-.10	.08	-.04	-.06	.00	<i>.15**</i>	--			
10. Race	1.81	0.39	.01	-.01	.04	.05	.04	.02	-.01	-.05	<i>.19**</i>	--		
11. Education	4.11	1.22	-.07	.06	.00	.11*	.10	.03	-.03	-.01	-.01	.01	--	
12. Sup. Exp.	4.26	1.39	.05	.05	-.02	.11*	-.02	-.05	-.06	<i>.22**</i>	<i>.60**</i>	.09	-.03	--
13. Hiring Exp.	4.02	1.38	.05	-.01	.02	.12*	.03	-.07	-.08	<i>.17**</i>	<i>.57**</i>	<i>.12*</i>	.02	<i>.81**</i>

Note. $n = 331$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent scale reliabilities for all conditions in time 2.

Referrer race was scored such that 1 = White and 2 = Black. Referrer gender was scores such that 1 = man and 2 = woman. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E4*Time 2 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Competence	5.03	1.05	.96									
2. Commitment	4.73	0.94	.65**	.86								
3. Interview Rec	7.94	2.32	.63**	.71**	--							
4. Salary Rec	12.37	5.86	.01	.01	-.02	--						
5. Guessed Purpose	0.30	0.46	.24*	.14	.05	.07	--					
6. Gender	1.51	0.50	-.06	.09	.12	.04	-.05	--				
7. Age	41.14	14.06	-.17	.06	-.16	-.01	-.10	.04	--			
8. Race	1.83	0.38	-.08	.10	.08	.12	-.03	.11	.26**	--		
9. Education	3.96	1.18	-.07	-.09	-.11	-.14	-.07	-.18	.11	.05	--	
10. Sup. Exp.	4.16	1.24	-.04	.14	-.11	-.17	-.12	.31**	.50**	.06	-.02	--
11. Hiring Exp.	3.77	1.32	-.00	.15	-.03	-.10	-.17	.20*	.53**	-.06	-.01	.79**

Note. $n = 106$ except for recommended salary, where $n = 105$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent reliabilities for all conditions in time 2. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E5*Time 3 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Referrer Race	--	--	--											
2. Referrer Gender	--	--	--	--										
3. Competence	5.31	0.98	-.06	.09	<i>.96</i>									
4. Commitment	5.00	0.88	-.04	.01	<i>.67**</i>	<i>.87</i>								
5. Interview Rec	8.32	2.25	.04	.04	<i>.71**</i>	<i>.68**</i>	--							
6. Salary Rec	12.85	6.02	.06	-.04	.09	.02	<i>.13*</i>	--						
7. Guessed Purpose	0.25	0.43	.06	-.01	.02	-.03	.00	<i>.11*</i>	--					
8. Gender	1.48	0.50	-.10	-.01	-.08	-.02	-.09	.08	.01	--				
9. Age	40.15	13.58	-.07	-.05	<i>-.12*</i>	.07	-.04	-.10	-.09	<i>.16**</i>	--			
10. Race	1.80	0.40	-.07	-.08	-.01	.00	-.00	-.02	-.10	-.00	<i>.21**</i>	--		
11. Education	4.08	1.23	<i>.13*</i>	-.02	-.08	-.03	.06	-.00	-.03	-.05	.06	.03	--	
12. Sup. Exp.	4.20	1.36	-.07	.02	-.03	<i>.14**</i>	-.05	-.07	<i>.13*</i>	<i>.28**</i>	<i>.57**</i>	.07	-.03	--
13. Hiring Exp.	3.91	1.38	-.02	.03	-.01	<i>.11*</i>	-.01	-.09	-.07	<i>.22**</i>	<i>.56**</i>	.06	.02	<i>.79**</i>

Note. $n = 357$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent scale reliabilities for all conditions in time 3. Referrer race was scored such that 1 = White and 2 = Black. Referrer gender was scores such that 1 = man and 2 = woman. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E6*Time 3 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Competence	5.01	1.06	.96									
2. Commitment	4.73	0.88	.60**	.87								
3. Interview Rec	7.43	2.32	.66**	.72**	--							
4. Salary Rec	11.18	5.89	.09	-.04	.01	--						
5. Guessed Purpose	0.27	0.44	.10	.09	.02	-.01	--					
6. Gender	1.47	0.50	.09	.01	.02	.10	-.05	--				
7. Age	42.47	14.15	-.09	.09	-.04	-.02	-.09	-.04	--			
8. Race	1.89	0.32	-.07	-.09	-.09	.03	.13	-.06	.18	--		
9. Education	4.05	1.14	-.06	.10	.05	-.04	.07	-.06	-.17	-.05	--	
10. Sup. Exp.	4.41	1.30	.00	.10	.11	.05	-.06	.04	.60**	.08	.02	--
11. Hiring Exp.	4.19	1.33	-.01	.17	.13	.07	.00	-.00	.55**	.11	.02	.85**

Note. $n = 79$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent reliabilities for all conditions in time 3. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E7*Time 4 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Referrer Race	--	--	--											
2. Referrer Gender	--	--	--	--										
3. Competence	5.18	0.99	.12*	.08	.97									
4. Commit	4.91	0.89	.06	.05	.69**	.86								
5. Interview Rec	8.03	2.29	.12*	-.02	.66**	.66**	--							
6. Salary Rec	12.57	5.83	-.02	.00	.07	.06	.07	--						
7. Guessed Purpose	0.24	0.43	.00	-.03	.02	.05	.09	.08	--					
8. Gender	1.48	0.50	.03	.01	-.07	.02	.00	-.02	.03	--				
9. Age	41.04	13.92	-.06	-.04	-.16**	.03	-.07	-.12*	-.00	.13*	--			
10. Race	1.81	0.39	-.01	.00	.00	.02	-.03	.01	.07	-.00	.19**	--		
11. Education	4.05	1.22	-.05	-.08	-.01	.05	.11*	.01	.04	-.05	.05	.02	--	
12. Sup. Exp.	4.28	1.34	-.05	-.06	-.05	.09	-.02	-.11*	.05	.27**	.57**	.06	.00	--
13. Hiring Exp.	3.98	1.38	-.05	-.04	-.06	.07	.01	-.12*	.02	.20**	.57**	.06	.04	.79**

Note. $n = 354$ except for correlations with recommended salary, where $n = 353$. *M* and *SD* are used to represent mean and standard deviation, respectively. Commit = Commitment, Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent scale reliabilities for all conditions in time 4. Referrer race was scored such that 1 = White and 2 = Black. Referrer gender was scores such that 1 = man and 2 = woman. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E8*Time 4 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Competence	5.29	1.06	.97									
2. Commitment	4.98	0.88	.66**	.86								
3. Interview Rec	8.08	2.23	.72**	.67**	--							
4. Salary Rec	12.99	5.94	.03	-.14	.06	--						
5. Guessed Purpose	0.28	0.45	-.26*	-.16	-.25*	-.04	--					
6. Gender	1.47	0.50	-.05	-.15	-.08	.05	-.15	--				
7. Age	38.54	12.57	-.12	.04	-.17	-.11	.10	.08	--			
8. Race	1.82	0.39	.05	.13	.03	.12	.01	-.06	.29**	--		
9. Education	4.20	1.16	-.04	.10	.08	-.04	.10	-.02	-.11	.00	--	
10. Sup. Exp.	4.04	1.42	.13	.07	.02	.08	.00	.10	.57**	.17	-.12	--
11. Hiring Exp.	3.84	1.36	.15	.08	-.00	-.10	.01	.09	.50**	.13	-.08	.85**

Note. $n = 83$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent reliabilities for all conditions in time 4. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E9*Time 5 means, standard deviations, and correlations for treatment conditions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Referrer Race	--	--	--											
2. Referrer Gender	--	--	--	--										
3. Competence	5.22	1.04	-.02	-.06	.96									
4. Commitment	4.93	0.93	-.05	-.05	.70**	.88								
5. Interview Rec	8.03	2.34	-.09	-.03	.64**	.70**	--							
6. Salary Rec	12.91	6.00	-.09	.06	.10	.12*	.13*	--						
7. Guessed Purpose	0.25	0.43	.06	-.01	.09	.09	.07	-.05	--					
8. Gender	1.49	0.50	.01	.04	-.06	.01	-.02	.01	.04	--				
9. Age	40.69	13.60	.08	.04	-.11*	.05	-.04	-.14*	.08	.09	--			
10. Race	1.82	0.38	.03	.05	.07	.08	.05	-.02	.06	-.01	.25**	--		
11. Education	4.11	1.21	.02	-.04	-.02	-.00	.07	.01	.02	-.02	.02	-.00	--	
12. Sup. Exp.	4.27	1.32	.01	.04	-.03	.08	.01	-.06	.03	.18**	.58**	.10	-.01	--
13. Hiring Exp.	3.99	1.37	-.01	.05	-.02	.10	.04	-.10	.00	.14**	.56**	.09	-.01	.84**

Note. $n = 349$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent scale reliabilities for all conditions in time 5. Referrer race was scored such that 1 = White and 2 = Black. Referrer gender was scored such that 1 = man and 2 = woman. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

Table E10*Time 5 means, standard deviations, and correlations for control condition*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Competence	5.37	0.93	<i>.96</i>									
2. Commitment	5.01	0.92	<i>.69**</i>	<i>.88</i>								
3. Interview Rec	8.51	2.05	<i>.63**</i>	<i>.65**</i>	--							
4. Salary Rec	12.38	6.06	.14	-.07	-.06	--						
5. Guessed Purpose	0.25	0.44	.10	.15	.13	-.04	--					
6. Gender	1.43	0.50	-.05	-.13	-.21	.09	.03	--				
7. Age	40.06	14.13	-.18	-.04	-.03	-.09	-.00	.25*	--			
8. Race	1.78	0.41	.16	.18	-.02	.04	-.02	-.04	.05	--		
9. Education	3.95	1.20	-.00	.05	.08	.19	-.13	-.18	-.00	.10	--	
10. Sup. Exp.	4.11	1.47	-.03	.14	.01	-.06	.15	.43**	.56**	.00	-.09	--
11. Hiring Exp.	3.82	1.39	.01	.01	.03	.00	.02	.30**	.56**	.03	.12	.68**

Note. $n = 88$. *M* and *SD* are used to represent mean and standard deviation, respectively. Sup = Supervision, Exp = experience, Rec = Recommendation. * indicates $p < .05$. ** indicates $p < .01$. Numbers on the diagonal in italics represent reliabilities for all conditions in time 5. Race was scored such that 1 = not White and 2 = White. Gender was scored such that 1 = not men and 2 = men.

APPENDIX F: RESULTS OF CONFIRMATORY FACTOR ANALYSIS FOR PRIMARY STUDY

Table F1

Time 1 Confirmatory Factor Analysis for Competence and Commitment Measures

<i>Model</i>	<i>X²</i>	<i>df</i>	<i>ΔX²</i>	<i>Δdf</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>
One Factor	717.92	44	--	--	.82	.77	.19	.10
Two Factor	273.62	43	444.29	1	.94	.92	.11	.04

Note: n = 437

Table F2*Time 2 Confirmatory Factor Analysis for Competence and Commitment Measures*

<i>Model</i>	<i>X²</i>	<i>df</i>	<i>ΔX²</i>	<i>Δdf</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>
One Factor	736.61	44	--	--	.85	.81	.19	.09
Two Factor	225.52	43	511.10	1	.96	.95	.10	.03

Note: n = 437

Table F3*Time 3 Confirmatory Factor Analysis for Competence and Commitment Measures*

<i>Model</i>	<i>X²</i>	<i>df</i>	<i>ΔX²</i>	<i>Δdf</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>
One Factor	839.34	44	--	--	.84	.80	.20	.09
Two Factor	308.98	43	530.36	1	.95	.93	.12	.03

Note: n = 437

Table F4*Time 4 Confirmatory Factor Analysis for Competence and Commitment Measures*

<i>Model</i>	<i>X²</i>	<i>df</i>	<i>ΔX²</i>	<i>Δdf</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>
One Factor	771.95	44	--	--	.86	.82	.20	.09
Two Factor	166.09	43	605.09	1	.98	.97	.08	.02

Note: n = 437

Table F5*Time 5 Confirmatory Factor Analysis for Competence and Commitment Measures*

<i>Model</i>	<i>X²</i>	<i>df</i>	<i>ΔX²</i>	<i>Δdf</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>
One Factor	781.92	44	--	--	.86	.82	.20	.08
Two Factor	258.38	43	523.54	1	.96	.95	.11	.02

Note: n = 437