

**PURDUE UNIVERSITY  
GRADUATE SCHOOL  
Thesis/Dissertation Acceptance**

This is to certify that the thesis/dissertation prepared

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Entitled

GENDER STEREOTYPES AND SELECTION DISPARITY: AN INVESTIGATION OF THE THEORIES WHICH EXPLAIN GENDER DISPARITY

For the degree of Master of Science

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7/6/2015

Date

GENDER STEROTYPES AND SELECTION DISPARITY: AN INVESTIGATION OF THE THEORIES  
WHICH EXPLAIN GENDER DISPARITY

A Thesis

Submitted to the Faculty

of

Purdue University

by

Laura M. Spice

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Science

August 2015

Purdue University

Indianapolis, Indiana

## ACKNOWLEDGEMENTS

I would like to warmly thank the chair of my thesis project, Leslie Ashburn-Nardo. She has been supportive, encouraging and thoughtful throughout graduate school and the thesis process, and I appreciate her greatly for this. I would like to thank the members of my committee, Jane Williams and Peggy Stockdale, for your feedback and time on this project. Your insight has been truly impactful on the content of my thesis, as well as my experience at IUPUI.

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## ABSTRACT

Spice, Laura M. M.S., Purdue University, August 2015. Gender Stereotypes and Selection Decisions: An Investigation of the Theories Which Explain Gender Disparity. Major Professor: Leslie Ashburn-Nardo.

While gender equality in the workplace is slowly improving, discrimination still exists. Past research has shown that women are underrepresented in both high status jobs, as well as stereotypically masculine careers. Two theories which explain gender discrimination –Lack of Fit Theory and Status Incongruence Hypothesis—have been widely supported but are rarely researched simultaneously. In this study participants rated hypothetical male and female job candidates applying to a hypothetical job that was either high status or low status, and in masculine domain or a feminine domain. Neither Lack of Fit nor Status Incongruence Hypothesis were supported. However, participants rated candidates applying for jobs in the feminine domain as less competent, hireable, and likeable. Participants also found high status candidates less hireable than low status candidates. These results suggest that within this study gender discrimination was more specific than robust, meaning research design should allow for detection of such nuanced discrimination.



## CHAPTER 1. INTRODUCTION

### Background

There are multiple theories which explain the driving force behind gender discrimination in the workplace. However, the theories that exist rely on fundamentally different theoretical arguments. This paper will seek to explore current gender discrimination theories simultaneously in order further understand how discrimination functions in organizations.

### Job Gender Stereotypes

Women have made progress for work place equality over the years. Gradually, women have transitioned from low status jobs into more professional, higher status jobs. Despite these gains, women still hold traditionally feminine jobs with lower pay and lower status than men, and the gender hierarchy in organizations continues (Blau, Ferber, & Winkler, 1998). Forbes reports that, on average, women are paid 78% of what men are paid (Kerpen, 2015). Only 4.8% of CEOs for companies included in the S & P 500 are women (Catalyst, 2015). Additionally, women in traditionally masculine fields are less represented in the field itself—only 26% of 3,816,000 computing-related positions are women employees (Diamandis, 2014).

While a variety of factors contribute to gender disparity in the workforce, in part it can be attributed to job gender stereotypes. When jobs are stereotyped as either masculine or feminine, men and women are restricted to specific jobs within their respective gender. Overall, it has been found that women in stereotypically masculine jobs are disadvantaged in hiring (Haslam & Ryan, 2008; Olian, Schwab, & Haberfield, 1988; Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012) as well as in performance appraisals (Nieva & Gutek, 1980; Rudman & Phelan, 2008). Research has also documented that women in stereotypically masculine jobs are penalized in personnel outcomes, such as hireability and salary assignment (Moss-Racusin, et al., 2012).

Job gender stereotypes consist of two major components: task domain and job status. Task domain concerns whether the job tasks are stereotypically thought to be masculine or feminine. Job status concerns the status within the organization (low vs. high, powerless vs. powerful; etc.). Jobs can be various combinations of these components. For example, a job can be high status, but in a feminine domain (Supervisor of Human Resources; Brescoll, Uhlman, Moss-Racusin, & Sarnell, 2011), or a job could be low status, but in a masculine domain (Staff at a financial firm; Lyness & Heilman, 2006). Jobs are multi-dimensional in the real world, making it necessary for research to look into the dimensions of job gender stereotypes. The literature suggests that both gender task domain and job status contribute to disparity between men and women. Next is a review of existing literature on gender task domain and job status, followed by two theories that help explain how these components play out in the

stereotyping of jobs. The goal of this study is to look further into the relationship between task domain and job status, the theories that explain gender discrimination in the work place, and gain a better understanding of the driving force of gender discrimination.

### Gender Task Domain

The perception of jobs as masculine or feminine is highly reliant on basic gender stereotypes. Women are typically defined with communal traits, while men are defined with agentic traits (Heilman, 2001). Communal characteristics are nurturing characteristics: kind, caring, helpful to others – maternal in nature. Research suggests that many of these maternal stereotypes follow from evolution; for thousands of years women have been responsible for nurturing their young while depending on men to provide food, shelter, and protection (Eagly & Wood, 1999). More commonly than men, women hold positions with job tasks that reflect communality, such as elementary school teachers, registered nurses, and secretarial positions (Solis, 2011). Communality implies a motherly demeanor, so oftentimes women are considered too “soft” for non-communal jobs.

Agentic characteristics, in contrast, are more independent: assertive, aggressive, and directional (Heilman, 2001). Following from evolutionary psychology, men have been perceived as the “hunter/gatherers” of the family—a position that requires aggressive and assertive behavior (Eagly & Wood, 1999). Unlike communality, agency is typically associated with the “get it done” attitude desired in most

corporate/professional workplaces. For example, an engineer is a job with non-relational tasks that require directness, independence, and mathematical skills (Heilman, 2001). The communality/agency dichotomy is the foundation by which we evaluate men and women. Communal and agentic stereotypes are robust and inherent; they have existed for thousands of years and are only evolving at a sluggish pace.

People describe *and* prescribe communality and agency upon men and women—meaning men and women are *defined* with gender specific terms (description), and that men and women are *expected* to act with behaviors that support their gender traits (prescription) (Heilman, 2001). For example, a study found that participants rated competence as a less desirable characteristic for women than for men—as men are expected (prescribed) to be more competent (Prentice & Carranza, 2002). Heilman also highlights *proscriptions*, which indicate what men and women are expected *not* to do. Research has found that gender expectations and stereotypes influence how we process information (Heilman & Haynes, 2008), which in turn affects how we evaluate women in masculine task domains (Heilman, 1983). Unfortunately, communal stereotypes impact women in a negative way, such that we see women as unfit for stereotypically agentic (masculine) jobs.

### Job Status

The second component of job gender stereotypes is status within the organization. A high status job is one that is high rank in the company—typically high status jobholders manage other people and contribute to key business decisions. On

the other hand, a low status job has low rank or is entry level, and has little responsibility with managing people or making influential decisions. Research shows that agentic traits are frequently associated with high status jobs, while communal traits are associated with low status (Heilman, Block, Martell, & Simon, 1989). Thus, men are expected to occupy high status jobs and women to occupy low status jobs. In fact, women typically hold lower to mid-level management positions, as opposed to upper-level leadership positions (Lyness, 2002), while men primarily occupy jobs that have higher status (Solis, 2011). Since women are perceived as communal, they are prescribed to be unsuccessful in leadership positions. The disparity between women's communality and leaders' agency creates negative performance expectation for women as leaders. Virginia Schein's seminal research in leadership and gender established the saying: "think manager, think male". The statement iterates the fact that leaders are perceived as agentic and males are also perceived as agentic, while women are not (Schein, 1973, 1975). However, it *is* possible to have a low status job that is high in agency/masculinity (e.g. a construction worker), or a high status job that is high in communality/femininity (e.g. president of a women's college).

In her study, Schein asked participants to associate descriptive characteristics with successful managers. Both male and female participants chose agentic characteristics such as aggressive, self-confident, objective, aggressive, and ambitious, as indicative of successful managers. Communal characteristics, on the other hand, were not associated with successful leadership. In a later replication of this study, results showed that this effect was still present in men. Women, however, had associated

agentic *and* communal traits with successful leadership (Brenner, Tomkiewicz, & Schein, 1989). This finding may highlight the way gender stereotypes about leadership are slowly changing over time. However, a recent meta-analysis on leadership perceptions and gender revealed that, overall, masculinity is still more associated with men and leadership (Koenig, Eagly, Mitchell, & Ristikari, 2011). Due to the agentic perception of leadership, there is a salient discrepancy between the communal characteristics of women and the agency of leadership. As a result people see women as less effective leaders than men (Eagly & Karau, 1991).

Taking into account both gender task domain and job status, research has shown that there are multifaceted social and economic negative workplace outcomes for women who violate gender stereotypes. Women who violate prescribed communality stereotypes are typically penalized in regards to hiring, promotion, salary negotiations, and leadership evaluations (Rudman & Phelan, 2008). There are two theoretical frameworks that help to make sense of why and how women are penalized for stereotype violations. This study will use these two focal frameworks to explain the mechanisms by which women are punished for stereotype violation. The first is Lack of Fit Model, and the second is Status Incongruity Hypothesis.

#### Lack of Fit Model

The Lack of Fit Model explains how worker stereotypes and work stereotypes create perceptions of “fit” between the worker and the work. The Lack of Fit Model was developed by Heilman (1983, 1995) as a cognitive framework to explain evaluations of

men and women for certain roles. The Lack of Fit Model states that stereotypes influence expectations that men or women will be successful or unsuccessful at a specific job. Heilman states that individuals perceive varying degrees of “fit” between the job candidate/incumbent and the job, and that fit happens on a highly implicit, cognitive level. Stereotypes about the job candidate and job can either be congruent; in that they fit—or incongruent; in that they do not fit. Perceptions of job candidates’ or job incumbents’ *actual* abilities are perceived through their *stereotypic* abilities, and then their perceived abilities are mapped on to the stereotypes of the job. According to the Lack of Fit model, women who violate gender norms by applying for masculine, or high status jobs are perceived as unfit for the job. For example, a situation with poor fit could be a woman applying for an aeronautical engineering position. This position has highly agentic tasks, and is perceived as low in communality. A situation with high stereotype fit would be a woman applying for a registered nurse position. The position has communal tasks, and is perceived as high in communality.

The dichotomy women face (communality vs. agency) is the basis by which people evaluate her as “fit” for the job. Often times when women violate their communality stereotype, they are penalized for likeability and competence. Social cognition literature shows that, universally, people make quick judgments on the competence and warmth of others (Fiske & Cuddy, 2002). The warmth dimension captures traits related to perceived intention, such as: “friendliness, helpfulness, sincerity, trustworthiness and morality”. The competence dimension reflects traits related to perceived ability, such as: “intelligence, skill, creativity and efficacy”

(Fiske, Cuddy, & Glick, 2006, p. 77). The tendency to label others as competent or warm is reflective of our natural instinct to decide whether they are friend or foe. Typically, warmth is the trait judged first, as we want to know if someone has good or ill intent. This is a sort of survival-mode instinct we have—a person’s good vs. ill intent is the most important information for our survival (Fiske, Cuddy, & Glick, 2006). After warmth is gauged, next individuals judge competence and assess if they would serve as a resourceful person. We ask ourselves, “Can this person act resourcefully on their good intent?” The evaluation of warmth and competence is robust and evolutionary, such that we often analyze people in these domains without being fully cognizant of it.

In the gender stereotyping literature, competence and warmth are referred to as competence and likeability. These are two major components that inform overall personnel decisions of fit. The likeability and competence literature has identified various combinations of warmth and competence that individuals often perceive others as: likeable/competent, likeable/incompetent, unlikeable/competent, and unlikeable/incompetent (Fiske & Cuddy, 2002). Naturally, those perceived as likeable *and* competent are in the best position for being hired, promoted, or reaping other benefits. Women who violate communal stereotypes struggle to be perceived as both likeable and competent. Women who are seen as agentic are often assumed to be competent but not likeable, and women who are seen as communal are often assumed to be likeable but not competent. This trend of “one but not the other” typically does not hold true for men. So, for women, agency and communality stereotypes strongly



predict likeability and competence perceptions, which subsequently influence personnel evaluations of women—as evidenced in the literature (Eagly & Karau, 2002; Heilman, 2001).

In most studies, likeability and competency measures show strong relationships with hiring and promotion decisions (Moss-Racusin et al., 2012; Steinpreis, Anders, & Ritzke, 1999; Rudman & Glick, 2002). Research shows that women’s performance in agentic task domains is often devalued in comparison with equally talented men (Swim, Borgida, Maruyama, & Myers, 1989), and that there is significant gender discrimination when selecting women into agentic task domain jobs (Olian et al., 1988). For example, a study of gender stereotypes and personnel decisions examined letters of recommendation for men and women applying to a stereotypically scientific job. Letters of recommendation were coded for communal vs. agentic adjectives used. The study also investigated whether the gendered words in the recommendation letters were linked to hiring decisions. The study found that women were described with more communal adjectives than men, and that there was a negative relationship between number of communal trait adjectives and hiring decisions (Madera, Hebl, & Martin, 2009). Following from Lack of Fit Model, this study shows that when there is incongruence between the job (masculine) and job candidate (described with communal adjectives), there is a decreased likelihood that women will be hired. Conversely, the extent to which there is congruence between job (masculine) and job candidate (described with agentic adjectives) there is an increased likelihood of getting the job.

A study by Heilman et al. also portrays lack of fit in relation to likeability and competence. The study manipulated the amount of information given about employee success (success without support vs. success with information to support). The study found that participants rated women in a male gender-typed job (Assistant VP Sales at an aircraft company) as less competent and achievement oriented than men when information about their success at the job was unclear. Conversely, participants rated women in the male gender-typed job as less likeable and more hostile than men when the women's success was obvious and supported by information (Heilman et al., 2004). Additionally, the study linked competence/likeability ratings to overall evaluations of performance and organizational resource allocation, such as assignments in pay (Heilman et al., 2004). Other research has shown that given equal amounts of information, women are typically rated as less competent than men in a masculine task domain (Moss-Racusin et al., 2012).

Lack of Fit Model can help to make sense of these studies—a communal (likeable) woman doesn't fit the agentic job's requirements, yet an agentic (competent) woman doesn't fit her own "communal/likeable" stereotype and thus is sanctioned. Either way, a woman looking to move into a masculine task domain or high status job has her work cut out for her. Lack of Fit Model shows that status, job domain, likeability, and competence have complex and meaningful relationships with career outcomes.

## Status Incongruity Hypothesis

While Lack of Fit Model helps to explain how stereotypes inform perceptions of fit, Status Incongruity Hypothesis offers a different perspective on how stereotypes impact women. The Status Incongruity Hypothesis (SIH) proposes that women who possess or desire status threaten the gender hierarchy (Rudman, Moss-Racusin, Phelan, & Nauts, 2012). For example, consider a woman who seeks power within her organization. She might be perceived as power hungry if she is promoted up the ranks, or if she expresses the desire to do so. When women seek power, they undermine the stereotypic differences between men and women—men are assertive/direct vs. women gentle/nurturing. Power seeking limits the rationale that men deserve higher status for legitimate reasons. As a result of threatening the gender hierarchy, women who violate status norms (non-task related norms) receive backlash. Unlike LOF Model, SIH claims that status violations (and only status violations) cause backlash against women. Much of the SIH functions from our tendency to justify the systems (or hierarchies) of the world—it is simply human instinct to defend the existing hierarchy (Rudman et al., 2012; Moss-Racusin, Phelan, & Rudman, 2010). This overarching tendency to justify societal norms is explained by System Justification Theory.

In 1994 Jost and Banaji proposed System Justification Theory. System Justification is a psychological process by which existing social systems are legitimized with stereotypes. Stereotypes are used to explain the current states of affairs, such as poverty, powerlessness, and exploitation of certain groups (Jost & Banaji, 1994). A woman who violates status stereotypes is also violating the system, or “the way things

are". Women in high status positions represent a shift in power, and a shift in systemic norms. System Justification Theory would argue that the shift in power (disruption of the hierarchy) is discomforting to people and that individuals use stereotypes to defend the gender hierarchy.

For example, one may argue that women are unassertive and overly emotional, which is why they hold lower level positions, as opposed to executive (CEO, COO, etc.). This rationalization is formed on the stereotype that women are meek and emotional, which justifies the stratification of power. SIH states that current hierarchy gives justification and support to the way power is distributed to certain groups, and justification that women are not in power. Thus, SJT explains hierarchical defense mentioned in SIH.

Just as with the Lack of Fit Model, likeability and competence still play a role in evaluations of women in high status, leadership positions—because SIH still relies on gender stereotypes. Women in leadership positions who display agentic behavior (rather than communal behavior) are rated as less likeable by their subordinates, regardless of their effectiveness (Eagly, Makhijani, & Klonsky, 1992; Rudman & Glick, 2002). Agentic women are viewed as hostile, selfish, devious and evaluated as less likeable in comparison with their male counterparts (Heilman, Block, & Martell, 1995).

Studies have found that there is significant backlash against women who seek power. For example, a political study by Okimoto and Brescoll (2010) revealed voting preferences were negatively influenced by the female candidate's power-seeking intentions. Women who sought power experienced repercussions in voting preferences.

Voting preferences were driven by perceptions of low female communality, which triggered feelings of moral outrage and lower perceptions of female candidate competence. This is especially interesting, as the study only looked at *aspiration* for power. A similar study looked into the advancement of 30,000 managers and their advancement in the organization. This study revealed that women in upper levels of management received fewer promotions than men who were equally talented and of equal rank (Lyness & Judiesch, 1999). This evidence suggests that women often face difficulty when obtaining power and status.

A meta-analysis by Eagly et al. (1992) looked at how female leaders were evaluated. Evaluations included perceived competence, satisfaction with the woman as a leader, and leadership style. The meta-analysis showed that women were evaluated more negatively than men in positions with high levels of agency, in leadership positions, positions where there were more men than women in the job, and in cases where there were more male raters than female raters. Interestingly, this trend of devaluing female leaders holds true in hiring for a women into feminine leadership roles as well. A study by Rudman investigated hiring in both female and male managerial jobs, where male and female job-candidates' applications to were created as equally agentic. As expected, the agentic female job applicants were viewed to be less socially skilled (likeable) than their agentic male equivalents. In the feminized manager condition, women who were found to be less likeable were also found to be less hireable. Again, women face a double edged sword in high status positions; communality indicates inadequacy for leadership, while agency indicates inadequate likeability

(Rudman & Glick, 1999). More importantly, these findings suggest that regardless of the task domain, the agency within leadership positions can be enough for women to be considered unlikeable and incapable of success in the job.

### Current Study

The goal of the current study is to look further into discrimination against women in the workplace, and provide support for underlying theories that drive this discrimination. Research has shown that there is undoubtedly discrimination against women when it comes to hiring and promotion and that this discrimination leads to gender disparity in the workforce. We know disparity exists; now we need to delve further into the theories that explain *why* and *how* it happens.

Theoretically, there are still contributions to be made. Lack of Fit and Status Incongruity both explain how discrimination functions—but they fundamentally rest on two different arguments. Status Incongruity argues that gender hierarchy defense is the reason for disparity, whereas LOF argues cognitive fit is the reason. There has been limited views on the theoretical functioning of discrimination against women since these two theories are typically researched separately. Oftentimes researchers do not look into job status and task domain simultaneously. The present study employed a hypothetical selection scenario, in which participants rated a hypothetical job candidate for a hypothetical job opening. The study pitted Lack of Fit against Status Incongruence by manipulating both job status and task domain, (low vs. high status; masculine vs. feminine task domain) as well as manipulating job candidate gender (male vs. female

job candidate). Measurements of hireability, salary assignment, competence and likeability were used as dependent variables. Ultimately, the study will lead to a better conclusion on the theoretical underpinnings of gender discrimination in the workplace.

Practically, this study serves to further how organizations discuss discrimination and hiring decisions or promotions. Currently, trainings typically focus on the cognitive piece of discrimination, rather than hierarchical defense. Companies use trainings that tackle stereotyping head on—many programs frame stereotyping behaviors as “micro inequities”. We teach our employees to avoid using stereotypes, and to judge people based on their character and qualifications. However, by focusing solely on the cognitive side of stereotyping we may be leaving out another major piece of the puzzle. Status Incongruity would argue that there is an inherent motivational piece to stereotyping—a motivation driven by hierarchical defense. An employee can alter his/her stereotyping behavior, but if there is unknown motivation behind it, the impact could be nullified. Rarely do workplace trainings discuss our fear of disruption and change. Educating employees about hierarchical defense may add awareness and appropriate action to discriminatory behaviors in the workplace.

#### Expectations for Lack Of Fit Related Outcomes

According to the Lack of Fit literature, there is evidence that congruence between worker and work does not function simply as a dichotomy (incongruent vs. congruent); rather, it operates in a more nuanced fashion which relies on the complexities of the job. Within the Lack of Fit Model, stereotype fit operates additively,

such that the *more* a woman violates the masculine stereotype of the job, the worse personnel evaluations she receives. Fit is gauged in a complex way, thus it would appear that status and job domain should function additively and interactively. In other words, if LOF is driving discrimination in hiring, the *more* masculine a job is (e.g. a high status/male task job is more masculine than a high status/feminine task job) the worse the female vying for that job will be evaluated.

#### Hypotheses Derived from Lack of Fit Model

*Hypothesis 1a:* No main effects are expected for candidate gender, job status, or task domain.

*Hypothesis 1b:* A two-way interaction for all outcome variables (likeability, competence, hireability, salary) is expected, such that female candidates will be rated as less competent/likeable/hireable/lower salary in the high status condition than in the low status condition. Male candidates, however, will be rated equally in both high and low status conditions.

*Hypothesis 1c:* A three-way interaction for all outcome variables (likeability, competence, hireability, salary) is expected, such that women will be rated as less competent/likeable/hireable/lower salary in the low status/masculine condition than in the low status/feminine domain, and this effect will become more pronounced in the high status/masculine condition. Men, will be rated as less



competent/likeable/hireable/lower salary in both the high and low status feminine domains than in the masculine domains. See Figure 1.1 and 1.2 for an illustration of the expected three-way interaction.

#### Expectations for Status Incongruence Hypothesis Related Outcomes

If SIH is driving personnel discrimination, only the high versus low status manipulation will show a difference in personnel ratings of women. SIH is not based on fit perceptions like LOF, but rather on social perceptions related to system justification and hierarchical defense. Because status incongruity argues all penalization happens in the high status condition, we would not see the same possibility for task domain and status functioning additively as with Lack of Fit. Rather, the interaction effects for women would be seen when a job moves from the low status condition to high status.

#### Hypotheses Derived from Status Incongruence Hypothesis

*Hypothesis 2a:* No main effects are expected for candidate gender, job status, or task domain.

*Hypothesis 2b:* A two-way interaction for all outcome variables (likeability, competence, hireability, salary) is expected, such that female candidates will be rated as less competent/likeable/hireable/lower salary in the high status condition than in the low status condition. Male candidates, however, will be rated equally

competent/likeable/hireable/paid equally salary in both high and low status conditions.

See figure 2.1 and 2.2 for an illustration of the expected two-way interaction.

## CHAPTER 2. METHOD

### Design

The study employed a 2 (gender of candidate: male vs. female) × 2 (gender task domain: masculine vs. feminine) × 2 (status of job: high vs. low status position) between-subjects design. Task domain was manipulated (Construction Worker vs. HR Generalist) as well as status level in the organization (Executive vs. Assistant). The use of construction worker and HR generalist as stereotypically male and female roles comes from Brescoll et al. (2012). These two jobs have been validated as equally prestigious, and equally associated with masculinity (construction worker) or femininity (HR generalist). Brescoll and colleagues required students to rate 30 occupations from the Bureau of Labor Statistics, “according to whether they believed them to be typically held by men or women (1=typically held by a man, 7=typically held by a woman), as well as their relative prestige (1=extremely unprestigious, 7=extremely prestigious). Of these occupations, construction site supervisor was rated as a stereotypically male occupation (M=1.95, SD=1.89), while human resources supervisor was seen as a stereotypically female occupation (M=6.55, SD=2.01). At the same time, both jobs were rated as equivalently prestigious (Ms=5.05 and 5.25, respectively)” (Brescoll et al., 2012).

However, to verify the effectiveness of these manipulations in the present sample, Brescoll's genderiness and prestige measurements were included in the survey.

### Participants

Participants were 243 individuals recruited from Amazon Mechanical Turk (MTURK). Participants were compensated \$0.50 for their participation. Participants were at least 18 years or older. Ages ranged from 18 to 75 years old ( $M=35.84$ ,  $SD=11.50$ ). Fifty-one percent of the participants were female, while 49% were male. The sample comprised 77% White, 9% Asian, 6% African American, 5% Hispanic or Latino participants, and 3% identified themselves as Other. Geographically, 35% were from the South, 24% from the Northeast, 21% from the West and 20% from the Midwest. Forty-three percent of participants had Some College, 22% had a Professional Degree, 10% had a High School Degree, 9% had a Bachelor's Degree, and 9% had an Associate's Degree. Most participants reported making less than \$40,000 a year (62%), 18% reported \$40,000 to \$60,000 a year, 20% reported making more than \$60,000 a year. Professionally, 56% of participants reported working Full-time jobs, 19% were Unemployed, 14% worked Part-time, and 9% reported doing Contract work.

### Procedure

Participants were randomly assigned to one of the eight conditions (male vs. female candidate, high vs low status job, masculine vs. feminine task domain) and asked to read the candidate's cover letter and resume (see Appendix B for an example).

Participants were told that the purpose of the study is to “investigate factors related to hiring job candidates” (see Appendix A for an example). To ensure participants took time to read the materials, the survey began by keeping the materials screen up for a minimum of two minutes before participants could continue. After viewing the materials for at least 2 minutes, participants rated the candidate on likeability, competence, hireability, and salary conferral. After rating the candidates, participants were asked to report gender beliefs on a series of measurements (note: these were completed for exploratory purposes and are not part of the thesis). At the end of the survey, demographics were collected. On average, it took the participants around 10 minutes to complete the survey.

### Measures

The online survey contained a total of 6 separate measures. These measures included hireability, salary, competence, likeability and manipulation checks.

#### Hireability

Participants answered 3 items that capture the hireability of the candidate. Items were rated on a 1-7 scale (1=Strongly Disagree, 7=Strongly Agree), with higher numbers reflecting greater hireability. Items were used from a 3-item scale used by Moss-Racusin et al., 2012. Moss-Racusin et al. reported internal consistency of  $\alpha = 0.91$ . The present sample also yielded a reliability of  $\alpha = 0.91$ . See Appendix C.

### Salary

Again, following Moss-Racusin et al. (2012), salary conferral was measured using one item, “If you had to choose one of the following starting salaries for the applicant, what would it be?” Salaries increased in increments of \$5,000, and each salary was anchored on a 1-7 scale. The salaries ranges, in general, were decided from research on salary.com. Due to a measurement confound, analyses of salary are not reported. See Appendix D.

### Competence/Likeability

Participants responded to 4 items regarding likeability and 4 items regarding competence. Items were rated on a 1-7 scale (1=Strongly Disagree, 7=Strongly Agree). Reliabilities were calculated for internal consistency (competence  $\alpha = 0.93$ , likeability  $\alpha = .91$ ). This measurement follows from Heilman, Wallen, Fuchs & Tamkins, 2004. See Appendix E.

### Manipulation Checks

After completing the survey, participants were asked whether the applicant was male or female, the job was HR/Construction, and high or low status (supervisor/associate). These checks were to verify that the participant is cognizant of information pertinent to the study. Participants were asked if they have had jobs in either construction or human resources. Participants were also asked to estimate the amount of attention they gave to the survey. Participants’ data were analyzed only if

they passed all 3 manipulation checks and had not had a job in HR or Construction. Ninety-five percent of participants passed the candidate gender check, 98% passed HR/Construction check, and 85% passed the high/low status check. Fourteen percent of the sample was dropped due to having a previous job in either HR or Construction. All in, I dropped 110 respondents from a sample of 353, resulting in a final sample of 243 participants.

## CHAPTER 3. RESULTS

### Preliminary Analyses

Items were reverse-scored when appropriate and averaged to create an index score for each participant on each dependent variable. Averages were computed for each outcome variable—hireability ( $M=5.59$ ,  $SD=1.04$ ), competence ( $M=5.93$ ,  $SD=.92$ ), likeability ( $M=5.31$ ,  $SD=.88$ ), and salary ( $M=3.34$ ,  $SD=1.48$ ).

Perception measures were included to ensure participants saw HR and construction as equally prestigious and equally stereotypically male or female, like the participants from the original study that used these manipulations (Brescoll et al., 2012). In order to test whether participants rated HR and Construction stereotypically female (HR) or male (Construction), two one sample t-tests were run to compare scores with the mid-point of the scale. Consistent with Brescoll et al. 2012, HR was rated as stereotypically female ( $t(239)=14.79$ ,  $M=5.08$ ,  $SD=1.13$ ,  $p<.05$ ) and construction was rated as stereotypically male ( $t(238)= -47.16$ ,  $M=1.67$ ,  $SD=.76$ ,  $p<.05$ ). To test if the jobs were seen as equally prestigious a paired samples t-test was run. In contrast to Brescoll et al. 2012, HR ( $M=4.37$ ,  $SD = .97$ ) was seen as more prestigious than construction ( $t(241)= -12.44$ ,  $M=3.19$ ,  $SD=1.13$ ,  $p<.05$ ). This is problematic, as it creates a potential confound in the manipulation. To control for this unexpected difference in prestige,



a prestige difference score was calculated for each participant by subtracting construction prestige ratings from HR prestige.

Correlations were run to verify that outcome variables were correlated. Every dependent variable was significantly correlated with each other. This was expected, as past literature documents the complex relationships between these outcomes. A second set of correlations was run to see which demographic variables were related to the outcome variables. Out of all the demographics, gender and salary yielded the only significant correlations. Given past research, I anticipated gender would be related and it was. Gender was coded men=1, women=2, and salary was coded in categories ranging from 1 = Less than \$20,000, to 6 = More than \$100,000. See Table 1 for more detail.

Because outcome variables were significantly correlated, and some demographics were significant, MANCOVA was determined to be the appropriate analysis for the data. Participant self-reported salary and the prestige difference score were treated as covariates. Consistent with previous research which has yielded gender differences in outcomes, analyses were conducted including participant gender as an additional IV.

### Hypothesis Tests

The data were submitted to a  $2 \times 2 \times 2 \times 2$  4-way MANCOVA to control for Type I error, given the correlations among outcomes. Participant salary and prestige difference scores were used as covariates in the analysis. Alpha is set at .05.

In contrast to hypotheses, analyses did not yield a 3-way interaction between candidate gender, job status, and task domain, nor did the analyses yield a 2-way interaction between candidate gender and job status (see table 2 for further details). Thus, neither Hypothesis 1a, Hypothesis 1b, Hypothesis 1c, Hypothesis 2a nor Hypothesis 2b was supported. However, there were significant main effects for hireability, competence, likeability, and salary assignment, and an unexpected marginally significant 3-way interaction for likeability between participant gender, job candidate gender, and job status. These are discussed by outcome measure in the sections that follow.

#### Hireability

For perceived hireability, main effects were found for candidate job status, task domain, and participant gender. For job status, candidates were rated as significantly more hireable when job status was low ( $M=5.74$ ) versus high ( $M=5.41$ ) ( $F(4, 221) = 8.20$ ,  $p < .01$ ;  $\eta^2 = 0.13$ ). Participants rated candidates applying for stereotypically feminine jobs as significantly less hireable ( $M=5.43$ ) than candidates applying for stereotypically masculine jobs ( $M=5.75$ ) ( $F(4, 221) = 2.93$ ,  $p < .01$ ;  $\eta^2 = 0.05$ ). Lastly, female participants rated job candidates as significantly more hireable ( $M=5.79$ ) than male participants rated them ( $M=5.39$ ) ( $F(4, 221) = 3.65$ ,  $p < .01$ ;  $\eta^2 = 0.06$ ).

### Competence

For perceived job candidate competence, main effects were found for task domain and participant gender. Participants rated candidates applying for stereotypically feminine jobs as significantly less competent ( $M=5.77$ ) than candidates applying for stereotypically masculine jobs ( $M=6.10$ ) ( $F(4, 221) = 2.93, p < .01; \eta^2 = 0.05$ ). Female participants rated job candidates as significantly more competent ( $M=6.10$ ) than male participants rated them ( $M=5.76$ ) ( $F(4, 221) = 3.65, p < .01; \eta^2 = 0.06$ ).

### Likeability

There was a significant main effect of task domain for likeability. Participants rated candidates applying for stereotypically feminine jobs as significantly less likeable ( $M=5.21$ ) than candidates applying for stereotypically masculine jobs ( $M=5.41$ ) ( $F(4, 221) = 2.93, p < .05; \eta^2 = 0.05$ ).

In addition, there was a marginally significant 3-way interaction for likeability involving candidate gender, job status, and participant gender ( $F(4, 221) = 2.56, p = .08; \eta^2 = 0.04$ ). After examining 2-way interactions, it was found that in the low status condition, there was a significant two-way interaction between candidate gender and participant gender ( $F(1, 110) = 6.21, p < .04$ ). However, in the high status condition, there was no significant two-way interaction between candidate gender and participant gender, ( $F(1,88)=.009, p=.93$ ). See Figure 3.1 for further details.

Simple main effect tests were inconclusive. In the low status condition there were no significant differences in likeability ratings between male participants ( $M=5.17$ ,

SD=.77) and female participants (M=5.45, SD=.91) rating male job candidates (F(69)=.533,p=.18). Likewise, there were no significant differences between male participants (M=5.43, SD=.88) and female participants (M=5.32, SD=.88) rating female job candidates (F(60)=.00,p=.623). Among male participants there were no significant differences in their ratings of female candidates (M=5.43, SD=.88) or male candidates (M=5.17, SD=.77) (F(67)=.29,p=.20). Among female participants there were no significant differences in their ratings of female candidates (M=5.32, SD = .88) or male candidates (M=4.45, SD=.88)(F(60)=.002, p=.62). Thus, although none of the contrasts was significant in the low status condition, the trend of male participants rating male candidates somewhat lower than participants rated candidates in the other conditions likely is responsible for the marginally significant overall result.

#### Salary

Due to a confound in the salary scale (only realized after data had been collected), salary findings will not be reported.

## CHAPTER 4. DISSCUSION

### Summary of Results

The purpose of this study was to investigate whether Lack of Fit or Status Incongruence theory was the driving force behind gender discrimination in hiring decisions. It was proposed that the results of this study would help to clarify the theoretical underpinnings of workplace gender discrimination. In this section I will first summarize the results of the study and how they relate to literature surrounding Lack of Fit and Status Incongruence. Then, I will then present theoretical and practical implications of this study. I will discuss the limitations of this study, and potential opportunities for future research, followed by general conclusions.

This paper proposed two primary competing hypotheses reflecting Lack of Fit Theory and Status Incongruence Hypothesis. In order to examine these competing hypotheses, my research design utilized a multitude of manipulations and a comprehensive list of DVs. This research design contributed a holistic view of hiring discrimination, rather than an isolated glimpse. A marginally significant three-way interaction between candidate gender, task domain, and job status would have indicated support for Lack of Fit theory, where alternatively, a two-way interaction between candidate gender and job status would have indicated support for

Status Incongruence Hypothesis. Neither of these hypotheses was supported. Although I had good intentions to pit these two theories against each other, the data do not permit firm conclusions.

Main effects for job status were sensible but did not shed light on Status Incongruity or Lack of Fit. Participants rated candidates for low status jobs as more hireable than those for high status jobs, meaning they were less selective for lower profile jobs than for high profile jobs. This main effect can serve as evidence that the participants were paying attention and understood the manipulations.

Another set of main effects was found in relation to task domain, in which candidates for stereotypically feminine jobs were rated as less competent, likeable, and hireable, when controlling for the perceived job prestige difference. These findings are related to gender devaluations literature. In the current study, a manipulation check showed that participants perceived the HR job as feminine and the construction jobs as masculine, and they also devalued the feminine job in comparison to the masculine job, in terms of both candidates for stereotypically feminine jobs (likeability, competence, hireability) and the worth of those jobs (salary). It has been found in research and practice that female dominated jobs are commonly devalued by paying lower wages than male dominated jobs, even when the work is of comparable worth (Manis, 2013; Charles & Grusky, 2004). However, in this study the candidates themselves seemed to be penalized for merely applying to the feminine job—they were found to be less competent and less hireable. Whereas previous literature finds female typed jobs to be devalued by means of pay, here the candidates personified the devaluation and were

seen as a less desirable and hireable candidate. It also should be noted that the generalization of HR as the definition of all “feminine jobs” should be taken with caution—this study utilized one exemplar of feminine jobs which is a limitation. In the study, participants did rate HR as a more feminine job than masculine, but there could have been other factors associated with HR that informed their ratings and impeded on the construct validity of our manipulation.

For multiple dependent variables, female participants were less critical of job candidates than were male participants. Female participants rated job candidates as more hireable and competent than male participants rated them, which is generally consistent with research. For example, one study that examined between- and within-subjects data, showed that gender accounts for an “extremely small” amount of variance in performance ratings (Pulakos, White, Oppler, and Borman, 1989). Likewise, another study showed women to be less harsh on poor performers than men, and that they delayed feedback longer than men did (Benedict & Levine, 1988).

In summary, although hypotheses were not supported, these data are in many ways consistent with previous research examining similar questions. In addition, they extend previous findings to demonstrate the individual-level consequences associated with task domain.

#### Practical Implications

Some of the more interesting findings of this study, practically speaking, were the lack of significant findings surrounding selection bias. Taking into account the limitations

with the strength of the manipulations and their construct validity, I did not find pervasive candidate gender bias in hiring within this sample. Within this study selection bias based on gender was not robust, but specific to task domain only. Even more specific was the marginal 3-way interaction, which should be looked at with caution, but is still notable. This is evidence that researchers of hiring discrimination must pin-point the specific situations where discrimination is spotted, in order to better understand its evolution. Researchers can utilize a similar methodological approach as this study—one that allows for more variations of job types to be investigated—in order to target more specific instances of bias in hiring.

While there was not general hiring discrimination based on candidate gender in the study, I did document a type of bias—bias against feminized jobs. This type of bias perpetuates the devaluation of occupations that are considered feminine, or are highly comprised of women. While the bias was not against female candidates, it was still against a feminine job, which does have real world implications for women in the workplace. Even though the bias in this study was against the feminine *job*, it was ultimately felt by *candidates* merely applying for the feminine job. Unfortunately, bias against a specific “feminine” field furthers systemic issues with occupational pay inequality and general devaluations. Consistent with research on microinequities and more subtle sexism, this type of bias is hard to detect and legislate, but occurs with great frequency (Hinton, 2004; Rowe, 1990). Organizations can do their best to detect



bias by keeping detailed hiring records. Companies should track hire rate vs. rejection rates by department to ensure their interviewers are not being pigeonholed for one type of job.

In addition to the findings listed above, a notable finding within this study was difference in ratings from male and female participants. Women were, in general, more lenient than men. This is a form of rater bias that may impact hiring. Since there was rater bias in this instance, and also where male participants rated male applicants for low status jobs, organizations should create diverse interview panels to counteract any demographical rater bias.

#### Study Limitations

This study possessed a number of limitations. The primary and perhaps most detrimental limitation is that participants did not rate the job manipulations (HR and construction) as equally prestigious. The participants saw HR jobs as significantly more prestigious than construction jobs. In Brescoll's study, participants rated them as equally prestigious (Brescoll et al., 2011). It should be noted that in the original study, the manipulations were created with a sample of students, and I used these manipulations on real world participants (Brescoll et al., 2011). The results indicate participants were paying attention throughout the survey, meaning they likely truly perceived the HR job to be significantly more prestigious. I attempted to control for this issue by creating a prestige difference score for each participant (HR prestige score minus construction prestige score) and entered the prestige difference score into the MANCOVA as a

covariate, but ideally the jobs would have been seen equally a priori. Despite attempting to control for the perceived prestige difference between HR and construction jobs, findings showed that candidates for the stereotypically feminine HR job were rated more negatively on all outcome variables.

A second limitation was the manipulation pass rate. Participants appeared to have a hard time passing the job status manipulation check –85% of them passed. Comparatively, 95% of participants passed the candidate gender manipulation check, and 98% of participants passed the task domain check. Although I limited the sample to only those that passed all of the manipulation checks, this pass rate may be indicative that the status manipulations were not strong enough. Future studies may consider manipulating job status more dramatically (CEO vs. Entry Level instead of VP vs. Associate).

A third limitation is the utilization of hypothetical job candidates, or paper people. It has been questioned if the results of a “paper person” study will generalize into practice (Ilgen & Favero, 1985). However, in order to test my hypotheses and ensure experimental control, a hypothetical situation was necessary. Even though I was unable to collect data in the field, I utilized common documents for hiring—a job description, cover letter, and resume—in order to maintain some normalcy and consistency of the hiring process. However, unlike the real world, participants may not have been particularly motivated to “hire” the best person, as they had no ties to the hypothetical organization.

A fourth limitation is the construct validity of the manipulations used to represent task domain, or masculine and feminine jobs. While measures were included to confirm that these manipulations were perceived as masculine or feminine, there are other factors that could have been associated with these jobs, beyond the perception of them as masculine or feminine. For example, a construction job is typically outdoors, physical, and requires different hours than and HR job. These other indicators could have influenced the participants' ratings rather than the perception that the jobs were masculine or feminine.

### Conclusion

This study attempted to get a clearer theoretical picture of the force behind gender discrimination in the workplace. Previous theories state different driving forces of discrimination and few studies look at the key variables of these theories simultaneously. The present study examined jobs in a complex, multi-faceted way which allowed examining possible driving forces behind hiring discrimination. Although the hypotheses were not supported, more studies should similarly attempt to disentangle factors that contribute to gender discrimination. As research continues to reveal groups of people, situations, and job types that are vulnerable to hiring discrimination, practitioners will have an easier time identifying discrimination and addressing it. Progress has been made

in documenting hiring discrimination against women; however, there is much more room to go in understanding the driving force and the situational catalysts of gender discrimination.

## REFERENCES

## REFERENCES

- Blau, F. D., Ferber, M. A., & Winkler, A. E. (1998). *The Economics of Women, Men, and Work*. Saddle River, NJ: Prentice Hall.
- Brenner, O. C., Tomkiewicz, J., & Schein, V. E. (1989). The relationship between sex role stereotypes and requisite management characteristics revisited. *Academy of Management Journal*, 32, 662-669.
- Brescoll, V. L., Uhlmann, E. L., Moss-Racusin, C., & Sarnell, L. (2012). Masculinity, status, and subordination: Why working for a gender stereotype violator causes men to lose status. *Journal of Experimental Social Psychology*, 48(1), 354-357.
- Catalyst (2015). Women CEOs of the S&P 500. *New York: Catalyst*. Retrieved April 3, 2015 from: <http://www.catalyst.org/knowledge/women-ceos-sp-500>
- Cejka, M. A., & Eagly, A. H. (1999). Gender-stereotypic images of occupations correspond to the sex segregation of employment. *Personality and Social Psychology Bulletin*, 25, 413-423.

- Davison, H. K., & Burke, M. J. (2000). Sex discrimination in simulated employment contexts: A meta-analytic investigation. *Journal of Vocational Behavior*, 56, 225-248.
- Diamandis, P. (2014). Why we need more women in technology. *Forbes*. Retrieved June 6, 2015 from: <http://www.forbes.com/sites/peterdiamandis/2014/11/03/please-we-need-more-women-in-technology/>
- Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta analysis. *Journal of Personality and Social Psychology*, 60,685-710.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111, 3–22.
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin*, 117, 125–145.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573–598.
- Eagly, A. H., & Wood, W. (1999). The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American Psychologist*, 54(6), 408.

Fiske, S. T., Cuddy, A. J., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences, 11*(2), 77-83.

Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*(6), 878.

Fuegen, K., Biernat, M., Haines, E., & Deaux, K. (2004). Mothers and fathers in the workplace: How gender and parental status influence judgments of job-related competence. *Journal of Social Issues, 60*, 737-754.

Haslam, S. A., & Ryan, M. K. (2008). The road to the glass cliff: Differences in the perceived suitability of men and women for leadership positions in succeeding and failing organizations. *The Leadership Quarterly, 19*(5), 530-546.

Heilman, M. E. (1983). Sex bias in work settings: The lack of fit model. *Research in Organizational Behavior, 5*, 269–298.

Heilman, M. E. (1995). Sex stereotypes and their effects in the workplace: What we know and what we don't know. *Journal of Social Behavior and Personality, 10*, 3-26.



Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657-674.

Heilman, M. E., & Blader, S. L. (2001). Assuming preferential selection when the admissions policy is unknown: The effects of gender rarity. *Journal of Applied Psychology*, 86, 188-193.

Heilman, M. E., Block, C. J., Martell, R. F., & Simon, M. C. (1989). Has anything changed? Current characterizations of men, women, and managers. *Journal of Applied Psychology*, 74, 935-942.

Heilman, M. E., Block, C. J., & Martell, R. F. (1995). Sex stereotypes: Do they influence perceptions of managers? *Journal of Social Behavior and Personality*, 10, 237-252.

Heilman, M. E., & Haynes, M. C. (2008). Subjectivity in the appraisal process: A facilitator of gender bias in work settings. *Beyond Common Sense: Psychological Science in the Courtroom*, 127-155.

Heilman, M. E., & Okimoto, T. G. (2008). Motherhood: A potential source of bias in employment decisions. *Journal of Applied Psychology*, 93(1), 189-198.

- Heilman, M. E. & Stopeck, M. H. (1985a). Being attractive, advantage or disadvantage? Performance based evaluations and recommended personnel actions as a function of appearance, sex, and job type. *Organizational Behavior and Human Decision Processes*, 35, 202-215.
- Heilman, M. E. & Stopeck, M. H. (1985b). Attractiveness and corporate success: Different causal attributions for males and females. *Journal of Applied Psychology*, 70, 379-388.
- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology*, 89, 416-429.
- Hinton, E. L. (2004). Microinequities: when small slights lead to huge problems in the workplace. *DiversityInc Magazine*.
- Ilgen, D. R., & Favero, J. L. (1985). Limits in generalization from psychological research to performance appraisal processes. *Academy of Management Review*, 10(2), 311-321.

- Kawakami, C., White, J. B., & Langer, E. J. (2000). Mindful and masculine: Freeing women leaders from the constraints of gender roles. *Journal of Social Issues, 56*(1), 49-63.
- Kerpen, C. (2015). Let's talk about the gender pay gap. *Forbes*. Retrieved February 2, 2015 from: <http://www.forbes.com/sites/carriekerpen/2015/02/12/lets-talk-about-the-gender-pay-gap/>
- Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin, 137*(4), 616.
- Lyness, K. S. (2002). Finding the key to the executive suite: Challenges for women and people of color. *The 21st Century Executive: Innovative Practices for Building Leadership at the Top, 229–273*.
- Lyness, K. S., & Heilman, M. E. (2006). When fit is fundamental: performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology, 91*(4), 777.
- Lyness, K. S., & Judiesch, M. K. (1999). Are women more likely to be hired or promoted into management positions?. *Journal of Vocational Behavior, 54*(1), 158-173.

- Madera, J. M., Hebl, M. R., & Martin, R. C. (2009). Gender and letters of recommendation for academia: Agentic and communal differences. *Journal of Applied Psychology, 6*, 1591–1599.
- Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences, 109*(41), 16474-16479.
- Moss-Racusin, C. A., Phelan, J. E., & Rudman, L. A. (2010). When men break the gender rules: Status incongruity and backlash against modest men. *Psychology of Men & Masculinity, 11*(2), 140.
- Nieva, V. F., & Gutek, B. A. (1980). Sex effects on evaluation. *Academy of Management Review, 267-276*.
- Olian, J. D., Schwab, D. P., & Haberfeld, Y. (1988). The impact of applicant gender compared to qualifications on hiring recommendations: A meta-analysis of experimental studies. *Organizational Behavior and Human Decision Processes, 41*(2), 180-195.

- Okimoto, T. G., & Brescoll, V. L. (2010). The price of power: Power seeking and backlash against female politicians. *Personality and Social Psychology Bulletin*, 36(7), 923-936.
- Phelan, J. E., Moss-Racusin, C. A., & Rudman, L. A. (2008). Competent yet out in the cold: Shifting criteria for hiring reflect backlash toward agentic women. *Psychology of Women Quarterly*, 32(4), 406-413.
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26, 269–281.
- Rowe, M. P. (1990). Barriers to equality: The power of subtle discrimination to maintain unequal opportunity. *Employee Responsibilities and Rights Journal*, 3(2), 153-163.
- Rudman, L. A., & Glick, P. (1999). Feminized management and backlash toward agentic women: The hidden costs to women of a kinder, gentler image of middle managers. *Journal of Personality and Social Psychology*, 77, 1004–1010.
- Rudman, L.A., & Glick, P. (2002). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues*, 57, 743.

Rudman, L. A., Glick, P., & Phelan, J. E. (2008). From the laboratory to the bench: Gender stereotyping research in the courtroom. *Beyond Common Sense: Psychological Science in the Courtroom*, 83-102.

Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice against female leaders. *Journal of Experimental Social Psychology*, 48(1), 165-179.

Sackett, P.R., DuBois, C.L.Z., & Noe, A.W. (1991). Tokenism in performance evaluation: The effects of work group representation on male-female and white-black differences in performance ratings. *Journal of Applied Psychology*, 76(2), 263-267.

Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics. *Journal of Applied Psychology*, 57, 95-100.

Schein, V. E. (1975). Relations between sex role stereotypes and requisite management characteristics among female managers. *Journal of Applied Psychology*, 60, 340-344.

Solis, H. L., Bureau of Labor Statistics, (2011). *Women in the Labor Force: A Databook*.

Retrieved June 6, 2015 from: <http://www.bls.gov/cps/wlf-databook-2011.pdf>

Steinpreis, R. E., Anders, K. A., & Ritzke, D. (1999). The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study. *Sex Roles, 41*(7), 509-528.

Swim, J., Borgida, E., Maruyama, G., & Myers, D. G. (1989). Joan McKay versus John McKay: Do gender stereotypes bias evaluations? *Psychological Bulletin, 105*, 409-429.

Tiedens, L. Z. (2001). Anger and advancement versus sadness and subjugation: the effect of negative emotion expressions on social status conferral. *Journal of Personality and Social Psychology, 80*(1), 86.

## TABLES



Table 1 Outcome Correlations and Covariate Correlations

	Mean	Std. Dev	1	2	3	4	5	6	7
1 Hireability	5.59	1.04	<b>.91</b>						
2 Competence	5.93	.92	.79**	<b>.93</b>					
3 Likeability	5.31	.88	.55**	.64**	<b>.91</b>				
4 Salary	3.34	1.48	.38**	.38**	.25**				
5 Participant Gender	1.51	.50	.19**	.18**	.08	.03			
6 Participant Salary Difference Score	2.39	1.34	-.16*	-.16*	-.14*	.06	-.01		
7	1.18	1.48	.03	.10	.06	.04	.08	.02	

\* $p < .05$ ; \*\* $p < .001$ ; Bold numbers on the axis are index Cronbach's Alphas

Table 2 MANCOVA Table

	Wilks' $\lambda$	Partial $\eta^2$	F	Sig.
Participant Salary	.95	.05	3.051	.02
Prestige Difference Score	.97	.03	1.516	.20
Participant Gender	.94	.06	3.646	.01
Candidate Gender	.99	.01	0.783	.54
Job Task Domain	.95	.05	2.934	.02
Job Status	.87	.13	8.203	.00
Candidate Gender * Job Task Domain	.97	.03	1.523	.20
Candidate Gender * Job Status	1.00	.00	0.111	.98
Candidate Gender * Participant Gender	1.00	.00	0.187	.94
Job Task Domain * Job Status	.98	.02	0.943	.44
Job Task Domain * Participant Gender	.99	.01	0.375	.83
Job Status * Participant Gender	.99	.01	0.689	.60
Candidate Gender * Job Task Domain * Job Status	.98	.02	0.935	.44
Candidate Gender * Job Task Domain * Participant Gender	1.00	.00	0.132	.97
Candidate Gender * Job Status * Participant Gender	.96	.04	2.257	.06
Job Task Domain * Job Status * Participant Gender	.99	.01	0.585	.67
Candidate Gender * Job Task Domain * Job Status * Participant Gender	.99	.01	0.503	.73

FIGURES

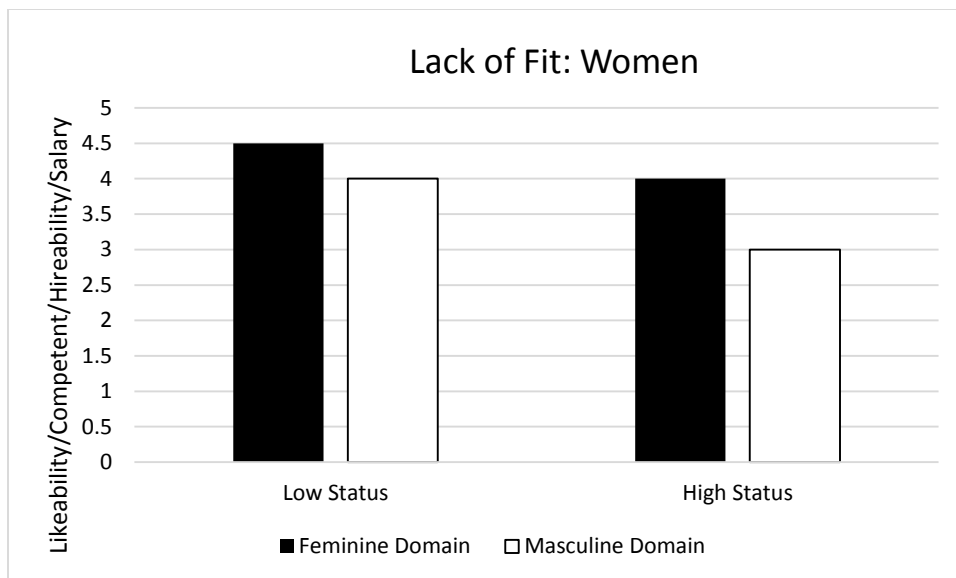


Figure 1.1 Lack of Fit Hypothesis: Women

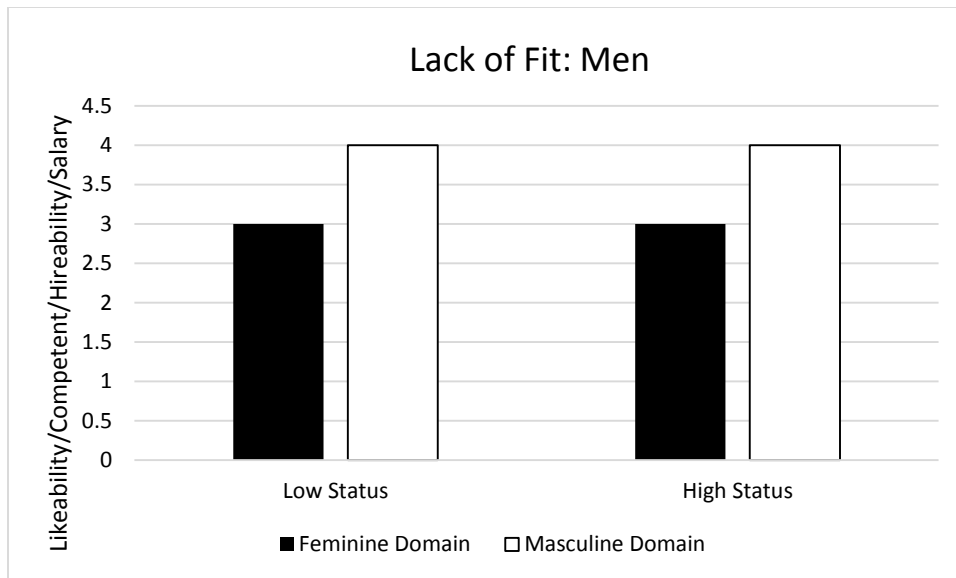


Figure 1.2 Lack of Fit Hypothesis: Men

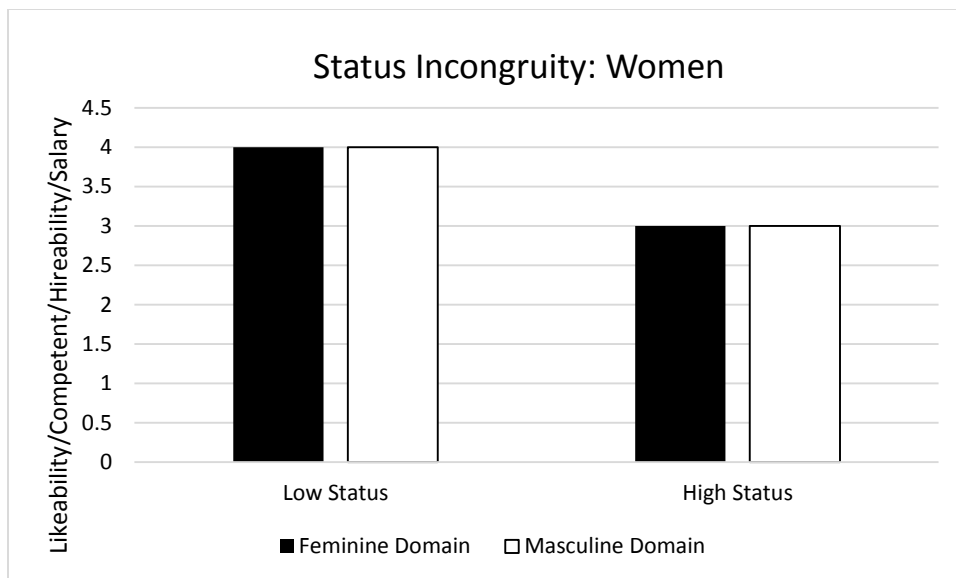


Figure 2.1 Status Incongruity Hypothesis: Women

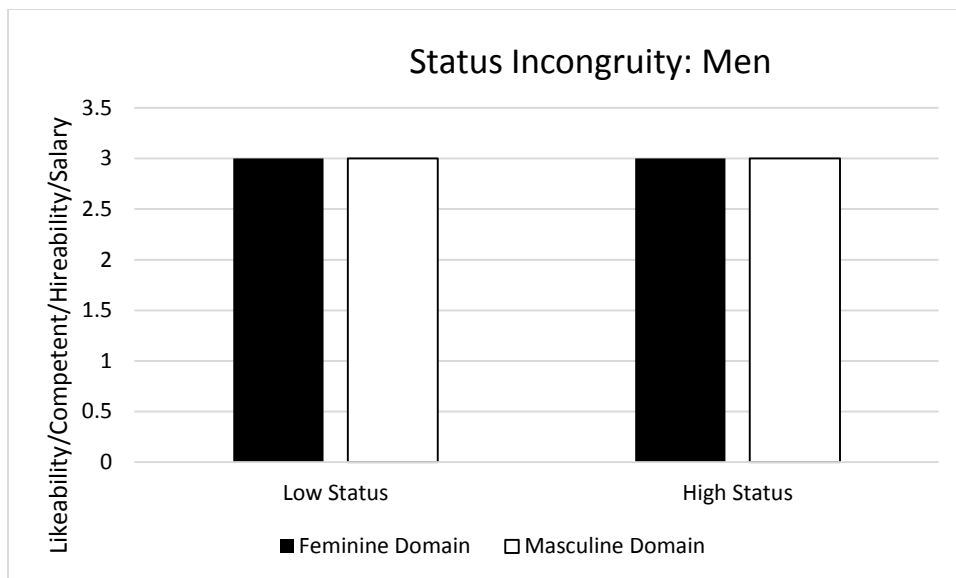


Figure 2.2 Status Incongruity Hypothesis: Men

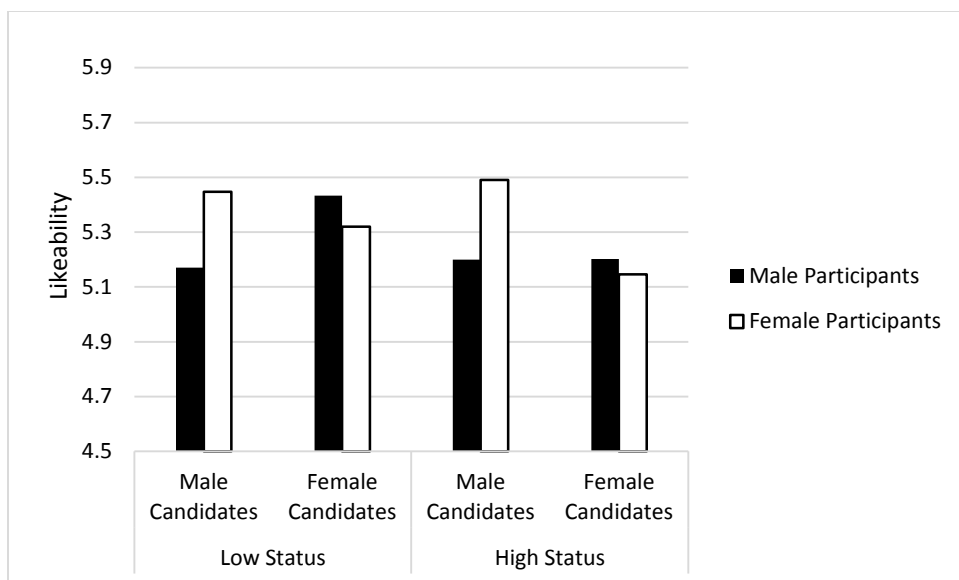


Figure 3.1 3-way Interaction for Likeability



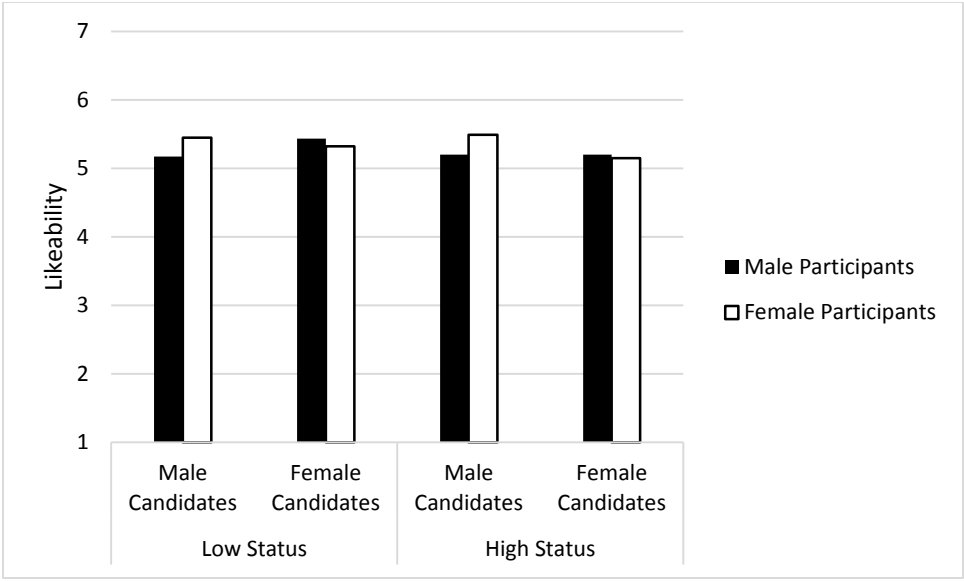


Figure 3.2 3-way Interaction for Likeability with Full Scale

## APPENDICES

## Appendix A Cover Story

The purpose of this study is to investigate factors related to hiring job candidates. Findings may be used to inform how future candidates are rated and hired, thereby helping organizations streamline and standardize their hiring process. Please view the documents below and allow your browser enough time to load them (can take about a minute).

The following documents reflect a job description and the application materials of a randomly chosen job applicant (cover letter and resume). Again, there will in total be THREE documents: job description, resume, and cover letter. Please read these materials carefully and note that you CANNOT come back to this page. This also serves as a reminder that you will be asked questions about these materials. Once you have spent two minutes on this page, the NEXT button will appear at the bottom, allowing you to continue.

## Appendix B Participant Materials

### Job Description: Male Task Domain/Low Status

#### Residential Construction Associate

#### Job Requirements

1. Work outside in the elements—capable of physical labor for nearly 40 hours a week
2. Follow projects specifications by reading blueprints, planning documents, and process flow charts.
3. Compliant with public law and safety regulations
4. Operate/use power tools
5. Digging and spreading dirt to level earth
6. Laying concrete and patching concrete
7. Cutting and joining dry wall
8. Operate company vehicles—greasing, fueling , and cleaning heavy equipment

#### Required Skills

- Standard mathematics used in construction
- Experience with power tools
- Basic construction experience
- Equipment experience
- Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads

#### Required Experience

- Bachelor of Science degree in construction or engineering, or equivalent experience required.
- A minimum of 2 years of experience in construction industry.
- Thorough understanding of all construction specifications, systems, and procedures.

**Cover Letter & Resume: Male Task Domain/Low Status  
Associate Construction Worker**

As an established construction worker, I was excited to learn about your organization's opening for a professional with my background and credentials. Upon review of the requirements, I am confident I have what it takes to support organizational and client goals. I have attached my resume for your review as the first step in this application process.

To complement the information in the attached resume, I would like to draw your attention to additional information about who I am, and the qualities I can bring to your construction team. Through my education and professional experience, I have a solid background in providing quality construction solutions. As such, I have established the ability to understand issues that arise throughout the construction process, and the ability to address those issues with tact and immediacy. I read situations and anticipate questions and challenges. I am strong in work ethic and offer a direct, to the point style of work.

From the start, I get the job done right. No matter the task, I always take pride in the way I carry out my responsibilities. The gratification I find from construction creates an enjoyable work experience for both me and my peers. Rest assured you can expect the same dedication and results previous employers have commended me for.

My deep passion is for finely constructed homes. I get a true sense of accomplishment when projects are executed seamlessly from start to finish. I welcome a personal interview to discuss my background in more detail, and how my qualifications and education can bring value to your organization. I look forward to your positive response.

Sincerely,

Michael/Michelle Miller

**Resume**

Michael/Michelle Miller

**EDUCATION**

Bachelor of Science in Construction Management 2011; GPA 3.0  
University of Oregon

**EXPERIENCE**

Harrison Partners, Ltd.

**Associate Construction Laborer– 2 Years (Current)**

- Collaborating with construction team to establish specification for construction procedure.
- Using a variation of power tools to construct and erect buildings
- Operating fork lift
- Moving materials—lifting, pushing, and pulling of objects
- Stocking and inventory of construction materials
- Concrete pouring

**Construction Laborer – Apprentice 1 Year**

- Followed construction specifications to build residential properties for a large housing development
- Construction tasks involved: poured concrete, put up drywall, insulation, basic plumbing, laying floor work, siding the house, and basic roofing

**SKILLS**

Ability to Follow Specifications

Accuracy

Power Tools

Machinery Maintenance

Team Collaboration

Basic Math

## Appendix C Hireability Index

How likely would you be to invite the applicant to interview for the job?

How likely would you be to hire the applicant for the job?

How likely do you think it is that the applicant was actually hired for the job he/she applied for?

## Appendix D Salary Conferral

## High Status

If you had to choose one of the following starting salaries for the applicant, what would it be?

- 1 (\$60,000)
- 2 (\$65,000)
- 3 (\$70,000)
- 4 (\$75,000)
- 5 (\$80,000)
- 6 (\$85,000)
- 7 (\$90,000)

## Low Status

If you had to choose one of the following starting salaries for the applicant, what would it be?

- 1 (\$40,000)
- 2 (\$45,000)
- 3 (\$50,000)
- 4 (\$55,000)
- 5 (\$60,000)
- 6 (\$65,000)
- 7 (\$70,000)



## Appendix E Competence and Likeability Index

## Competence

Please rate the extent to which you believe:

This candidate would be competent in this job

This candidate would be effective in this job

This candidate would be productive in this job

## Likeability

Please rate the extent to which you believe:

This candidate would be likeable in this job

This candidate would be relaxed in this job

This candidate would be easy to work with in this job