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The Impact Of Power Status On Gender Stereotypes, Sexism, And Gender Discrimination Toward Women In The Workplace And The Career Identity Development Of Women

Juemei Yang

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THE IMPACT OF POWER STATUS ON GENDER STEREOTYPES, SEXISM,
AND GENDER DISCRIMINATION TOWARD WOMEN IN THE WORKPLACE AND
THE CAREER IDENTITY DEVELOPMENT OF WOMEN

by

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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

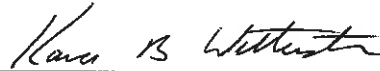
In partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota
December
2016

This dissertation, submitted by Juemei Yang in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.



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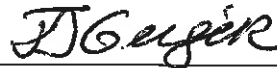
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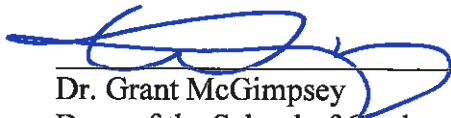


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December 1, 2016

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November 29, 2016

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ABSTRACT

Women often experience unique barriers at workplace that hinder their career development (Whitley & Kite, 2010). In this study I focused on several of the barriers: gender stereotypes, sexism, and gender discrimination. Specifically, I examined the impact of career-related power, the gender of the perceiver, and the gender of the perceived on the endorsement of gender stereotypes, of sexist attitudes, and of gender discrimination. Significant results indicated that gender stereotypes and sexist attitude are most strongly endorsed by men with high power and women with low power. The largely insignificant results of discrimination also suggested that a climate change might be taking place at workplace, where hostile working environments against women are less tolerated. The insignificant results prompted reflection on future research implications and suggested the need of different research designs and measures. In addition, this study offered clinical implications including educational information to be included in career counseling trainings. Finally, I offered practical implications in creating a more inclusive and just workplace.

CHAPTER I

INTRODUCTION

There is currently a significant presence of women in the U.S. workforce, and the number continues to increase every year (Whitley & Kite, 2010). Today, the majority of U.S. undergraduates are women, and these women are more likely than men to earn a baccalaureate degree and a graduate degree (National Center for Education Statistics, 2007; Syverson, 2003). In the United States, 46 percent of all workers are women, and women are achieving higher-level positions in the workplace (U.S. Department of Labor, 2008). Women's roles have changed and there are many models of successful women in all occupational fields (Pew Research Center, 2010-2011). Research shows that young women now surpass young men in believing that achieving success in a high-paying career or profession is important in their lives (Pew Research Center, 2010-2011). Despite these facts, expectations about women have not kept pace with women's changing roles (Whitley & Kite, 2010). There are discrepancies between the ways women value themselves at work and the ways women are valued by others. For example, women in nontraditional roles are still expected to behave like "women," such as to present themselves submissively or fulfill the roles of being wives and mothers (Whitley & Kite, 2010).

Because women and men are treated differently in the workplace, women in the United States today face some unique barriers in developing their career identities. It is important to note that many jobs still remain gender-segregated even decades after the women's rights movement (Betz, 2008). Occupations such as secretaries, speech therapists, and elementary school teachers are predominantly women, whereas

occupations such as engineers, dentists, and physicians are predominantly men (Betz, 2008). For women, this job segregation often leads to a “sticky floor,” which describes the idea of an invisible force that keeps women at the bottom of career positions (Gutek, 2001). Many of the traditionally female occupations do not offer avenues for promotion or advancement, and Gutek calls them “dead-end jobs.” Men, on the other hand, indisputably dominate the highest professional level (Fassinger, 2001). In the mid-1990s, men comprised 85 percent of tenured professors, 89 percent of the membership in the U.S. House of Representatives, 90 percent of the U.S. Senate, 95 percent of Fortune 500 corporate executive officers, and 99.9 percent of athletic team owners (Fassinger, 2001).

Zula (2014) provided more up-to-date data and found that working women have largely remained in nonprofessional occupations (73%), whereas gains in nontraditional occupations have been minimal. For instance, the number of women entering nontraditional occupations had declined to 4.9 percent from 7.1 percent in 1983 (Zula, 2014). After four decades of efforts to fully involve women in the academic workforce, only 42 percent of all full-time faculty members were women (Francine, 2014). In 2015, 84 women (19.3 percent) served in the United States House of Representatives, and 20 women (20 percent) served in the United States Senate (Center for American Women and Politics, 2016). In addition, in 2010, only 19 percent of chefs and head cooks, 5.2 percent of aircraft pilots and flight engineers, 4.4 percent of Fortune 500 corporate executive officers, and 1 percent of athletic team owners were women (Zula, 2014). These numbers support the claim that even women who gain entry into professional jobs often reach what is known as the “glass ceiling,” an invisible barrier that prevents women from reaching the highest levels of an organization (Thomas, 2005). Additionally, evidence suggests that men have an

advantage even when they work in female-dominated professions, and that they are on a fast track to management positions (Williams, 1992).

Besides job segregation, women and men do not receive equal pay at the workplace. In 2010, women who were full-time workers had median weekly earnings of \$669, compared with \$824 for their male counterparts. While women continue to earn less than men, it is important to acknowledge that there have been some improvements since the collection of statistical data on this topic began in 1979. Up to 2004, the average of what women earned steadily rose from 62% of what men earned to 81%. However, the women's-to-men's earnings ratio has settled, and no further growth has been observed since then (Pew Research Center, 2010-2011).

It is also important to note that women are not as successful in the workplace as compared with men, not because they are less capable than men, but because systematic gender oppression exists in our society (Whitley & Kite, 2010). It is important to understand the factors that discourage girls and women from pursuing careers, prohibit their entry into professional positions, and further limit success for those who do gain entry. Through this understanding, we hope to support women's career identity development and increase women's career success.

More specifically, women's career identity development is impacted by gender stereotypes, sexism, and gender discrimination (Ruble, Cohen & Ruble, 1984). Additionally, higher status people control most resources (i.e., decision making) that are necessary for people to advance in their careers, such as the decision making of hiring, promoting, and allocating training resources (Melamed, 1995). It is also clear that gender stereotypes, sexism and gender discrimination toward women have an impact on such decision making for women (Melamed, 1995). And such decision

making, in turn, has an impact on women's career identity formation and development.

More specifically, Ruble, Cohen, and Ruble (1984) have suggested that gender stereotypes include the belief that women possess personality characteristics that are considered inappropriate and inadequate for performing effectively in high-level positions. These stereotypes operate at various stages in women's career development, and they set a series of barriers for women who are aspiring to positions traditionally dominated by men (Ruble et al., 1984). In addition, as women move into higher career positions, they face increased pressure to comply with traditional gender roles. Finally, Melamed (1995) provided evidence that although factors such as personality characteristics and career choices do have some impact on women's career success, gender discrimination accounted for, astonishingly, over 55% of the gender gap between men and women in career success.

Since gender stereotypes, sexism, and gender discrimination make a tremendous negative impact on the career development of women, it is important to discuss three key factors that contribute to these barriers. First, studies show that differences in physical appearance of men and women result in perceptions of personal traits associated with each sex (Friedman, Putman, Hamberger, & Berman, 1992). For instance, a petite physical appearance is perceived to be consistent with feminine characteristics, and a muscular physical appearance is perceived to be consistent with masculine characteristics (Friedman et al., 1992). Second, the sex composition of a workplace and its organizational policies (particularly male-dominated workplaces and policies that tolerate discriminatory behaviors) contributes to gender discrimination (Bobbitt-Zeher, 2011). Third, fear of threat to male status and power as well as the urge to avoid negative reactions to nontraditional roles

contribute to the endorsement of sexism (Glick & Fiske, 2001). For example, men who see women as a threat to male status are more likely to endorse sexism, and women who are motivated to avoid negative reactions are more likely to avoid nontraditional gender roles (Fiske, Lin, & Neuberg, 1999). Furthermore, research shows that some of these variables are inter-correlated in career settings. For example, gender stereotyping contributes to discriminatory actions in the workplace (Bobbitt-Zeher, 2011).

In addition to stereotypes, sexism, and discrimination, another concept to be introduced here is power status. Power can be defined as the degree of control one has over one's own fate and those of others (Sachdev & Bourhis, 1985). In career settings, power status can be defined as the level of managerial positions that allow the control of career resources as employment, promotion and training opportunities (Cuddy, Fiske, & Glick, 2004). Power status is an important construct to be examined because there is evidence to support that having higher power status leads people to display more discriminatory behaviors (Sachdev & Bourhis, 1985). We know very little, however, about the impact of power status on individuals' formation of gender stereotypes, sexist attitudes, and gender discriminatory behaviors in career settings.

The purpose of this study was to compare the endorsement of gender stereotypes, of sexist attitudes, and of gender discrimination behaviors between people who are at a higher power status and those who are at a lower power status in career settings. In addition, this study examined the impact of gender stereotypes, sexism, and gender discrimination on career-related decision making such as employment, promotion, and allocation of training resources. Finally, the impact of such decision making on women's career development and identity formation was evaluated.

CHAPTER II

LITERATURE REVIEW

In this chapter the four main constructs of gender stereotypes, sexism, gender discrimination, and power status are discussed in detail. Prior to that discussion, a detailed look at women's career development and identity in American history is addressed.

History of Women's Career Development and Identity

Before discussing specific career development barriers women face today, it is important to first examine the history of women as workers in the context of the history of the United States. A close examination revealed that American women's experiences in the workforce have been very diverse. They worked in a variety of settings, and the kind of work done has varied between different classes, races, ethnic groups, and geographical locations (Lerner, 1977). Historians have observed that women's career development and identities in a variety of occupations were influenced by historical and political events (Miller, 2006). Some important events are reviewed here, and women's experiences with gender stereotypes, sexism, and gender discrimination are examined in this context. The historical period being discussed here focuses on events prior to the independence of the United States up to the present.

Largely as a result of socialization experiences, women are often not reinforced for developing strong motivation to carry out career-related behaviors and pursue career paths, and thus have struggled to fully realize their capabilities and talents in their career potential (Hackett & Betz, 1981). Women's career development

is complex because women face many unique barriers. For instance, women face the issue of managing multiple life roles and solving role conflicts in work and family (Herley, 2016). Women also deal with barriers such as sexual discrimination and sexual harassment (Whitley & Kite, 2010). It is important to understand women's career identity development to better assist them in finding satisfaction in their work lives.

Colonial Era (1492-1776)

Throughout American history, women have done unpaid domestic work, and more often their unpaid domestic labor has not been considered "work" (Kessler-Harris, 1981). But dating back to the colonial era of American history, the family unit was the focus of work, and women and the tasks they performed were an integral part of agricultural labor and home manufacturing (Cleveland, Stockdale, & Murphy, 2000). Women worked at home and shared the endless tasks of producing food, clothing, and furnishings with other family members (Wertheimer, 1977). For two centuries, almost everything that families used or ate was produced at home by women (Wertheimer, 1977). The work of women required extensive hours of labor. As Wertheimer stated, "A woman's work began at sunup and continued by firelight as long as she could hold her eyes open" (pp. 12). The purpose of labor at this time, instead of payment, was related to sustaining the family directly through production (Miller, 2006).

Besides working for their own families, some women worked as indentured servants. Approximately two-fifths of the servants were female (Kessler-Harris, 1981). The working conditions of female servants were far from satisfying. The duration of servitude was subject to the will of their masters, and it was often years long. They were prohibited to leave or marry before the service was complete, or they

could be severely punished by whipping, branding, and extending the term of service (Wertheimer, 1977). It was not uncommon for males who controlled their servitude to sexually assault them, so pregnancy could be used as a rationale to extend their service term (Spruill, 1998). Overall, indentured servants worked with little legal contracts, colonial laws of protection, or compensation (Kessler-Harris, 1981).

If a family could save money and buy land or open a shop, they could move into the middle class or even higher though enslaved Africans, and their children had no chance to move up (Wertheimer, 1977). About one third of the enslaved people were women, and they were sold without regard for the breaking up of families or even for the separation of young children from their mothers (Wertheimer, 1977). Enslaved women soon became the preferred labor source over indentured servants. This was because enslaved women were cheaper, never became free, and could provide continuous labor by giving birth to children. In addition to working on labor-intensive tasks in the field alongside men, Black women also performed household chores for both their own and their masters' families (Baker, 2008). Moreover, sexual exploitation of enslaved women by the plantation owner was common, and pregnancy usually made no difference in work assignment. Finally, they were forced to neglect their own children, and care for those of their masters (Smith, 1971). Influenced by class and racial factors, Black women were the most vulnerable population in the preindustrial time (Baker, 2008). Although indentured servants and enslaved people were important to the work force, neither identified their work as a career to be developed. Their work did not contribute to the development of any career identity for many women.

When settlers came to the New World, they were appalled to see how the Native American women did all of the traditional and manual labor, according to

European standards. They worked in and around the house, reared the children, prepared food, and created pottery. They also worked in the fields tilling the land and farming (Brown, 1996). Like the English, the Native Americans made a clear distinction between “women’s work” and “men’s work,” and the men never liked to be caught doing the former. The early explorers observed the Native American men leisurely enjoying their lives and hunting deer and animals, fishing, and building homes for their families; these were activities that the noble class of Europe did in their leisure (Brown, 1996). Native American women, at this time, made important contributions to their families through their work; however, their opportunities to work outside the home were rare, and their work contributed limitedly to their career development and career identities.

The Revolutionary War (1775-1783) and Industrialization

Before the Revolution, the British mercantile policy in the late 17th century altered the work of women and their lives (Kessler-Harris, 1981). The policies of the British homeland prohibited the colonies to trade with any country other than England, and England taxed heavily on the monopolized products sold to the colonies (Wertheimer, 1977). These mercantile regulations further required the colonies to consume whatever was imported from England, and prohibited trade among the colonists (Berky & Shenton, 1966). It caused widespread unemployment and raised the cost of goods, and soon it became apparent that the colonies could not survive in this system, so they objected with a series of "non-importation" agreements that made buying domestic goods a patriotic act (Spruill, 1998). The movement toward political independence expanded the market for many types of goods and led White working class women to develop their household skills in producing and selling knitted goods (Paludi, 2008). These women were able to earn small but steady incomes by spinning

and knitting, and their career identities began to grow (Foner, 1947). However, it is important to note that women at this time were still subjugated and were very limited in their opportunities for employment outside the home (Paludi, 2008).

The political conflict between England and the colonies eventually led to the Revolutionary War (Foner, 1947). Working women of the colonies played a major role in the Revolution (Berky & Shenton, 1966). They farmed food, sewed clothes, made shoes, cooked for the troops, and nursed the wounded (Berky & Shenton, 1966). Some women even fought as soldiers (Berky & Shenton, 1966). It was widely recognized and respected that the colonial women contributed inspirationally and economically through the Revolutionary period, and work and career options were further developed (Beard, 1969). In this new American era, however, neither the Constitution nor the Bill of Rights offered women economic rights or any form of acknowledgement (Spruill, 1998). Married women especially lost any identities of their own. They could not own any property, any wages they earned were their husband's, and women had no political rights guaranteed to them (Spruill, 1998).

The movement of political independence and industrialization fostered the creation of technology to increase the quantity of manufactured goods. The household manufacturers quickly lost ground in the resulting competition with factory-made goods (Kessler-Harris, 1981). The early careers that women had developed through selling homemade products soon diminished. The Industrial Revolution, however, made wage labor widely available to women, and took them out of their homes (Wertheimer, 1977). Miller (2006) distinguished paid work that was external to the family, and unpaid work that was within the family. Miller highlighted that before industrialization, paid work was largely being done by men and the unpaid work was largely being done by women. Before unpaid work was recognized as work, only paid

work was acknowledged as a career (Miller, 2006). So it is important to note that women begin to establish their career identity through paid work in the Industrial Revolution period (Kessler-Harris, 1981).

During the early stages of industrialization in the US, large numbers of single White women worked for wages in the late 18th century on motor-driven machines in factories (Abbott, 1910). Despite the emergence of this important female work force, the ideology during this period still stopped women from pursuing a career, and conveyed to women that the only way to achieve the identity of woman was to bear and nurture children (Marshall & Paulin, 1987). It was reasoned that a few years of discipline in the factory would make women better wives (Sumner, 1974). And when women were married, they were strongly expected to relinquish their jobs (Marshall & Paulin, 1987). In this historical time, the career identities of these White single women were only allowed for the purpose of becoming better wives and taking better care of their families (Giele & Stebbins, 2003).

Compared to the Colonial Period, conditions for enslaved individuals in the industrial era were aggravated by rising political tensions and White fears of slave rebellion (Quarles, 1996). In order to maintain the slave system, restrictions grew more rigid and punishment more severe (Frazier, 1928). Enslaved people had no legal standing and could not own property. They were discouraged from making social contacts with non-slaves, and they were prohibited from holding any kinds of formal gatherings. Whites feared educated enslaved people, and it became a crime to teach them to read or write (Frazier, 1928). Although they were severely punished for doing so, enslaved people sought out every opportunity to learn. Nonetheless, this powerful institutional barrier meant that the enslaved population remained largely illiterate (Foner, 1976).

Besides working in the fields, enslaved women were also bought by cotton mills, sugar refineries, and other manufacturers (Reddings, 1950). Considering the low cost of owning slaves, it is not surprising that factory owners preferred to enslave them over hiring White women (Reddings, 1950). Enslaved women were considered as particularly valuable in the factory, because their children could be put into light factory jobs at a young age (Aptheker, 1971). Additionally, women and children cost less than men to feed (Aptheker, 1971). Working conditions of industries were harsh and dangerous. Industrial slaves worked a seven-day week, 12 to 16 hours per day. Food, clothing, and housing conditions were poor, and medical care hardly existed (Aptheker, 1971).

Civil War (1861-1865) and its Aftermath

During the Civil War, the role of women began to change significantly because a large number of them entered the work force for the first time to take the place of men called to military duty (Kessler-Harris, 1981). This trend seemed to awaken men's and women's awareness of women's capacities. Even after the war, many of these women kept their jobs and remained a permanent part of the work force (Flexner & Fitzpatrick, 1996). Women in both the North and the South worked as nurses and cared for the wounded on the battlefield; this was the first time American women received formal training to become nurses (Young & Young, 1959). Women also served as war workers and catered, laundered, sewed, and raised funds for the soldiers (Eaton, 1961). Although women were honored, it was more of a benevolent sexist comment that limited the function of women to that of an altruistic nature. This social attitude stopped women from pursuing careers for themselves (Kessler-Harris, 1981).

Whenever possible, enslaved men and women were put to work in iron furnaces, cotton and wool mills, and other factories during the war. However, Black workers sensed their increased power and started to protest for their rights. They refused to be whipped and struck for wages, and they gradually won more rights in the work force (Flexner & Fitzpatrick, 1996). After the war, however, the people who were freed were rarely hired in factories, and they faced the challenge of finding jobs, homes, and education (Redding, 1950). Redding argued that even when Black people were employed, they lost jobs more rapidly than White people and had to face constant discrimination at work. Black women had an especially hard time, and they could only get jobs that White workers refused to do, such as heavy labor jobs or as janitresses (Redding, 1950).

By 1900, one-fifth of America's 25 million women were in the work force. In some industries such as the garment industry, women even outnumbered men. Despite that, women mostly held unskilled jobs that offered little chance to move up the job ladder. Furthermore, women were denied membership in the labor unions, and they earned just half the wages of non-union men, and one-third that of union men (Young & Young, 1959).

Post-World War I Prosperity and the Great Depression (1900-1930)

American women began to work outside the home in significant and increasing numbers after 1875. The years from 1900 to 1930 were the early decades of a truly mature industrial economy, and a significant amount of women participated in the labor force (Leuchtenburg, 1958). After World War I, advertising campaigns about consumer sales became massive. It was a social trend for women to transition from producers to consumers. The idea of consumption spread and it increased pressure on family income and also shifted the job structure, making more clerical and

white-collar slots available. An increasing number of women slowly entered these types of jobs. Arguably, these positions offered women a clear career identity for the first time (Kessler-Harris, 1981). Despite the increase in office and factory jobs, private domestic employment was the single largest female occupational category in 1900 (Tentler, 1979). Additionally, Tentler indicated that these jobs were largely held by women who could not easily secure higher-paying jobs in the factory or office because of age, race, or marital status.

After the economic affluence of the 1920s, the depression of the 1930s limited employment opportunities, so women were urged to return to their homes (Kessler-Harris, 1981). As a result, women lost their jobs and stayed unemployed at almost double the rate of men (Leuchtenburg, 1954). Married women were especially vulnerable because it was assumed that they could be sustained by their husbands' salaries (Kessler-Harris, 1981). This part of women's working history demonstrates that in social economic crisis, the career identities of women were more vulnerable than those of men.

As industry selectively and slowly started to pull itself together, women were rehired at a fast rate (Kessler-Harris, 1981). Employment, however, was nearly always a sex-segregated experience, and as a result, powerfully reinforced the stereotypical male and female gender roles (Tentler, 1979). For instance, women worked predominantly in the field of service sectors, such as secretaries and teachers, reinforcing that women's social role is caring and nurturing in nature (Kessler-Harris, 1981). In addition to job segregation, women's wages were much lower than men's, often deliberately calculated to be less than living cost. Women's low wages condemned them to be financially dependent on men, and reinforced a self-image of dependence and passivity in the workplace. The social message of the women's wage

reaffirmed the gender stereotype that domestic responsibility was a woman's destiny (Tentler, 1979). Finally, it is worth noting that an important transition to present-day patterns of women's work was beginning to occur by 1930. Female labor force participation increased more rapidly, and this level of participation began to increase significantly after 1930 (Long, 1958).

World War II (1939-1945)

The rigid lines of sex-segregated professions came under attack during World War II. As many men were drafted into the war, women began to enter traditionally masculine jobs, such as lumber mills and auto and aircraft factories (Cleveland, Stockdale, & Murphy, 2000). Despite racial discrimination and long-established color barriers, the pressure for labor was too great, and African American women joined White women in the factories for the first time (Kessler-Harris, 1981). A Fair Employment Practices Commission was established to help alleviate discrimination against Black people in war production (Giele & Stebbing, 2003). However, the war did not alter fundamental social attitudes about female workers. Both men and women still assumed that the men were the family breadwinners and that they had a superior claim to the available work and career identities (Kessler-Harris, 1981). Once the war was over, many women were forced out of their nontraditional jobs and returned to more female-dominated work (Cleveland et al., 2000). Nonetheless, WWII still impacted women's career identities because it gave women the chance to prove that they are just as capable as men. Though relatively short-lived, the war became a symbol of freedom and broadened the possibilities of their career identities (Cherlin & Walters, 1981).

Contemporary Patterns

During the post-war period, women became permanent participants in the workforce (Cleveland et al., 2000). Many social factors caused women's labor force participation to rise sharply, particularly among women in middle and older age groups (Oppenheimer, 1970). These factors included women marrying at a later age, having fewer children, the increasing divorce rate, and women depending less on marriage as a means of economic support (Giele & Stebbins, 2003). In addition, a new feminist movement made active efforts in expanding women's rights and opportunities. This movement began to re-examine employment and family policies to encourage women's career advancement (Liljestrom, Mellstrom, & Svenson, 1978). Women began to organize themselves into groups such as Women Office Workers and Union Wage to fight for equal pay for work, clearer job definitions, and access to promotions (Kessler-Harris, 1981). Furthermore, for many families, the husband's income no longer seemed to sufficiently support the family (Oppenheimer, 1970). As new technology products (e.g., telephones, refrigerators, automobiles) became necessary goods for most families, women were more motivated to contribute financially to the household (Kessler-Harris, 1981). On the threshold of the twenty-first century, a new pattern in the home began to emerge. Women's housework and care-giving responsibilities were reduced as a result of household conveniences, more active participation of husbands in domestic work, and more use of outside services (Giele & Stebbins, 2003). This new freedom women gained allowed them to work more outside of homes and be more dedicated to develop their career identities. Giele and Stebbin noted that as all of these factors contributed to the increased availability of women in the workforce, considerable progress was made. Women's labor force participation in the United States rose from 38 to 57 percent between 1960 and 1990,

and pay equity in hourly earnings steadily improved from 64 to 74 percent between 1979 and 1988 (U.S. Department of Labor, 1989; 1990).

Despite these positive changes, women still faced many forms of oppression at the workplace. For instance, women working full-time continued to earn only about 60 percent of men's wages (Cleveland et al., 2000). Additionally, promotional opportunities were still limited for women, and employers used upcoming marriages and childbirths as excuses to lower their wages or even fire them (Kessler-Harris, 1981). Finally, female workers were separated into social serving occupations that were often dead-end positions that did not offer any promotion opportunities (Kessler-Harris, 1981).

Labor force participation rates and wages of women have been heterogeneous among racial groups. For instance, recent unemployment rates of African American females are roughly twice as high as for White females (Blue, Ferber, & Winkler, 2006). Furthermore, Hispanic women currently have the lowest rate of employment among all racial groups (Blue et al., 2006). A pay gap has also been observed among racial and ethnic groups. Between 1970 and 1990, White women's wages in the United States rose from 58.7 percent of White men's to 71.78 percent (Stebbin, 2001). However, Black and Hispanic women earned only 69 percent and 52 percent, respectively, of White men's annual earnings by 1999 (Stebbin, 2001).

Since the inception of the United States as a nation, women have been persistently participating in the labor force, both in domestic work and in jobs outside of the home. As economic circumstances demanded the participation of females in the labor force, women have had more room to pursue a wide variety of work roles. The social attitude about women workers has evolved slowly along historical, political, and economical events. However, the impact of gender stereotypes, sexism, and

gender discrimination seems to be pervasive and lasting. These factors are explored more closely in the next section.

Factors Impeding Career Development for Women in the United States

Many factors, both positive and negative, have influenced women's choices of getting into the paid labor force. Although throughout history women were seldom encouraged to develop career identities, there were historical events that supported more freedom for women to work. Recognizing that there were many positive factors that inspired women to work, the current study focuses on factors that can inhibit the career development of women. The literature has suggested that three negative factors have created considerable barriers for women's career development: 1) gender stereotypes (Del Boca & Ashmore, 1980), 2) sexism (Glick & Fiske, 1997a; Glick & Fiske, 1997b), and 3) gender discrimination (Joseph, 1983).

Gender Stereotypes

It is hypothesized that gender stereotypes arose to rationalize the distribution of the sexes into social occupational and social roles (Hoffman, & Hurst, 1990). Gender stereotypes have been defined as simplistic generalizations and beliefs about the behaviors, gender attributes, roles, and characteristics of each sex, for both individuals and groups (Del Boca & Ashmore, 1980). Research about gender stereotypes identified two clusters of traits that represent core components of gender-based stereotypes, one associated with men and the other associated with women (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968; Deaux & LaFrance, 1998). Stereotypes about men are represented by a cluster of agentic traits that includes characteristics such as independent, strong, and self-confident, and stereotypes about women are represented by a cluster of communal traits that include characteristics such as emotional, helpful, and kind (Whitley & Kite, 2010). Whitley

and Kite further argued that gender stereotypes define people's ideas about how women and men should behave, and those who violate the assumptions will be viewed negatively. Twenge (2001) examined women's endorsement of gender stereotypes and found that today's women are significantly more likely to report having agentic characteristics compared to women of 20 years ago. However, women's self-endorsement of communal traits has not changed, nor has men's self-endorsement of either agentic or communal traits.

Studies have shown that gender stereotypes about social roles concretely exist in career settings (Miller, Taylor, & Buck, 1991; Heilman, Block, & Martell, 1995; Schein, 1973; Schein, 1975; Schein, 2001). Men are thought to possess achievement-oriented traits, often labeled as "agentic" (Bakan, 1966). Such traits include aggressiveness, forcefulness, independence, and decisiveness (Heilman, 2001). Women are thought to possess social-oriented traits, often labeled as "communal" (Bakan, 1966). Thus, women are characterized as kind, helpful, sympathetic, and concerned about others (Heilman, 2001). Not only are the conceptions of women and men different, but they often are oppositional (Heilman, 2001) and polarized (Bem, 1993). Thus, it is assumed that gender-associated characteristics are exclusive to each other; what is masculine is not feminine and what is feminine is not masculine (Heilman, 2001; Whitley & Kite, 2010). In addition, these stereotyped beliefs have proved resistant to change (Heilman, 2001; Dodge, Gilroy & Fenzel, 1995; Leuptow, Garovich, & Leuptow, 1995), because changing stereotypes challenges one's gender role identity (Gash, 1993). Given the existence of gender stereotypes, they function in career settings to legitimize the inequalities between men and women and enhance men's higher power status (Bruckmüller, Hegarty, & Abele, 2012).

Anker (1998) argued that stereotypes about gender resulted in sex-segregation at the workplace. She found that women are thought to share several characteristics, such as a caring nature and manual dexterity that make them better employees in female-typed occupations. Unfortunately, these occupations almost always put women in lower power statuses. At the same time, they are thought to have certain negative traits (such as deficiencies in math, difficulties supervising others, and less ability to travel) that disqualify them from male-typed high power status occupations. As a result, women are notably under-represented in those fields associated with physical sciences, engineering, and applied mathematics (Gardner, 1998). Occupational segregation is now considered to be largely responsible for the wage differential in the job market, as well as the differences in prestige in what are traditionally considered “men’s jobs” and “women’s jobs” (Reskin & Padavic, 1994).

Eagly and Karau (2002) proposed a role congruity theory and attempted to explain this segregation. They argued that people observe women and men in their social roles, and draw conclusions about the characteristics the sexes have. Because men tend to be observed in high power status occupations and these positions require agentic traits, from this observation, people conclude that men are agentic in nature (Eagly & Karau, 2002). In contrast, women are observed in low power status roles that require communal attributes; therefore, people conclude that women are communal (Eagly & Karau, 2002). We then observe a feedback effect, in which women and men internalize gender stereotypes and shape their behaviors accordingly (Blau, Ferber, & Winkler, 2006). For instance, people may invest less in the education of girls or may expect women to be less committed to their careers, which fulfills these gender stereotypes and further impedes women's career identity development (Blau et al., 2006).

Miller and his colleagues (1991) investigated career related gender stereotypes and found that people commonly endorsed the gender stereotypes that men are the norm in higher prestigious jobs, and women should hold lower status jobs. Participants were asked to imagine details about the "typical college professor" and the "typical elementary school teacher." Participants tended to imagine the typical college professor as male and the typical elementary school teacher as female (Miller, Taylor, & Buck, 1991). Further, participants were asked to explain a made-up gender difference, which is the different rate of doctor visits in a year between males and females. The results supported the notion that, when explaining gender gaps in the behavior of college professors, participants focused on the qualities of women, and assumed that men are the norm. In contrast, when explaining differences between elementary school teachers, participants focused on men, and assumed that women are the norm (Miller et al., 1991). This study, however, had some methodological limitations. The sample of this study was composed of undergraduates from a single college campus (Princeton University), making its generalizability limited. Additionally, the study relied on self-report and was subject to response bias. Despite the limitations, one of the strengths of this study was the randomization design and control of variables.

Finally, when participants were asked to predict a direction if any reduction in the existing gender differences occurs, the majority of the participants predicted changes would occur in female professors and in male teachers, which confirmed again the gender stereotype that men are the norm in college professors, and women are the norm in elementary teachers (Miller et al., 1991). This study provided evidence for the commonly endorsed gender stereotypes about what kind of jobs men and women should hold. Such gender stereotypes are likely to have a negative effect

on women's career development. In this case, for example, it may be harder for women, than men, to pursue a higher status college professor career. We do not know, however, if a person who has the power to make career decisions – e.g., to hire or to tenure – for female professors would endorse more or less gender stereotypes.

Beyond the academic profession, similar gender stereotypes were observed in industrial/organizational career settings (Schein, 1973; Schein, 1975; Schein, 2001). Schein (1973) developed a 92 descriptive terms index to define both the sex role stereotypes and characteristics of successful mid-level managers, which is called the Schein Descriptive Index (SDI). Male and female mid-level managers were recruited as participants, and they were assigned to three different groups. One group was asked to rate if the 92 terms were descriptions of women in general. The second group was asked to rate if the terms described men in general. Finally, the third group was asked to rate if the terms described successful mid-level managers. This study was replicated in both 1975 and 2001 (Schein, 1975; Schein, 2001). The results of 1973 and 1975 showed that both male and female mid-level managers believed that successful mid-level managers were perceived to possess characteristics, attitudes, and temperaments more commonly ascribed to men than to women (Schein, 1973; Schein, 1975). These results suggested that, in the 1970s, gender stereotypes were commonly endorsed by both male and female mid-level managers.

In the 2001 study, Schein interviewed international mid-level managers and both international and domestic management students, in addition to domestic mid-level managers. The results showed that, after about 30 years, female managers changed their attitudes and believed that women and men were as equally likely to possess characteristics necessary for managerial success (Schein, 2001). In the 2001 study, results showed that female management students held similar beliefs and would

be expected to treat men and women equally in selection and promotion. Male managers, however, continued to believe that successful managerial characteristics were more likely to be held by men than by women (Schein, 2001). Male management students viewed management positions in the same way as the male managers (Schein, 2001). In addition, male management students from five different countries (United States, Germany, United Kingdom, China, and Japan) viewed women as much less likely to have leadership abilities, be competitive, be ambitious, be skilled in business matters, have analytical ability, or desire responsibilities (Schein, 2001). These studies provided strong support for the possibility that gender stereotyping in career settings is a global phenomenon, and women around the world have difficulty advancing in power status. It seems that the endorsement of gender stereotypes in women has been changing over the past 30 years, but such change has not been observed in men. Not only do men in higher power status (i.e., male managers) engage in stereotypical thinking, but so do men who have potential to gain higher power status (i.e., male management students). While women expect to be treated equally at workplace, they may experience a discrepancy in reality. Such a discrepancy may have a profound effect on their career identity formation.

The comprehensive replication of Schein's original study design yielded a large amount of data and valuable research findings. At the same time, there are inevitable limitations in these research efforts that need to be acknowledged. For instance, because Schein surveyed males and females holding middle-line manager positions, the results may not be generalizable to the general public. The design of the study also lacked control of variables, and randomization was not part of the research procedure.

In a review article, Heilman (2001) differentiated gender stereotypes into descriptive and prescriptive ones. According to Heilman, descriptive gender stereotypes make assumptions about what women as a group are like, and denote differences in how women and men actually are. Descriptive gender stereotypes obstruct women from advancing in organizations by stating that stereotypical views of what women are like (i.e., kind and warm) do not fit the male sex typing of managerial roles (i.e., assertive and dominant; Heilman, 2001). This phenomenon is explained by the lack of fit model (Heilman, 1983; Heilman, 1995) in that the perceived lack of fit is responsible for many types of biased judgments about women in work settings and influence actions against women (Heilman, 2001). Heilman (2010) identified two forms of biased judgment, and one of them is devaluation of women's work accomplishments. Research has shown that despite producing the identical work product as a man, a woman's work is often regarded as inferior (Heilman, 1983; Heilman 1995; Nieva & Gutek, 1980). Another biased judgment proposed by Heilman (2001) is to attribute a woman's successful performance to something other than her enduring capacity. For example, a woman's success can be attributed to other people in the work setting. Such attribution has detrimental effects on her future prospects, because her skills and ability are neither recognized nor appreciated, and her success is seen as unlikely to be repeated and/or sustained (Heilman, 2001).

Related to descriptive stereotypes, prescriptive gender stereotypes assume what women as a group should look like, set norms about behaviors that are suitable for each gender (Burgess & Borgida, 1999; Eagly, 1987; Terborg, 1977), and disapprove of counter-normative behaviors (Cialdini & Trost, 1998). For instance, when women are perceived to have the attributes that are necessary to effectively

perform male sex-typed jobs, their success is a violation of the norms of gender stereotypes. What these women are perceived to be fits the job requirement, but does not fit the conceptions of what they should look like. This new type of lack of fit is likely to induce disapproval and penalties for these women, and may again obstruct their advancement in careers (Heilman, 2001). For example, female managers exhibiting a masculine leadership style elicit less enthusiasm and satisfaction among employees (e.g., Bartol & Butterfield, 1976; Jago & Vroom, 1982). As Heilman (2001) put it, "Women, quite simply, are not supposed to excel at jobs and tasks that are designated as male in our culture" (p. 667).

Because the behaviors that are prescribed directly relate to the attributes that are positively valued for each gender, there is much overlap between prescriptive and descriptive gender stereotypes. For instance, because the communal traits of women are so positively valued, they are an essential part of what women should be (Heilman, 2001). Gender stereotypes support the notion that women will not perform well in various work settings, which negatively impact women's career development at every step of their career, from the very entry into organizations, to the advancement in organizational hierarchies, and to gaining training resources.

Since gender stereotypes characterize women as lacking the stereotypically male traits associated with high-status jobs, one might suppose that requiring some female traits, or feminizing the job description, would allow women to be seen as a better fit for managerial positions. Rudman and Glick (2001) examined this idea by asking participants to make hiring decisions for a masculine or "feminized" managerial job. A feminized job description in this study was a position that required social skills in addition to agentic skills (Rudman & Glick, 2001). In their study, male or female applicants were presented as either agentic or androgynous (i.e.,

possessing both agentic and communal traits). They found that an agentic female applicant was rated as less socially skilled and likeable than an identically presented man. When the job was feminized, the agentic woman was actually further disadvantaged, and was viewed as less hireable than an equally agentic man (Rudman & Glick, 2001). The authors argued that prescriptive gender stereotypes were at play to legitimize this discrimination. By contrast, androgynous female applicants were not discriminated against, regardless of job description (Rudman & Glick, 2001). It appears that managerial jobs require women to exhibit only certain types of agentic traits (competence) but not the other (dominance). This is, however, a formidable task for women in reality. Provided women also display communality, they must appear competitive and independent, but not at the expense of others (Rudman & Glick, 2001). Demonstrated in this study, women's career development process is more difficult, unstable, and complicated in comparison to that of their male counterparts.

Pratto and Pitpitan (2008) examined both racial and gender stereotype contents and found that gender stereotypes have the function of de-legitimizing power holding by women and legitimizing particular forms of power that men have. For instance, women are stereotyped as loving to shop but not work; and seeking wealthy husbands for financial support. Such stereotypes of women imply that women do not deserve access to resources (Pratto & Pitpitan, 2008). As mentioned earlier, power is about having access and control over resources, so gender stereotypes limit the power of women. Another gender stereotype states that women are naturally interested in children, and similarly that women are warm and caring. These types of stereotypes normalize domestic obligations as part of women's characters thus leaving women with no choice but to perform the obligations (Pratto & Pitpitan, 2008). On the other hand, gender stereotypes expect men to be agentic and not communal. Such

stereotypes not only make it seem appropriate for men to have authority positions, but also exempt men from the obligations of taking care of other people (Pratto & Pitpitan, 2008). Although this study did not examine gender and power specifically in career settings, it nonetheless provides evidence that gender stereotypes de-legitimize women from obtaining particular forms of power, such as control of resources, and lock them into low power status roles, such as taking care of children (Pratto & Pitpitan, 2008).

Bruckmüller and his colleagues (2012) examined the functions of gender stereotypes within the context of career settings. They found that gender stereotypes have the function of maintaining men as the norm in workplaces (Bruckmüller, Hegarty, & Abele, 2012). Participants were asked to read a text about gender differences in managerial leadership styles. In one condition, this text was worded so the men were the linguistic norm, and women were compared with men. In the other condition, women were the linguistic norm. After reading this text, participants rated the extent to which five masculine and five feminine traits applied to women and men in general. The findings evidenced that when men were framed to be the linguistic norm, participants endorsed more gender stereotypes compared with when women were the linguistic norm, and believed more strongly that women lacked the attributes to be effective leaders. The results of this study suggested that most people would habitually frame men as the norm in their everyday language, and the way we habitually frame group differences appears to be contributing to the acceptance of inequalities as legitimate (Bruckmüller, Hegarty, & Abele, 2012). As this study demonstrated, because of the existence of gender stereotypes, women may face extra barriers in becoming a leader and accessing higher power status in career settings. When generalizing the results to the American population, however, it is important to

keep in mind that this study was done in Germany, and participants were German university students. Another methodological factor to be taken into account includes that the study relied on voluntary participation of students by approaching them on campus and asking them to read a text. This method raises the concern that students who agreed to participate may have responded differently than the ones who refused to participate.

In a similar but now dated study, Goldberg (1968) attempted to examine stereotypes about women. In this study, participants were presented with the same writing pieces, but were told that the author was either a male or a female. The results showed that male authors were rated significantly more favorably than female authors. His study was repetitively cited as evidence of gender bias in evaluations. Swim, Borgida, Maruyama, & Myers (1989) reviewed studies that were paradigmatically similar to the experiment conducted by Goldberg in 1968. After a thorough quantitative meta-analysis examining the differences between average ratings of men and women across studies, Swim and colleagues (1989) found that the average difference between ratings of men and women was negligible. There was some indication, however, that women were rated less favorably than men when less information was presented. Swim and colleagues (1989) proposed that participants may have disregarded global gender stereotypes when individuating information was presented (Swim et al., 1989). Still, this is evidence that global gender stereotypes exist. This study also demonstrated that bias was greater when the stimulus material was a résumé or application. The authors suggested that career settings may be a unique context to study gender stereotypes (Swim et al., 1989). Although the difference is rather small, this is an important piece of information, because review of a résumés and applications is typically the beginning process of employment;

therefore, if this aspect of the process is gender biased, this could point to a widespread detrimental effect on women's career development.

To measure gender stereotypes in the present study, we used the Bem Sex Role Inventory (BSRI) developed by Sandra Bem in 1975. The BSRI is a measure of masculinity-femininity and gender roles. Bem's goal of the BSRI was to examine psychological androgyny and provide empirical evidence to show the advantage of a shared masculine and feminine personality versus a sex-typed categorization (Bem, 1975). The original test was formatted with 60 different personality traits, and normative data was found from a sample of over one thousand Stanford University undergraduates. The current study uses the short form of the BSRI, which consists of 30 items, because it allows for increased internal consistency (Bem, 1975).

Gender stereotypes exist widely and have the function of maintaining existing power status of men and women (Del Boca & Ashmore, 1980). The existing research suggests that because gender stereotypes influence evaluations of women in work settings, women who are equally competent to men do not gain the same opportunities for employment, promotion, and training resources, and do not develop their careers to the same levels as men do (Miller et al., 2001; Heilman, 2001; Schein, 1973; Schein, 1975; Schein, 2001). Methodological concerns, however, are common in the existing research, including use of college students as convenience samples, lack of randomization, and relying on vignettes and self-report measures. Finally, the existing research does not tell us if possession of career-related power increases or decreases the endorsement of gender stereotypes; which is a central research question of the current study.

Sexism

The definitions of sexism have emphasized the two components of a) hostility toward women; and b) endorsement of traditional gender roles (Glick & Fiske, 1997a). Glick and Fiske defined the endorsement of traditional gender roles as limiting women's conduct to fit societal prescriptions and restricting women to roles accorded less power status than those of men. The authors further described that traditional attitudes about women's roles are closely linked with hostility toward women. Only recent research proposed that benevolent sexism should be recognized as distinct from hostile sexism.

Hostile sexism is an adversarial view of gender relations in which women are perceived to seek control of men (Glick & Fiske, 1997b). Benevolent sexism, on the other hand, tends to elicit behaviors typically categorized as pro-social (such as helping) or intimacy seeking (such as self-disclosure; Glick & Fiske, 1996).

Benevolent sexism was defined by Glick and Fiske (1996) as a set of interrelated attitudes toward women that are sexist in terms of viewing women stereotypically and in restricted roles but that are subjectively positive feeling tones for the perceiver. The authors, however, do not consider benevolent sexism to be a good thing. Despite the possible positive feelings it may indicate for the perceiver, the underpinnings of benevolent sexism lie in traditional stereotyping and masculine dominance (i.e., the man as the provider and woman as his dependent), and its consequences are often damaging. Moreover, benevolent sexism is not necessarily experienced as benevolent by the recipient (Glick & Fiske, 1996).

Because the multidimensional construct encompasses two sets of sexist attitudes (hostile and benevolent), Glick and Fiske (1996) suggested that the nature of sexism is ambivalent as these two constructs subjectively entail opposite evaluative

feeling tones toward women. In their study, they surveyed over 2000 participants using the Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996), a scale that assesses both hostile and benevolent sexism. The results not only confirmed the existence of both benevolent and hostile sexism, but also positive correlations were repetitively found between these two forms of sexism scales, suggesting that the two forms of sexism are related aspects of sexist ideology (Glick & Fiske, 1996).

In a study conducted by Heilman and her colleagues (2004) that specifically addressed a hostile sexism example, a total of 242 participants were surveyed regarding their reactions to a woman's success in a male gender-typed job (i.e., an Assistant Vice President of sales for an aircraft company). Participants were asked to rate how competent and likeable they thought the woman was. Results strongly indicated that when women were acknowledged to have been successful, they were less liked and more personally denigrated than equivalently successful men. These negative reactions, however, occurred only when the success was in an arena that was traditionally male in character (such as being a leader in an aircraft company). These results were taken to support the idea that gender stereotypes can prompt biases in evaluative judgments of women even when these women have proved themselves to be successful and have demonstrated their competence (Heilman, Wallen, Fuchs, & Tamkins, 2004). In this study, sex of the stimulus person (male or female) and clarity of performance (unclear or clearly successful) outcome were controlled variables, allowing better comparison between conditions. Subjects were recruited from introductory psychology courses, which raises the concern of its representation of the general public. However, one of the strengths of the study was that participants were randomly assigned to each of the two performance outcome conditions, which helped to minimize the risk of deception via confounding.

Compared with hostile sexism, benevolent sexism may be subjectively positive for the perceiver. However, Glick and Fiske (1996) emphasized that benevolent sexism is not considered a positive thing, because it reinforces traditional stereotyping and masculine dominance. Hostile sexism is associated with negative affect toward and stereotyping of nontraditional women, whereas benevolent sexism is associated with positive affect toward and stereotyping of traditional women, and together, they both serve the function of limiting women to low power status roles (Glick & Fiske, 1997a). To be aware of the existence of both forms of sexism is important for this current study, because both of them serve to justify and maintain patriarchy and traditional gender roles, and may have significant impacts on women's career development. More importantly, because benevolent sexism is more acceptable in social settings, it may be more prevalent than hostile sexism (Swim & Cohen, 1997).

Cuddy, Fiske and Glick (2004) addressed an example of benevolent sexism and its potential harm to the career development of women. The study used a vignette and Discrimination Proxy Items that were modified and used in the current study. In their study, participants read a vignette that described varied aspects of a consultant worker. Different conditions of the experiment included the gender of the consultant and stating if the consultant had children. Then participants rated the consultant on competency-related as well as warmth-related traits. In addition, participants were asked how likely, as a client, they would hire, suggest promotion, and suggest continued training for this consultant. The results showed that women lost perceived competence and gained perceived warmth when they became mothers. More importantly, participants expressed less interest in hiring, promoting, and educating the working mother compared to the childless woman. It was concluded that gaining

perceived warmth does not help women to develop their careers; instead, losing perceived competence hinders their growth as professionals. Male workers, on the other hand, do not lose perceived competence when they become fathers; instead, they are perceived as both competent and warm. The authors suggested that women are more vulnerable than men in issues related to parenthood (Cuddy, Fiske, & Glick, 2004). However, it is unknown at this point whether high power status people are more likely to force women into traditional roles than those who have lower power status. Cuddy and colleagues (2004) put participants into the customer role, and observed their perceptions of male and female workers. They did not address whether high power status people, such as managers and employers, were more likely to force women into traditional roles, such as being a mother, than those who had lower power status. The latter is a research question in the current study.

Since the research of Cuddy and colleagues (2004) is highly relevant to the current study, a more thorough critique of their methodology and use of scales is offered as follows, in addition to discussing the findings they suggested. First of all, a vignette technique was used in the experiment of Cuddy and colleagues (2004), and this methodology has both strengths and weaknesses. It was argued that vignettes could allow actions to be explored in a specific context, and would provide a less threatening way of exploring sensitive topics. However, there is wide and unresolved debate in the social sciences regarding the difference between the real world and the vignette world (Hughes & Huby, 2012). Cuddy and colleagues (2004) used vignettes with the assumption that there was linkage between what participants believed they might do and their actual actions. Such associations, however, may not always be promised as the empirical evidence so far is mixed (Rahman, 1996; Carson, 1996).

Another methodology concern is that Cuddy and colleagues (2004) used college students as their research subjects. This method has several advantages, including convenience in accessing the sample, and the relatively lower cost (Shaughnessey, Zechmeister, & Zechmeister, 2012). However, the biggest disadvantage of using college undergraduates in psychological research is that they are a very specific group of people and may not be representative of the general population. When the diversity of participants does not match the diversity of the overall population, it is very difficult to know whether results are universal (Shaughnessey et al., 2012).

Cuddy and colleagues (2004) used three discrimination proxy items to evaluate participants' discriminatory behaviors including their decisions to hire, promote, or train the person described in the vignette. Although Cuddy and colleagues provided reliability information ($\alpha = .83$), the development and validity information of the scale was unclear. Further, this scale intended to measure behaviors, but instead of directly observing behaviors, this scale relied on self-reporting, which could be easily influenced by participants' ability and willingness to answer honestly and accurately (Wilcox, 2005).

Although research demonstrating that endorsement of benevolent sexism is associated with a range of negative attitudes towards women, benevolent sexism tends not to be recognized as a form of sexism. For example, Barreto and Ellemers (2005) closely examined the contribution of benevolent sexism to the maintenance of gender inequality. Participants read a short description that was presented as a summarized result of a prior study concerning opinions of women. Half of the participants read hostile sexist opinions such as "women seek to gain power by getting control over men," and the other half read benevolent ones such as "women should be cherished by

men." Then participants indicated to what extent they liked the people with these views, and to what extent they perceive these people as prejudiced against women. The authors find that when people express benevolent sexism, they are less likely to be recognized as holding sexist views, and they are more likeable than the ones expressing hostile sexism. The results showed that people often fail to recognize benevolent sexism as a form of prejudice. Barreto and Ellemers (2005) proposed that benevolent sexists do not match the mental prototype of sexist perpetrators, and therefore it hinders the characterization of the source as sexist. Because benevolent sexism is under-recognized, it often remains unchallenged (Barreto & Ellemers, 2005).

As demonstrated, hostile and benevolent sexism often coexist, but researchers are concerned whether women are aware of this coexistence. Kilianski and Rudman (1998) examined if women approved of benevolent sexism while disapproving of hostile sexism, a concept they called equivocal egalitarianism. In their study, participants rated profiles of a hostile sexist, a benevolent sexist, and a non-sexist. Results showed that, the benevolent sexist was mildly more favored than the non-sexist, and the hostile sexist was strongly not favored as compared to the non-sexist. Overall, participants approved of the benevolent sexist while disapproving of the hostile sexist, and considered it unlikely that the hostile and benevolent sexist profiles described the same person. These data suggest that women may underestimate the coexistence of hostile and benevolent sexism in men. This lack of awareness may help sexist beliefs to be resistant to elimination. The authors argued that these findings have important implications for women in work settings. While benevolent sexism may help women to look "pure" and "charitable," high-status positions in the workplace often require "tough-mindedness" (Kilianski & Radman, 1998). Thus, it

stands to reason that benevolent sexist beliefs play a role in excluding women from such positions and resulting in the "glass ceiling" effect (Kilianski & Radman, 1998).

Fernández and colleagues (2006) conducted a study that explored differences between men and women in the endorsement of sexism. They found that male college students showed more hostile sexist attitudes toward women than do female college students. However, in both students and general populations, men and women endorse similar benevolent sexist attitudes (Fernández et al., 2006; Glick et al., 2000).

Fernández and his colleagues also found that one's field of study was related to the level of adherence to sexist attitudes. Both men and women who studied technical fields, such as physical sciences, engineering, and applied mathematics, showed the most sexist attitudes (both hostile and benevolent). This finding in particular provides highly relevant information for the present study. More specifically, according to Fernández and his colleagues, technical fields are the ones most associated with masculinity, status, and power, and students who major in these fields are at the entry level to gain power status. It is interesting to see that when people perceive themselves as having access to high power status in the future, they endorse more sexist beliefs about women. It is also surprising to know that it is not only men, but that women had such endorsements as well. The current study seeks to address if perceived higher power status affects the endorsement of sexist beliefs toward women.

Although the acceptance of hostile and benevolent sexism seems to be widespread and rigid, O'Neil and colleagues found that it is indeed possible to change women's sex role attitudes (O'Neil, Ohlde, Barke, Gelwick & Garfield, 1980). They assessed the effects of a 4-week workshop designed to enhance the awareness of college women about sex roles and career factors, as well as to expand their sex role

attitudes and self-concepts. They found that treatment participants spent more time thinking about their career planning and reported more traditional male occupations (such as investigative and enterprising careers) than control participants. The workshop appeared to change their attitudes about the appropriateness of two stereotypic masculine career areas (investigative and enterprising). This study provides evidence that reducing sexist beliefs supports women to better develop their career identities.

Gender attitudes and belief systems are multifaceted and undoubtedly contain unconscious as well as conscious elements (Ashmore, Del Boca, & Bilder, 1995). Increasingly, more studies used methods such as implicit association tests to more accurately measure gender attitudes. An implicit association test (IAT, Greenwald, McGhee, Schwartz, 1998) measures the differential association of two target concepts with an attribute. The two concepts appear in a two-choice task (e.g., flower vs. insect names), and the attribute appears in a second task (e.g., pleasant vs. unpleasant words for an evaluation attribute). When instructions oblige highly associated categories (e.g., flower + pleasant) to share a response key, performance is faster than when less associated categories (e.g. insect + pleasant) share a key. This performance difference implicitly measures the differential association of the two concepts with the attribute. Findings consistently have confirmed the IAT's usefulness in assessing differences in evaluative association between pairs of semantic or social categories (Greenwald et al., 1998). Findings also have suggested that the IAT may resist self-presentational forces that can mask personally or socially undesirable evaluative associations, such as ethnic and racial attitude (Greenwald et al., 1998). Thus, Greenwald and colleagues (1998) argued that the IAT method offers the further advantage of being adaptable to assess a wide variety of associations, including those that comprise stereotypes and

self concept. There are, however, still limitations to the method. For example, the balanced identity IAT measures only give group results rather than individual results. Therefore, it has its limitations when an analysis requires individual pinpoint data to analyze, for instance, how balanced one's identity is relative to others' (Greenwald, Banaji, Rudman, Farnham, Nosek & Mellott, 2002). Another limitation of the IAT is its high costs and its demands for research funding. According to a quote provided by www.projectimplicit.net, a web-based service that provides the IAT for researchers and organizations, the IAT gender and career test would cost \$1,500-\$3,000.

Rudman and Killianski (2000) are among the researchers that recognized the lack of scientific attention to implicit gender attitudes (unconscious attribution of particular qualities to a member of a certain gender), and studied attitudes toward female authority and their relationship to gender beliefs using implicit and explicit measures of each. The study presumed that labor divisions within the workplace signified different status expectancies for men and women, and male dominance in powerful social roles has produced an implicit male leader prototype (Rudman & Killianski, 2000). They found that implicit attitudes covaried with implicit stereotypical gender authority beliefs. At the same time, explicit attitudes covaried with explicit gender authority beliefs and hostile sexism. It is worth noting that although women showed less explicit prejudice than did men, their implicit attitudes were similarly negative (Rudman & Killianski, 2000). The findings suggested that gender stereotypes and sexist attitudes are correlated with each other at the implicit level in addition to the explicit level. They also suggested that sexist attitude and beliefs stop women from entering into power authority roles.

In addition to Rudman and Killianski's (2000) study, Serenko and Turel (2016) also used the IAT and a survey to examine the relationship between implicit

gender identity and university students' decisions to major in information technology (IT) and join the IT profession. Their findings revealed that gender identity played different roles between men and women in its influence on the IT major and career choices. Implicit gender identity was a strong predictor of the choice of an IT major and career choices for women, but not for men. This study showed that gender identity could be contributing to some women's decisions not to enter the IT field.

Besides investigating the relationship between implicit attitudes and career choices, some researchers also explored the relationship between implicit attitudes and discriminatory behaviors. McConnell and Leibold (2000), for example, found meaningful variability on the IAT related to intergroup discrimination. In their study, White undergraduates interacted separately with White and Black experimenters, and their behavior during these social interactions was assessed. The participants also completed a race IAT. As predicted, those who revealed stronger negative attitudes toward Blacks (vs. Whites) on the IAT had more negative social interactions with a Black (vs. a White) experimenter and reported relatively more negative Black prejudices on explicit measures. Although this study looked at racial attitudes and behaviors instead of gender attitudes and behaviors, it is still relevant to the present study in several ways. First, based on the results, McConnell and Leibold's (2000) study suggested that researchers can be confident that attitudes assessed by the IAT do relate to intergroup behavior. Second, the ability of the IAT to predict several specific biased social behaviors is consistent with the claim that implicit measures of attitudes are especially predictive of behavior leakage (Dovidio et al., 1997).

To summarize, existing literature suggests that sexism is a complex and multidimensional concept, and its covert and overt forms (Glick & Fiske, 1996), as well as implicit and explicit facets (Rudman & Kilianski, 2000) must all be

recognized. Research also suggests that these forms of sexism inevitably impede women's career development (Cuddy et al., 2004, Rudman & Kilianski, 2000; Heilman et al., 2004). Some common limitations in the existing literature include heavy use of college students as the source of research subjects, and the use of the vignette technique. What is not clear at this point is if the power status of a given person influences the person's sexist attitudes.

Gender Discrimination

Related to gender stereotypes, gender discrimination represents the behavioral application of simplistic generalizations and beliefs about each sex (Joseph, 1983). Discrimination in the workplace (as a broader concept) refers to the practice, rules, and policies of formal organizations that result in different outcomes for members of different groups (Benokraitis & Feagin, 1995). Thus, gender discrimination in the workplace appears to involve using gender as a screening device for employment decision making and other career-related resources. That is, opportunities might be denied based solely on the gender of the candidate (Joseph, 1983).

In the gender stereotypes section, we mentioned the Heilman's (1983) lack of fit model, which can be useful in discussing and understanding gender discrimination. The lack of fit model proposes that perceptions of applicants' attributes are compared with perceptions of job requirements. When the two types of perceptions are incongruent, then an assessment of poor fit is made. Davison and Burke (2000) performed a meta-analysis of the social psychological stereotyping literature and provided evidence for this model, as well as the existence of gender discrimination in the workplace. This meta-analytical study tested if the salience of applicant sex, job sex-type, sex of rater, and amount of job-relevant information of applicants would affect discrimination against female and male applicants. Some examples of female

sex-typed jobs are nurses, secretaries, and librarians, and some male sex-typed jobs include engineers and businessmen. They found that participants discriminated against female and male applicants when considered for an opposite-sex type of job. They also found that women were more vulnerable to discrimination when there was less job-relevant information about them. This study provided strong evidence that women's access to certain jobs can be denied solely because of their sex. In addition, it seems that men are assumed to be candidates in workplaces, but women are required to provide more proof to gain the same level of consideration.

Though now dated, Snizek and Neil (1992) concluded that the existing literature suggests that intentional gender discrimination in the workplace is often associated with the desire to protect male privileges. Snizek and Neil suggested that in explaining the unequal outcomes, one should examine the dominant group's stake in maintaining them. As long as a dominant group wants to subordinate others and is able to do so, the unequal outcome will not be substantially altered (Reskin, 1988). Gender discrimination and gender stereotypes are closely related, because gender discrimination is translated from gender stereotypes which emphasized a women's role in the home, as well as innate differences in her abilities when compared to men (Snizek & Neil, 1992). Snizek and Neil examined the processes underlying gender discrimination in a large Australian government research organization and differentiated between two different forms of discrimination in their study: promotional and day-to-day interaction.

Promotional discrimination concerned how much certain factors had created difficulties for them with respect to promotion. The day-to-day discrimination concerned the interactions women had with colleagues at their workplace on a daily basis- for example, if colleagues used sexist language. It is recognized that day-to-day

discrimination has a significant impact on women's work experience and professional identity development. In Snizek and Neil's (1992) study, 41 percent of women surveyed stated that they had regularly experienced promotional or day-to-day discrimination. The results also showed that work section and salary range appear to have the greatest impact on promotional discrimination. Specifically, women workers in career streams with very wide or broad salary ranges are significantly more likely to experience promotional discrimination, as compared to women in non-competitive careers with narrow salary ranges (Snizek & Neil, 1992). This result suggested that when women pose little or no threat to men, they perceive minimal discrimination; when women occupy jobs and job ladders where power and money are at stake, they often find themselves the targets of promotional discrimination by men (Snizek & Neil, 1992). It is essential to remember that this study was conducted in Australia using Australian people as research subjects. Although this study still may provide important insights and research aspirations, when making inferences to the American population, this research has its limits.

These findings suggested that the type of work condition impacts the probability that women will encounter discriminatory behaviors from men, and consequently may have implications for the current study. Specifically, people with a high power status may endorse different amounts of discriminatory behavior toward women if they perceive women as a threat to them. In the workplace, it appears to involve using gender as a screening device for employment decision making and allocating other career-related resources.

There is abundant evidence to confirm the existence of gender discrimination. Blau and Ferber (1992) report that 34% of the gender pay gap in the case of college graduates and 40% for those with a high school education or less is not explained by

human capital factors or job location. One popular explanation about the wage gap is "compensating differentials," whereby men are paid for dirty and more dangerous work and women are paid less because they work in pleasant, safe, and less demanding jobs (Giele & Stebinns, 2003). Jacobs and Steinberg (1995) found no evidence that this is the case. Women in certain jobs also experience unpleasant conditions and are not paid more, and men doing manual labor and dirty jobs are often paid less. The authors concluded that the wage gap between women and men cannot be explained by rational supply-demand logic, but it points to political, cultural, and institutional forces that create inequality at the workplace. Maas and Torres-González (2011) confirmed that women self-select into jobs with more objective evaluation methods to avoid gender discrimination. It explains why women are over-represented in jobs with objective forms of evaluation, such as piece-rate payments. The authors emphasized that gender discrimination continues to be a problem in these organizations.

Bobbitt-Zeher (2011) explored how gender stereotyping combines with institutional policies across workplace settings to contribute to gender discrimination. The author conducted a qualitative study, interviewing 219 women and creating a discrimination narrative that summarized the "who, what when, where, why, and how" of the discrimination based on the documents available in each case file. Further, the author used a standardized coding device to systematically record information on contexts and dynamics involved in each case. The author found that the vast majority of narratives involved being pushed out or fired. Substantial percentages of narratives involved sexual harassment, unequal material conditions, and unequal working conditions. The results showed that when a particular woman violated gender assumptions, the use of discrimination occurred primarily in sex-segregated

workplaces. Women's experiences with discrimination tend to result largely from unequal application and enforcement of policies.

Because gender discrimination is a behavioral application of gender stereotypes, it is not surprising that researcher Bobbitt-Zeher (2011) pointed out that gender stereotyping is one of the contributing factors to gender discrimination. Bobbitt-Zeher (2011) argued that in addition to gender stereotyping, organizational factors, such as gender composition of workplace and organizational policies, also combine to result in discriminatory actions. To illustrate the gender composition of workplace factor, one may consider a male-dominated work setting. In this setting, men may view women not only as outsiders, but also as invaders. It may make the gender of women as more salient as targets to attack. Women may be marginalized or ostracized by being asked to comply with gender-stereotyping-consistent expectations or by being discriminated against based on their gender (Bobbitt-Zeher, 2011). The methodology design in this study was a qualitative one. Bobbitt-Zeher studied 219 narratives and summarized them into “who, what, when, why, and how” of the discrimination based on the documents available in each case file. The strength of qualitative research is its ability to provide complex textual descriptions of how people experience a given research issue. It provides information about contradictory behaviors, beliefs, opinions, emotions, and relationships of individuals. Some argue that the disadvantages of qualitative research include difficulties in replicability and unavoidable researcher bias (Hennink, Hutter, & Bailey, 2010).

As additional evidence, Snizek and Neil (1992) have shown that women experience more discrimination in work settings that have high proportions of male workers compared to the settings that have high proportions of female workers. Yet in female-dominated settings, expressions of gender stereotyping also occur. Bobbitt-

Zeher (2011) explained this phenomenon by referring to the general negative connotation of stereotypes about women; while employers may value women's assumed traits like nurturance in some contexts, the stereotypes in these data generally suggest that women are inferior workers. Therefore, given the broad beliefs in gender appropriateness, a woman who fails to do gender properly in any setting may be subject to discriminatory sanctions. It is not clear at this point how power status impact gender discrimination in workplaces.

In addition to hiring decisions, promotion decisions are another observable discriminatory behavior, and were studied by Lyness and Judiesch (1999) in an effort to examine gender bias in promotion decisions and look for possible explanations of women's underrepresentation in management. More specifically, Lyness and Judiesch studied financial services managers through analysis of archival information on human capital variables and personnel moves over a 3-year period. They found that female managers did receive more management promotions than their male counterparts. However, they stressed that women receive more promotions because promotions are more likely in lower-paid occupations where women predominate. Their results showed that women in higher level positions received fewer promotions than women in lower levels. So when the level of promotions was controlled, women no longer appeared to receive more promotions. Moreover, the author also found that women were less likely than men to obtain their positions due to external hiring. Rather, it was more likely for women to be hired at entry-level, and later be promoted to managers. There is evidence to support that organizations increasingly hire people directly into management positions, instead of promoting existing employees (Baker, Gibbs, & Holmstrom, 1994; Schwan & Soeters, 1994). Lyness and Judiesch (1999)

argued that this growing pattern could reduce women's ability to advance above entry-level management even in the absence of gender bias in promotion decisions.

In conclusion, gender discrimination seemed to be a significant barrier for working women, and in studying women's career development, it cannot be ignored. The impact of power status on gender discrimination, however, remains largely unknown.

So far, we have examined the concepts of gender stereotypes, sexism, and gender discrimination separately. It is also clear that gender stereotypes, sexism, and gender discrimination have an important impact on the career identity formation and development of women. The piece that is missing at this point is whether holding a high power status would influence one's endorsement of gender stereotypes, sexist attitudes, and gender discrimination behaviors. This study examines the impact of power status on these three variables, and consequently power status is explored in the next section.

Power Status

In many careers, men commonly represent a large percentage of individuals in management level positions (Messerschmidt, 1986), which allows them to control valuable career resources such as employment decision making, promoting, and training opportunities (Cuddy, Fiske, & Glick, 2004). These resources are crucial for one's career identity formation and development. Since women have less access and control over these resources (Ragins & Sundstrom, 1989), women may be more disadvantaged than men in developing their careers and professional identities (Kelly & Marin, 1998). There is evidence to support that higher power status leads to more discriminatory behaviors (Sachdev & Bourhis, 1985). For instance, people allocate more resources for individuals within the group to which they belong and limit

resources for individuals in out-groups (Sachdev & Bourhis, 1985). Power status, in career settings, refers to the control of valuable career resources such as employment, promotion, and training (Conway, Mount, & Pizzamiglio, 1996). So far, we know very little about power status in career settings and the impact on individuals' formation of gender stereotypes, sexist attitudes, and gender discriminatory behaviors.

As noted, power status refers to the concept of one's ability to control and determine the allocation of valuable resources (e.g., money, class credits) for in-groups and out-groups (Sachdev & Bourhis, 1985). In career settings, management level positions that allowed one to decide who would be employed, promoted, and received training resources ran parallel with the concept of power status. Such career resources are crucial for one to develop a professional identity. Despite the importance of these resources, women, in comparison to men, have been occupying proportionately fewer positions of power in organizations (Betz, 2008; Whitley & Kite, 2010).

Some of the literature has shown that, in many careers, men still predominantly represent a large percentage of the management level positions and control most career resources (Fitzpatrick & Rappaport, 2011; Gutek, 2001; Messerschmidt, 1986; Syverson, 2003; Whitley & Kite, 2010). For instance, in the justice and law field, judges at both the state and federal levels are predominantly male and only 6% of equity partners at the 200 largest law firms are women (Fitzpatrick & Rappaport, 2011). Additionally, in the financial industry, fewer than 20% of finance industry directors and executives are women (Fitzpatrick & Rappaport, 2011). Furthermore, for the past decade, while women possess 60% of bachelor's degrees and make up nearly 50% of the workforce, they hold only 14% of senior executive positions at Fortune 500 companies (Gutek, 2001). Finally, only 15%

of senior managers and fewer than 3% of CEOs of Fortune 500 companies are women (Dworkin, Maurer, & Schipani, 2012).

In addition to being clustered in low power status positions, women may not advance as far or as fast as their male counterparts when promoted in the organizational hierarchy (Stewart & Gudykunst, 1982). Though this study is dated, it still provides us with information related to the promotional experiences of women in the workplace. In their study, Stewart and Gudykunst examined perceptions of the promotion process for males and females within a large organization. They used a self-report research design and controlled for the variances of experience and knowledge. For male workers, the number of promotions was positively correlated with experience and ability. A similar correlation, however, did not occur for females. Additionally, the results showed that female employees occupied significantly lower positions in the organizational hierarchy.

In an attempt to explain women's lower power status, Pyke (1996) presented the view that deeply held and typically unconscious beliefs about men's and women's essential natures shape how gender is accomplished in everyday interactions, or interpersonal power. Interpersonal power is combined with career-related power, such as a White man in a managerial role; one could be especially powerful in defining the culturally appropriate ways of producing gender. Because those beliefs are molded by existing macro-structural power relations, structures of inequality enhance, legitimize, and mystify the power of privileged men relative to lower-status men and women in general (Pyke, 1996). The construction of femininity, for example, can undermine women's interpersonal and career power- for example, in producing herself as female, she should not push her opinion or insist on having her way. Thus, the production of

gender often constrains women's exercise of power while motivating that of men, making those power relations inherently asymmetrical (Pyke, 1996).

Because women have limited access to higher power status, they may have limited control over valuable career development resources (Ragins & Sundstrom, 1989). In turn, it may be more of a challenge for women to develop their careers, as compared to men (Kelly & Marin, 1998). This disadvantage may be explained by the Social Identity Theory developed by Festinger (1954). This theory states that people identify themselves within a social context, develop a concept of in- and out-group, and strive to achieve a satisfactory image of him- or herself by seeking favorable social comparisons (Tajfel, 1981).

Furthermore, there is evidence to support that most superiors, regardless of their race and sex, tend to fill power positions they oversee with similar others (Elliott & Smith, 2004). Findings also show that, because there are more White men at higher levels of workplace power than members of other groups, White men have greater opportunity to exercise this self-similar preference and, in the process, reproduce their advantages over successive generations of employees. In addition, relative to White men, gender racial minorities encounter increasing inequality at high levels of power (Elliott & Smith, 2004).

There is also evidence to support that having higher power status will lead people to display more discriminatory behaviors, for instance, allocating more resources for individuals within the group they belong to and limiting resources for individuals for out-groups (Sachdev & Bourhis, 1985). In their study, Sachdev and Bourhis tested the effects of power status on intergroup behaviors. Participants were categorized into groups of different levels of power, and they were asked to distribute resources to in-group and out-group members other than themselves. The results of

the study showed that dominant group members (who have more power to decide the distribution of resources) were significantly more discriminatory than less powerful group members (Sachdev & Bourhis, 1985). Although this study was not specifically related to career settings, this finding is relevant to this current study because a strong positive relationship between power and discrimination was evidenced.

The work of Sachdev and Bourhis (1985), however, presents some limitations. First, their study was conducted in Canada and used introductory psychology students who had lived in Southern Ontario for most of their lives as their sample source. The applicability of the results to the general United States population remains unknown. In addition, as mentioned above, men, in contrast to women, are the dominant group in career settings. It is unknown if men would endorse more gender discrimination behaviors if they held higher or lower power status positions. Sachdev and Bourhis did not make such comparisons. Finally, little is known about the impact of power status on individuals' formations of gender stereotypes and sexist attitudes.

To summarize what was discussed regarding power status, women are severely underrepresented at higher power status positions in career settings (Messerschmidt, 1986). Because power means having control over one's resources and development, women are more disadvantaged in developing their careers (Kelly & Marin, 1998). Such a powerful impact on women makes power status an important construct to be studied in order to better understand women's career development. Past research findings suggest that having more power leads to more discriminatory behaviors (Sachdev & Bourhis, 1985). Primarily inspired by Sachdev and Bourhis' (1985) work, the present study observes the changes of gender stereotypes, sexism, and gender discrimination endorsement while examining levels of power status.

Purpose of the Study

A thorough historical examination of American women's career development and identity reveals that women have always been working and contributing to the work force; however, they also have faced various barriers in developing their careers (Lener, 1977; Miller, 2006). Gender stereotypes, sexism, and gender discrimination are three of the many barriers examined in the present study.

Gender stereotypes, defined as simplistic generalizations and beliefs about the behaviors, gender attributes, roles and characteristics of each sex, are a set of widely held beliefs and could powerfully and negatively influence evaluations of women at work (Del Boca & Ashmore, 1980). Gender stereotypes have the function of maintaining existing power status of men and women (Heilman, 2001; Schein, 1973; Schein, 1975; Schein, 2001), and impacting employment, promotion, and training opportunities (Miller et al., 2001). The current research further investigated if the possession of career-related power impacts the endorsement of gender stereotypes.

Sexism is the attitude of endorsing traditional gender roles (Glick & Fiske, 1997a). Sexism is differentiated into two correlated subtypes: hostile and benevolent sexism (Glick & Fiske, 1996). Other researchers differentiated between implicit and explicit sexist attitudes (Rudman & Kilianski, 2000). As the complexity and multidimensional nature of sexist attitudes has been increasingly acknowledged, research has also repetitively shown that sexism harms women's career development (Cuddy et al., 2004; Heilman et al., 2004; Rudman & Kilianski, 2000). Based on what is already known, we investigated if the power status of a given person influences the person's sexist attitudes.

Gender discrimination refers to behaviors that are based on stereotypical gender beliefs and attitudes (Joseph, 1983), such as denying women opportunities of

being hired or promoted solely because of their sex. Studies have shown that when women pose threats to the power and money held by men, they tend to receive the strongest forms of discrimination (Snizek & Neil, 1992). In addition, gender stereotypes can be combined with institutional policies to contribute to gender discrimination, and therefore, gender stereotypes are significant contributing factors to gender discrimination (Bobbitt-Zeher, 2001). Finally, work settings that have high proportions of men tend to be more discriminatory toward women (Snizek & Neil, 1992). The current research further investigated if the possession of career-related power impacts the endorsement of gender discrimination.

It is prudent to point out that most of the studies observed here investigated gender as an isolated identity. The interconnected nature of social categorizations such as race, class, ability, religion, age, and sexual orientation as they apply to given individual or group are minimally discussed. It must be acknowledge that systemic injustice and social inequality are not limited to gender and occur on a multidimensional basis (Defrancisco, Palczewski & McGeough, 2013). We should think of each element or trait of a person as inextricably linked with all of the other elements in order to fully understand one's identity (Defrancisco, et al., 2013). This limitation of the study is further discussed in the limitation section.

With the existing knowledge of gender stereotypes, sexism, and gender discrimination, we sought to further investigate how power status impacted the endorsement of beliefs, attitudes, and behaviors that are harmful to women. The purpose of this study was to compare the endorsement of gender stereotypes, of sexist attitudes, and of gender discrimination behaviors between people who are at a higher power status and those who are at a lower power status in career settings. In addition, this study examined the impact of gender stereotypes, sexism, and gender

discrimination on career-related decisions, such as those related to employment, promotion, and allocation of training resources. Finally, the impact of such decision making on women's career development and identity formation was evaluated.

Hypotheses

Because gender stereotypes, sexism, and gender discrimination were repetitively measured throughout the study, it would be helpful to introduce the instruments that measured each variable at this time. Gender stereotypes were measured by the Bem Sex-Role Inventory, which was developed by Bem in 1974 (see Appendix B). Bem's goal of the BSRI was to assess how people identify themselves psychologically, to examine psychological androgyny, and to provide empirical evidence to show the advantage of a shared masculine and feminine personality versus a sex-typed categorization (Pedhazur and Tetenbaum, 1979). Sexism was measured by the Ambivalent Sexism Inventory, which was developed by Glick and Fiske in 1996 (see Appendix C) and examines two positively correlated components of sexism that represent opposite evaluative orientations toward women: sexist antipathy or Hostile Sexism (HS) and a subjectively positive orientation toward women, Benevolent Sexism (BS). In measuring discriminatory behaviors, three questions were modified from the study of Cuddy, Fiske and Glick (2004) to form the Gender Discrimination Proxy Items (see Appendix D). Based on the existing research and what we already know about power status, gender stereotypes, sexism, and gender discrimination, it was hypothesized that:

1. Participants in higher power status positions would endorse more gender stereotypes (measured by the Bem Sex-Role Inventory [BSRI]; Bem, 1974), hold more sexist attitudes (measured by the Ambivalent Sexism Inventory [ASI]; Glick & Fiske, 1996), and show more discrimination behaviors

(measured by the Gender Discrimination Proxy Items [GDPI]; Cuddy et al., 2004) than participants in lower power positions would.

2. Male participants would endorse more gender stereotypes (measured by the BSRI), hold more sexist attitudes (measured by the ASI), and show more discrimination behaviors (measured by the GDPI) toward women than female participants would.

3. Participants would endorse more gender stereotypes (measured by the BSRI), hold more sexist attitudes (measured by the ASI), and show more discrimination behaviors (measured by the GDPI) toward women than toward men.

4. Male participants in higher power status positions would hold more sexist attitudes (measured by the ASI), show more gender discrimination behaviors (measured by the GDPI), and endorse more gender stereotypes (measured by the BSRI) toward women than would female participants in lower power status positions.

5. Compared to lower power participants, higher power participants would hold more sexist attitudes (measured by the ASI), show more discriminatory behaviors (measured by the GDPI), and endorse more gender stereotypes (measured by the BSRI) toward women than toward men.

CHAPTER III

METHOD

Women experience additional barriers at workplaces compared to men and such barriers considerably hinder their career development (Whitley & Kite, 2010). The three barriers specifically examined in this study are gender stereotypes, sexist attitude, and gender discrimination. A thorough literature review showed that the endorsement of such stereotypes, attitudes, and behaviors negatively impacts women's career identity. However, there were limited studies examining how power status would impact such endorsement. The purpose of this study is to examine the endorsement of negative beliefs of women between people who have higher and lower power status, as well as the impact on women's career development. The purpose of this chapter is to review the methods and procedures related to the purpose of this study.

Participant Demographics

Participants included 177 individuals of 18 years of age or older. The age range of participants was 20 to 68, with a mean of 36.09, and a standard deviation of 1.48. Among them, 83 (46.9%) were male and 94 (53.1%) were female. In regard to racial identification, 129 (72.9%) participants identified as Caucasian/White, seven (4%) as African American/Black, four (2.3%) as American Indian/Native American/First Nations, 15 (8.5%) as Asian American/Pacific Islander, seven (4%) as

Hispanic/Latino/Latina, 14 (7.9%) as International status, and one (.6%) as Mixed/Multiracial. Among all participants, 156 (88.1%) identified as heterosexual, 11 (6.2%) as bisexual, seven (4%) as gay/lesbian, and three (1.7%) as other. Among the three who identified as other sexual orientation, one participant (.6%) further identified as asexual and two (1.1%) as pansexual. Complete demographic data for all participants are reported in Table 1.

Participants were randomly assigned to the four conditions. In Condition 1, participants were assigned high power and read about the woman “Kate.” In Condition 2, they were assigned high power and read about the man “Dan.” In Condition 3, they had low power and read about “Kate.” In Condition 4, they had low power and read about “Dan.” **Condition 1** included 46 individuals. The age range was 24-68. The participants consisted of 24 males (52.2%), and 22 females (47.8%). Caucasian/White participants made up the majority of the sample with 35 (76.1%) participants. The majority of participants (43; 93.5%) identified as heterosexual. In household income, the \$40,000-\$60,000 category had the most identifiers (12; 26.1%). In regard to generational status, 82.6% of participants identified that both their parents and themselves were born in the US/Canada, which made up the majority of the sample. **Condition 2** included 45 individuals with an age range of 23 to 62. The participants consisted of 25 males (55.6%) and 20 females (44.4%). Caucasian/White participants made up the majority of the sample with 33 (73.3%) participants. The majority of participants (41; 91.1%) identified as heterosexual. In household income, the \$40,000-\$60,000 category had the most identifiers (13;

28.9%). There were 33 (73.3%) participants who identified that both their parents and themselves were born in the US/Canada, which made up the majority of the sample.

Condition 3 included 40 individuals with an age range of 26 to 62. The participants consisted of 17 males (42.5%) and 23 females (57.5%). Caucasian/White participants made up the majority of the sample with 27 (67.5%) participants. The majority of participants (35; 87.5%) identified as heterosexual. In household income, the under \$15,000 category and the \$40,000-\$60,000 category had the most identifiers, eight (20%) and nine (22.5%) participants, respectively. Twenty-seven (67.5%) participants identified that both their parents and themselves were born in the US/Canada, which made up the majority of the sample. **Condition 4** included 46 individuals with an age range of 20 to 68. The participants consisted of 17 males (37%) and 29 females (63%). Caucasian/White participants made up the majority of the sample with 34 (73.9%) participants. The majority of participants (37; 80.4%) identified as heterosexual. In household income, the under \$15,000 category and the \$40,000-\$60,000 category had the most identifiers, eight (20%) and nine (22.5%) participants, respectively. Twenty-seven (67.5%) participants identified that both their parents and themselves were born in the US/Canada, which made up the majority of the sample. Demographic information of participants by condition is also reported in Table 1.

Table 1. Participants Demographics –Combined and for Each Conditions.

Items	Total		Condition 1		Condition 2		Condition 3		Condition 4	
	N	%	N	%	N	%	%	N	%	
Gender										
Male	83	46.90	24	52.20	25	55.60	17	42.50	17	37.00
Female	94	53.10	22	47.80	20	44.40	23	57.50	29	63.00
Other	0	.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	177	100.00	46	100.00	45	100.00	40	100.00	46	100.00
Age										
18-23	2	1.20	0	0.00	1	2.20	0	0.00	1	2.20
24-29	57	32.20	13	28.30	20	44.50	10	25.00	14	3.40
30-34	34	18.70	8	17.40	10	22.20	10	25.00	6	13.10
35-44	52	29.40	18	39.10	10	22.20	13	32.50	11	23.90
45-54	18	1.10	5	11.00	2	4.40	3	7.50	8	17.40
55-64	13	7.40	2	4.40	2	4.40	4	10.00	5	1.80
65 and over	1	.60	0	0.00	0	0.00	0	0.00	1	2.20
Total	177	100.00	100.00	100.00	45	100.00	40	100.00	46	100.00
Race/Ethnicity										
Black	7	4.00	1	2.20	2	4.40	1	2.50	3	6.50
Native American	4	2.30	1	2.20	1	2.20	1	2.50	1	2.20
Asian American	15	8.50	4	8.70	5	11.10	3	7.50	3	6.50
Caucasian/White	129	72.90	35	76.10	33	73.30	27	67.50	34	73.90

Table 1. cont.

Items	Total		Condition 1		Condition 2		Condition 3		Condition 4	
	N	%	N	%	N	%	%	N	%	
Race/Ethnicity										
Hispanic	7	4.00	0	0.00	2	4.40	4	10.00	1	2.20
Int'l Status	14	7.90	3	6.60	2	4.40	4	10.00	4	8.70
-China	9	5.00	2	4.30	1	2.20	3	7.50	3	6.50
-India	1	.60	-	-	1	2.20	-	2.50	1	2.20
-England	1	.60	-	-	-	-	-	-	-	-
-Turkey	1	.60	-	-	-	-	-	-	-	-
-Asian	1	.60	-	-	-	-	1	2.50	-	-
-South Asian	1	.60	-	-	1	2.20	-	-	-	-
Mixed	1	.60	2	4.30	0	0.00	0	0.00	0	0.00
Total	177	100.00	46	100.00	45	100.00	40	100.00	46	100.00
Sexual Orient.										
Bisexual	11	6.20	3	6.50	2	4.40	2	5.00	4	8.70
Lesbian/Gay	7	4.00	0	0.00	1	2.20	3	7.60	3	6.50
Heterosexual	156	88.10	43	93.50	41	91.10	35	87.50	37	8.40
Other	3	1.70	0	0.00	1	2.20	0	0.00	2	4.30
-Asexual	1	.60	-	-	-	-	-	-	1	2.20
-Pansexual	2	1.10	-	-	2.20	2.20	-	-	1	2.20
Total	177	100.00	46	100.00	100.00	100.00	40	100.00	46	100.00

Table 1. cont.

Items	Total		Condition 1		Condition 2		Condition 3		Condition 4	
	N	%	N	%	N	%	%	N	%	
HH Income										
Under \$15,000	22	12.40	4	8.70	6	13.30	8	20.00	4	8.70
\$15,000-25,000	25	14.10	8	17.40	5	11.10	6	15.00	6	13.00
\$25,000-40,000	36	20.30	8	17.40	10	22.20	7	17.50	11	23.90
\$40,000-60,000	42	23.70	12	26.10	13	28.90	9	22.50	8	17.40
\$60,000-90,000	26	14.70	7	15.20	5	11.10	5	12.50	9	19.60
\$90,000-120,000	15	8.50	4	8.70	2	4.40	3	7.50	6	13.00
\$120,000-150,000	4	2.30	0	0.00	2	4.40	1	2.50	1	2.20
\$150,000+	7	4.00	3	6.50	2	4.40	1	2.50	1	2.20
Total	177	100.00	46	100.00	45	100.00	40	100.00	46	100.00
Gen'nal Status										
1 st Generation	28	15.80	7	15.20	8	17.80	6	15.00	7	15.20
-China	19	1.60	7	15.20	3	6.60	6	15.00	4	8.70
-India	3	1.60	-	-	2	4.40	-	-	1	2.20
-England	1	.60	-	-	-	-	-	-	1	2.20
-Turkey	1	.60	-	-	1	2.20	-	-	-	-
-Philippine	1	.60	-	-	1	2.20	-	-	-	-
2 nd Generation	18	1.20	1	2.20	84	8.90	7	17.50	6	13.00
US born Parents	131	74.00	38	82.60	33	73.30	27	67.50	33	71.10
Total	177	100.00	46	100.00	45	100.00	40	100.00	46	100.00

Measures

Demographic Questionnaire. Participants were asked to provide demographic information relevant to them, including the following: gender, age, race/ethnicity, sexual orientation, income level, and generational status in regard to US/Canadian citizenship.

Bem Sex-Role Inventory (BSRI; Bem, 1974). In 1974, Bem developed the Bem Sex-Role Inventory by surveying 444 male and 279 female Stanford undergraduate students (BSRI; see Appendix B). Bem's goal of the BSRI was to assess how people identify themselves psychologically, to examine psychological androgyny, and to provide empirical evidence to show the advantage of a shared masculine and feminine personality versus a sex-typed categorization (Pedhazur and Tetenbaum, 1979). The BSRI is a seven-point Likert scale containing three subscales: masculinity, femininity, and filler items. Examples of masculinity items include "independent," "assertive," and "strong." Examples of femininity items include "affectionate," "sympathetic," and "warm." Furthermore, examples of filler items include "reliable," "jealous," and "tactful." Masculine categories depict "assertive-dominance" and "instrumentality," while feminine categories depict "nurturance-interpersonal warmth" and "expressiveness" (Bem & Lipsitz, 1981). In explaining the meaning of high and low scores, Bem (1974) explained that individuals who obtain a measure of psychological androgyny, or high levels of both masculinity and femininity, are more adaptive in that they are not bound by behaviors associated with traditional masculine or feminine gender roles, and may feel comfortable engaging in behaviors appropriate for either gender. This gives these individuals increased flexibility and adaptability because their range of behaviors is not restricted by traditional gender roles (Bem & Lenney, 1976). In contrast, research suggests that individuals who are undifferentiated in terms

of gender role (low on both masculinity and femininity) tend to be less adaptable (Bem, 1974; Glazer & Desekm, 1985).

The BSRI is a widely used instrument in psychology and other fields because it measures masculine and feminine gender roles separately and has adequate psychometric properties. The BSRI was normed on a sample of over 700 Stanford University undergraduate students in introductory psychology classes. However, as the BSRI has become more widely used in psychology and other fields over the years, the psychometric properties and correlations of the BSRI have improved (Holt & Ellis, 1998). The psychometric properties of the BSRI have, in addition, been examined through many investigations (Bem, 1975; Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976; Gaudreau, 1977; Gross, Batlis, Small, & Erdwins, 1977; Pedhazur & Tetenbaum, 1979; Strahan, 1975; Wakefield, Sasek, Friedman, & Bowden, 1976; Walkup & Abbott, 1978; Waters, Waters, & Pincus, 1977; Wilson & Cook, 1984). Bem (1974) reported high internal consistency and test-retest reliability of the BSRI. Coefficient alphas computed for masculinity and femininity were .86 and .82, respectively. The BSRI test-retest reliability within a sample of 28 males and 28 females was demonstrated to be highly reliable over a four-week period (Masculinity, $r = .90$; Femininity, $r = .90$; Androgyny, $r = .93$). Through these research efforts, Bem developed the short form of the BSRI (Bem, 1981), in which half of the items from the original instrument were eliminated to form a 30-item inventory. The internal consistency ($r = .90$) of the short form was higher than that of the original, as items that demonstrated poor item-total correlations with the masculinity and femininity scales were eliminated. The BSRI short-form correlated highly with the original form, $r = .90$. Bem reported similar masculinity coefficient alphas, higher femininity coefficient alphas, and increased internal consistency

compared to the original form (Bem & Lipsitz, 1981). The short form discarded some feminine traits that could be seen as less socially desirable such as “gullible” and “childlike” (Bem & Lipsitz, 1981). The most recent re-evaluation of the short form (Holt & Ellies, 1998) revealed that the BSRI is a valid instrument for assessing gender roles, and the short form version of the BSRI is used in this study. Bem’s original root question was, “Rate yourself on each item, on a scale from 1 (never or almost never true) to 7 (almost always true).” However, in the current study, this question was modified to, “On each item, on a scale from ‘not at all accurate’ (1) to ‘extremely accurate’ (7), please rate how accurately each of the characteristics describes the person in the scenario.” This modified scale can be used to measure gender stereotypes participants might endorse toward the people in our vignettes. The reliability of the BSRI for this study was good (Masculinity, $r = .89$; Femininity, $r = .94$).

Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996). The ASI was developed by Glick and Fiske in 1996 (see Appendix C) and examines two positively correlated components of sexism that represent opposite evaluative orientations toward women: sexist antipathy or Hostile Sexism (HS), and a subjectively positive orientation toward women or Benevolent Sexism (BS). An example of the HS items is, “Most women fail to appreciate fully all that men do for them.” An example of the BS items is, “Women, compared to men, tend to have a superior moral sensibility” (Glick & Fiske, 1996). Overall ASI scores predicted ambivalent attitudes toward women, the HS scale correlated with negative attitudes toward and stereotypes about women, and the BS scale correlated with positive attitudes toward and stereotypes about women (Glick & Fiske, 1996). The ASI consisted of 22 statements that respondents were asked to rate on a six-point Likert-scale ranging from 0 (strongly

disagree) to 5 (strongly agree). A total of 11 items measured hostile sexism, and 11 items measured benevolent sexism. Higher scores indicated stronger endorsement of sexist attitudes, and lower scores indicated softer or no endorsement of sexist attitude. The total ASI score was based on an average of all items.

Six ASI studies (Glick & Fiske, 1996) were conducted on 2,250 respondents by surveying students from different universities (University of Massachusetts at Amherst, Amherst College, and Lawrence University) and public areas, involving both men and women, undergraduates and non-student samples, and established convergent, discriminant, and predictive validity. Factor analyses repeatedly confirmed the existence of BS and HS, both of which were reliably measured by the two ASI subscales (Glick & Fiske, 1996). A positive correlation was repeatedly found between the HS and BS scales, supporting the claim that these two forms of sexism tend to be related aspects of sexist ideology (Glick & Fiske, 1996). Predictive validity studies also showed that total ASI scores were related to ambivalence toward women, and HS predicted negative attitudes toward and stereotypes about women (Glick & Fiske, 1996). Although the ASI was initially developed with student samples, it showed its strongest predictive validity among men in the nonstudent samples (Glick & Fiske, 1996). Reliability analyses of a total ASI score (average of all items) and average scores for the two major subscales of the ASI yielded acceptable alpha coefficients (all alphas averaged in the .8 to .9 range). The BS scale consistently yielded lower alpha coefficients, which was expected and an accurate reflection of the multidimensional nature of this scale (Glick & Fiske, 1996). The 22 items in the ASI for the current study were shown to be highly reliable, $r = .92$.

Gender Discrimination Proxy Items (GDPI; Cuddy, Fiske, & Glick, 2004). In measuring discriminatory behaviors, three questions were modified from Cuddy,

Fiske, and Glick's study (2004). As part of this study, Cuddy and colleagues (2004) measured discriminatory behaviors toward working mothers (how they were hired, promoted, and trained differently) relative to childless working women, childless working men, and working fathers. Participants were asked to rate a person in a scenario using a seven-point (1 = "not at all," 7 = "extremely") Likert-type scale on the following three questions that examined the three aspects of discrimination, respectively: As a client, how likely would you be to request Kate (Dan) as one of your consultants?" (Hire), "As a client, how likely would you be to recommend Kate (Dan) for a promotion?" (Promote), and "As a client, how likely would you be to recommend that McKinsey & Company invest in continuing training and education for Kate (Dan)?" (Train). In their study (Cuddy et al., 2004), participants were 122 Princeton University undergraduates, and the three discrimination proxy items formed a single, reliable scale, $\alpha = .83$. Validity information of these proxy items was not discussed in Cuddy and colleagues' (2004) study. The GDPI used in this study is a modification from Cuddy and colleagues' (2004) version. The GDPI is slightly different in the four conditions to reflect the different power statuses participants were assigned to, and the different genders of the person in their scenario. When participants were assigned to the high power condition, such as in Conditions 1 and 2, the questions in the GDPI started with, "As an employer, how likely will you hire/promote/provide training resources...?" Participants were asked to answer these questions using a 5-point Likert-type scale (1 = "extremely unlikely," 5 = "extremely likely"). When participants were assigned to the low power condition, such as in Conditions 3 and 4, the questions in the GDPI started with "How strongly do you think your boss should or should not be hired/promoted/provided training resources...?" Participants were asked to answer these questions using a 5-point

Likert-type scale (1 = “very strong not to hire,” 5 = “very strong to hire”). When the scenario presented a female person, such as in Conditions 1 and 3, the GDPI asked questions regarding “Kate,” for example, “...how likely will you hire Kate...?” When the scenario presented a male person, such as in Conditions 2 and 4, the GDPI asked questions regarding “Dan,” for example, “...how likely will you hire Dan...?” The GDPI for this study was shown to be highly reliable, $r = .85$. See Appendix E for the complete GDPI used in this study.

Design

Condition 1. In this condition, participants were informed that they were the manager of the office (high power status). They received an application and were asked to review it to make a decision as to whether they would hire the person. It was implied that the applicant was a woman by using a female name Kate, and later referring to her by using the pronoun "she."

Condition 2. In this condition, the participants were informed that they were a manager in an office (higher power status), and they received an application and were asked to review it to make a decision as whether they would hire the person. The applicant was a man named Dan. The applicant was also referred to as "he."

Conditions 3. In this condition, the power status of participants was lowered by informing them that they were regular employees instead of managers. Again, participants were instructed to review an application to make a decision as to whether they think the person should be hired. In Condition 3, the applicant was a female and the same description of Kate used in Condition 1 was used here.

Condition 4. In this condition, power status was lowered again by informing participants that they were regular employees. Participants were instructed to review an application to make a decision as to whether they think the person should be hired.

In Condition 4, the applicant was a male, and the same description of Dan used in Condition 2 was used here.

Procedures

Respondent Recruitment. The surveys of this study were distributed online through Amazon Mechanical Turk (AMT). Participants were workers recruited via the AMT website. This site allows researchers to post their research surveys for AMT workers to view and complete for compensation. Workers on AMT consist of individuals who sign up on the AMT website to complete online tasks, or Human Intelligence Tasks (HITs), for compensation. Anyone with access to the internet is eligible to become an AMT worker, regardless of his or her geographical location.

Survey Development Procedure. Institutional Review Board (IRB) approval from the University of North Dakota (UND) was obtained for this study and the creation of a survey for recruiting participants. An online survey was created that included the informed consent, questionnaires, and demographic questions. The informed consent appeared prior to proceeding with the survey. Demographics questions constituted the first page of the survey. The vignette, BSRI, DGPI, and ASI followed, each on a separate page. The last page of the survey provided the participants with a completion code prior to submitting their surveys. All questions required a response prior to submitting the survey to ensure that participants were compensated for work that was complete.

Amazon Mechanical Turk Procedures. In this study, a Human Intelligence Task (HIT) was created on Amazon Mechanical Turk (AMT). HITs are online tasks

for individuals who signed up on the AMT website to complete for compensation. The HIT created for this study contained a brief description of the study and a link to the online informed consent form and survey. The brief description included the title of the research, goal of the research, directions for completing the HIT, length of the survey, and requirements to participate in the study. The requirement was that all participants had to be 18 years of age or older. Further, workers were able to view the HIT and complete it only if they lived in the United States. Workers had the option to view the HIT's description, described above, prior to participating. This allowed them the opportunity to opt out of the study after viewing the details of the research. In addition, participants could stop the survey at any time during their participation. After the survey was completed, a completion code was presented to the participant. In order for the participant to receive compensation, he or she had to enter the completion code on the AMT website. The AMT website provides an administrative page that reveals submission statistics and completion codes. Once a completion code had been entered, the researcher reviewed and approved the codes, thus automatically sending compensation to the participant's account. This method ensured that identifying information connected to their worker ID was not connected to their responses.

Participants were compensated US \$.50 each for their participation. This level of compensation was chosen in an attempt to be close to the median pay rate for HITs requiring similar time commitments available at the time of data collection. The survey had an average time commitment of 20 minutes. The survey remained posted

on AMT until the requested number of workers completed the survey, which took approximately two months. Of those who started taking it, 85% submitted a completed survey.

A benefit of this sampling method is the ability to draw participants from diverse geographical locations. Online sampling has been shown to be an acceptable way to collect externally valid responses from populations that are small and otherwise potentially difficult to contact for participation (Gosling, Vazire, Srivastava, & John, 2004). The intended population was adults (18 years and older) in the United States.

The data were examined for patterns of responses to identify cases that needed to be removed from analysis because of instances when participants gave the same response for all of the items across scales, which could indicate lack of cognitive engagement while taking the survey (Krosnick, 1991). Further, those who had duplicate IP addresses and those who took less than five minutes to complete the survey were omitted from the study because they were determined to have been completed without genuine effort or engagement. Missing data was not an issue, as survey items were all forced choice responses, resulting in all completed surveys having answers for all items.

General Procedure. The first piece of information presented to participants, following the demographic survey, was a career vignette. This vignette was adapted from a career scenario developed by Cuddy, Fiske and Glick (2004). Participants' power statuses were rotated, so half of the participants were assigned as the managers

of the office, and half were assigned as employees. The gender of the applicant was also rotated in two different conditions by using a female and a male name. The scenarios were otherwise identical across conditions. The differentiation of both the participants' power statuses and the applicant's gender created a 2x2 matrix, and yielded four different conditions to be presented. The Likert scale items were used to assess their responses to the specific scenario they received. A total of three scales were used to measure their endorsement of gender stereotypes, gender discriminatory behaviors, and sexist attitudes. Gender stereotypes were measured by using the Bem Sex Role Inventory (BSRI). Sexist attitudes were measured by using the Ambivalent Sexism Inventory (ASI). Discrimination behaviors were measured by asking several decision making questions using the Gender Discrimination Proxy Items (GDPI). It took participants an average of 20 minutes to complete the survey.

CHAPTER IV

RESULTS

This study examined barriers women experience at the workplace such as gender stereotypes, sexist attitude, and gender discrimination, because they substantially hinder women's career development (Whitley & Kite, 2010). Although such stereotypes, attitudes, and behaviors have been studied in the past, there were limited studies examining how power status would impact such endorsement. This study specifically examined the endorsement of negative beliefs about women between people who have higher and lower power status, as well as the impact on women's career development. The following chapter discusses how the data of this study supported or did not support each of the hypotheses.

Preliminary Analysis Section

This section presents the data regarding both intra- and inter-scale correlations. The Bem Sex Role Inventory (BSRI) was the only scale containing sub-scales- namely, BSRI-Femininity, BSRI-Masculinity, and BSRI-Neutral. The intra-scale correlation showed that BSRI-Neutral was found to be significantly correlated with BSRI-Masculinity, $r = .67, p < .001$, as well as with BSRI-Femininity, $r = .22, p < .01$. The inter-scale correlations showed that BSRI-Femininity and Ambivalent Sexism Inventory (ASI) were not correlated, $r = .06, p = .41$. BSRI-Masculinity and

ASI had a negative correlation, but the correlation was not significant, $r = -.09$, $p < .22$. BSRI-Femininity and Gender Discrimination Proxy Items (GDPI) were not correlated, $r = .05$, $p = .51$. However, BSRI-Masculinity and GDPI were significantly correlated, $r = .21$, $p < .01$. Finally, ASI and GDPI were not correlated, $r = .01$, $p = .93$.

Hypothesis 1

The first hypothesis predicted that participants in higher power status positions would endorse more gender stereotypes, hold more sexist attitudes, and show more discriminatory behaviors than participants in lower power positions. Five one-way analyses of variance were conducted to evaluate the relationships between the power statuses of participants and gender stereotypes, discrimination, and sexism.

The independent variable (the power status of participants) included two levels: high power status (employer) and low power status. The dependent variables were gender stereotype measured by the Bem Sex-Role Inventory (BSRI), discrimination measured by the Gender Discrimination Proxy Items (GDPI), and sexism measured by the Ambivalent Sexism Inventory (ASI). Gender stereotype had three subscales: femininity gender role, masculinity gender role, and neutral gender role. In regards to the first hypothesis, no significant results were found. The one-way ANOVA tests were found to be non-significant for ASI, $F(1, 84) = .75$, $p = .39$; for GDPI, $F(1, 84) = 3.01$, $p = .09$; for femininity gender role, $F(1, 84) = 2.02$, $p = .16$; for masculinity gender role, $F(1, 84) = 3.00$; $p = .87$; and for neutral gender role, $F(1, 84) = 1.57$, $p = .21$. Means and standard deviations for the two power status levels of

the five dependent variables are reported in Table 2. Generally, the hypotheses that power status would impact gender stereotype, sexism, and discrimination were not supported.

Table 2. Means and Standard Deviations of Scores on the ASI, GDPI, BSRI-Femininity, BSRI-Masculinity, and BSRI-Neutral for High Power Status (N = 46), and Low Power Status (N = 40).

Scale	High Power Status		Low Power Status		<i>F</i>	$\eta^{2\dagger}$
	M	SD	M	SD		
ASI	2.39	1.00	2.20	1.04	.75	.01
GDPI	3.93	.62	4.21	.84	3.01	.03
BSRI-Femininity	4.33	1.04	4.00	1.13	2.02	.02
BSRI-Masculinity	4.23	1.04	4.60	.92	3.00	.03
BSRI-Neutral	3.89	.70	4.07	.64	1.57	.02

Note. ASI = Ambivalent Sexism Inventory; GD = Gender Discrimination Proxy Items; BSRI-Femininity = Femininity items in Bem Sex-Role Inventory; BSRI-Masculinity = Masculinity items in Bem Sex-Role Inventory; BSRI-Neutral = Neutral items in Bem Sex-Role Inventory.

** = Significant at the .01 level; * = Significant at the .05 level.

$\dagger \eta^2$ = the effect size eta squared. Green, Salkind & Akey (2000) indicate that the range of effect sizes for eta squared is .01 (small), .06 (medium), and .14 (large).

Hypothesis 2

The second hypothesis predicted that male participants would endorse more gender stereotypes, hold more sexist attitudes, and show more discriminatory behaviors toward women than female participants. Five one-way analyses of variance were conducted to evaluate the relationship between the gender of participants and gender stereotypes, discrimination, and sexism.

Table 3. Means and Standard Deviations of Scores on the ASI, GDPI, BSRI-Femininity, BSRI-Masculinity, and BSRI-Neutral for Male Participants (N = 41) and Female Participants (N = 45).

Scale	Male Participants		Female Participants		<i>F</i>	$\eta^{2\dagger}$
	M	SD	M	SD		
ASI	2.68	.96	1.96	.95	12.42**	.13
GDPI	4.05	.74	4.07	.74	.03	.00
BSRI-Femininity	4.34	1.02	4.01	1.14	1.95	.02
BSRI-Masculinity	4.34	.93	4.46	1.07	.31	.00
BSRI-Neutral	4.00	.50	3.94	.81	.15	.00

Note. ASI = Ambivalent Sexism Inventory; GDPI = Gender Discrimination Proxy Items; BSRI-Femininity = Femininity items in Bem Sex-Role Inventory; BSRI-Masculinity = Masculinity items in Bem Sex-Role Inventory; BSRI-Neutral = Neutral items in Bem Sex-Role Inventory.

** = Significant at the .01 level; * = Significant at the .05 level.

$\dagger \eta^2$ = the effect size eta squared. Green, Salkind & Akey (2000) indicate that the range of effect sizes for eta squared is .01 (small), .06 (medium), and .14 (large).

The independent variable (the gender of participants) included two levels: male and female. The dependent variables were gender stereotype, discrimination, and sexism. Gender stereotype had three subscales: femininity gender role, masculinity gender role and neutral gender role. In regards to the second hypothesis, one significant result was found. The one-way ANOVA tests were found to be significant at the .01 level for ASI, $F(1, 84) = 12.42, p = .001$. The strength of relationship between the gender of participants and ASI, as assessed by η^2 , was strong, with the gender of participant factor accounting for 13% of the variance of the dependent variable. The one-way ANOVA tests were found to be non-significant for GDPI, $F(1, 84) = .03, p = .88$; for femininity gender role, $F(1, 84) = 1.95, p = .17$; for masculinity

gender role, $F(1, 84) = .31, p = .58$; and for neutral gender role, $F(1, 84) = .15, p = .70$.

The means and standard deviations for the two genders of participants of the five dependent variables are reported in Table 3. With the exception of sexism, the hypotheses related to power status impacting gender stereotype and discrimination were not supported.

Hypothesis 3

The third hypothesis predicted that participants would endorse more gender stereotypes, hold more sexist attitudes, and show more discriminatory behaviors toward women than toward men. Five one-way analyses of variance were conducted to evaluate the relationships between gender of the person described in the vignette and gender stereotypes, discrimination, and sexism.

The independent variable (gender of the person in vignette) included two levels: male and female. The dependent variables were gender stereotype, discrimination, and sexism. Gender stereotype had three subscales: femininity gender role, masculinity gender role, and neutral gender role. In regards to the third hypothesis, one significant result was found. The one-way ANOVA tests were found to be significant at the .01 level for BSRI-Femininity, $F(1, 174) = 6.81, p = .01$. The strength of the relationship between the gender of the person in vignette and BSRI-Femininity, as assessed by η^2 , was medium, with the gender of the person in the vignette factor accounting for 4% of the variance of the dependent variable. The one-way ANOVA tests were found to be non-significant for ASI, $F(1, 174) = .75, p = .39$; for GDPI, $F(1, 174) = 2.39, p = .12$; for masculinity gender role, $F(1, 194) = .22, p$

= .64; and for neutral gender role, $F(1, 174) = .63, p = .43$. The means and standard deviations for the genders of participants of the five dependent variables are reported in Table 4. With the exception of sexism, the hypotheses related to power status impacting gender stereotype and discrimination were not supported.

Table 4. Means and Standard Deviations of Scores on the ASI, GDPI, BSRI-Femininity, BSRI-Masculinity, and BSRI-Neutral for Male Vignette (N = 90), and Female Vignette (N = 86).

Scale	Male Vignette		Female Vignette		F	$\eta^{2\dagger}$
	M	SD	M	SD		
ASI	2.43	1.00	2.30	1.02	.75	.00
GDPI	3.99	.72	4.06	.74	2.39	.01
BSRI-Femininity	3.74	1.11	4.17	1.09	6.81**	.04
BSRI-Masculinity	4.48	1.08	4.41	1.00	.22	.00
BSRI-Neutral	3.88	.84	3.97	.68	.63	.00

Note. ASI = Ambivalent Sexism Inventory; GDPI = Gender Discrimination Proxy Items; BSRI-Femininity = Femininity items in Bem Sex-Role Inventory; BSRI-Masculinity = Masculinity items in Bem Sex-Role Inventory; BSRI-Neutral = Neutral items in Bem Sex-Role Inventory.

** = Significant at the .01 level; * = Significant at the .05 level.

$\dagger \eta^2$ = the effect size eta squared. Green, Salkind & Akey (2000) indicate that the range of effect sizes for eta squared is .01 (small), .06 (medium), and .14 (large).

Hypothesis 4

The fourth hypothesis made three predictions, and each prediction is discussed separately. The first prediction was that male participants in higher power status positions would hold more sexist attitudes toward women than female participants in lower power status positions. A two-way ANOVA of participant gender (male, female) and their level of power status (high, low) on sexist attitudes was conducted. The

interaction between participant gender and their power status was not significant, $F(1, 82) = .53, p = .47$. Despite the fact that the interaction was not significant, a follow-up on main effect was still conducted, because it is relevant to the hypothesis. A significant main effect of participant gender on sexist attitude was found, $F(1, 82) = 12.07, p = .001$. Sexist attitudes were higher for male participants ($M = 2.69, SD = .15$) than for female participants ($M = 1.96; SD = .14$). The main effect of participant's power status was not significant, $F(1, 82) = .29, p = .59$. The ANOVA results and descriptive statistics for sexist attitudes as a function of the two factors are presented in Table 5. With the exception of a main effect on participant gender, the hypothesis regarding the interaction between participant gender and level of power status having an impact on sexism was not supported.

Table 5. ANOVA Results and Descriptive Statistics for ASI by Gender and Power Status of Participants.

Gender of Participants	Power Status	M	SD	N	
Male	High	2.67	.92	24	
	Low	2.71	1.05	17	
Female	High	2.09	1.02	22	
	Low	1.83	.89	23	
Source	SS	Df	MS	F	<i>p</i>
Gender of Participants	11.19	1	11.19	12.07**	.001
Power Status	.27	1	.27	.29	.59
Gender of Participants X Power Status	.49	1	.49	.53	.47
Error	75.99	82	.93		
Total	88.14	85			

Note. ASI = Ambivalent Sexism Inventory; SS = Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

Table 6. ANOVA Results and Descriptive Statistics for GDPI by Gender and Power Status of Participants.

Gender of Participants	Power Status of Participants	M	SD	N	
Male	High	3.96	.65	24	
	Low	4.18	.85	17	
Female	High	3.91	.60	22	
	Low	4.23	.84	23	
Source	SS	Df	MS	F	<i>p</i>
Gender of Participants	.00	1	.00	.00	.99
Power Status	1.55	1	1.55	2.84	.10
Gender of Participants X Power Status	.06	1	.06	.11	.75
Error	44.68	82	.55		
Total	88.34	85			

Note. GDPI = Gender Discrimination Proxy Items; SS = Sum of Square; df = degree of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

The second prediction of hypothesis 4 was that male participants in higher power status positions would show more gender discriminatory behaviors toward women than female participants in lower power status positions. A two-way ANOVA of participant gender (male, female) and their level of power status (high, low) on gender discrimination was conducted. The interaction between participant gender and their power status was not significant, $F(1, 82) = .11, p = .75$. Despite the insignificance, the main effects of participant gender and power status were still conducted, and they were found to be non-significant [$F(1, 82) = .00, p = .99$; $F(1, 82) = 2.84, p = .10$, respectively]. The ANOVA results and descriptive statistics for gender discrimination as a function of the two factors are presented in Table 6. With the exception of a main effect on participant gender, the hypotheses regarding

interaction between participant's gender and their level of power status having an impact on sexism were not supported. Generally, the hypothesis that interaction between gender of participants and their power status would impact discrimination was not supported.

The last prediction of hypothesis 4 was that male participants in higher power status positions would endorse more gender stereotypes toward women than female participants in lower power status positions. A two-way ANOVA of participant gender (male, female) and their level of power status (high, low) on femininity gender role was conducted. The interaction between participant gender and their power status was significant, $F(1, 82) = 7.34, p = .01$. When power status of participants was high, male participants ($M = 4.74, SD = .70$) endorsed higher scores on femininity gender role than female participants ($M = 3.88, SD = 1.18$). However, when the power status of participants was low, female participants ($M = 4.15, SD = 1.10$) endorsed higher scores on femininity gender role than male participants ($M = 3.78, SD = 1.16$). The ANOVA results and descriptive statistics for femininity gender role as a function of the two factors are presented in Table 7. Because the interaction between participant gender and their level of power status was significant, the main effects of participant gender and power status were ignored, and instead the simple main effects were examined. There were no significant differences between power status for men, $F(1, 173) = .27, p = .60$, and power status for women, $F(1, 173) = .44, p = .51$. The simple main effects results are presented in Table 8. The hypothesis regarding interaction

between participant gender and level of power status having an impact on female gender stereotype was supported.

Table 7. ANOVA Results and Descriptive Statistics for BSRI-Femininity by Gender and Power Status of Participants.

Gender of Participants	Power Status of Participants	M	SD	N
Male	High	4.74	.70	24
	Low	3.78	1.16	17
Female	High	3.88	1.18	22
	Low	4.15	1.10	23

Source	SS	Df	MS	F	p
Gender of Participants	1.30	1	1.30	1.20	.28
Power Status	2.46	1	2.46	2.27	.14
Gender of Participants X Power Status	7.96	1	7.96	7.34**	.01
Error	88.86	82	1.08		
Total	101.07	85			

Note. BSRI-Femininity = Femininity items in Bem Sex-Role Inventory; SS =Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

Table 8. Simple Main Effect Results for Differences between Power Status for Men, and Power Status for Women.

Gender of Participants	SS	Df	MS	F	p
Male	.35	1	.35	.27	.60
Error	218.67	173	1.26		
Female	.55	1	.55	.44	.51
Error	218.67	173	1.26		

Note. SS =Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

Hypothesis 5

The fifth hypothesis also made three predictions, and each prediction is discussed separately. The first prediction was that compared to low power

participants, high power participants would hold more sexist attitudes toward women than toward men. A two-way ANOVA of participant's power (high, low) and the gender of the person in the vignette (male, female) on sexist attitudes was conducted. The interaction between participant gender and the vignette person's gender was not statistically significant, $F(1, 172) = .03, p = .86$. Despite the insignificance, the main effects of participant's power and the vignette person's gender were still conducted, and they were found to be statistically non-significant, [$F(1, 172) = .82, p = .37$; $F(1, 172) = 2.06, p = .15$, respectively]. The ANOVA results and descriptive statistics for sexist attitudes as a function of the two factors are presented in Table 9. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on sexism was not supported.

Table 9. ANOVA Results and Descriptive Statistics for ASI by Power Status of Participants and Gender of the Person in Vignette.

Gender of Person in Vignette	Power of Participants	M	SD	N	
Male	High	2.56	2.31	45	
	Low		.94	45	
Female	High	2.39	2.20	46	
	Low		1.04	40	
Source	SS	Df	MS	F	p
Gender of Person in Vignette	.83	1	.83	.82	.37
Power of Participants	2.08	1	2.08	2.06	.15
Gender of Person in Vignette X Power of Participants	.03	1	.03	.03	.86
Error	174.11	172	1.01		
Total	176.99	175			

Note. ASI = Ambivalent Sexism Inventory; SS =Sum of Square; df = degree of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

The second prediction of hypothesis 5 was that compared to low power status participants, high power participants would show more discriminatory behaviors toward women than toward men. A two-way ANOVA of participant's power (high, low) and the gender of the person in the vignettes (male, female) on gender discrimination was conducted. The interaction between participant's power and the vignette person's gender was not statistically significant, $F(1, 172) = .66, p = .42$. Despite the insignificance, the main effects of participant's power and the vignette person's gender were still conducted, and they were found to be non-significant [$F(1, 172) = 2.68, p = .10$; $F(1, 172) = 2.86, p = .09$, respectively]. The ANOVA results and descriptive statistics for gender discrimination as a function of the two factors are presented in Table 10. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on discrimination was not supported.

Table 10. ANOVA Results and Descriptive Statistics for GDPI by Power of Participants and Gender of the Person in Vignette.

Gender of Person in Vignette	Power of Participants	M	SD	N
Male	High	3.84	.52	45
	Low	3.94	.87	45
Female	High	3.93	.62	46
	Low	4.20	.84	40

Table 10. cont.

Source	SS	Df	MS	F	<i>P</i>
Gender of Person in Vignette	1.41	1	1.41	2.68	.10
Power of Participants	1.50	1	1.50	2.86	.09
Gender of Person in Vignette X Power of Participants	.35	1	.35	.66	.42
Error	9.27	172	.53		
Total	93.34	175			

Note. GDPI = Gender Discrimination Proxy Items; SS =Sum of Square; df = degree of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

The last prediction of hypothesis 5 was that compared to low power participants, high power participants would endorse more gender stereotypes toward women than toward men. Because gender stereotypes had three levels (femininity gender role, masculinity gender role, and neutral gender role), three separate two-way ANOVAs were conducted, and are discussed separately.

The first two-way ANOVA examined participant's power (high, low) and gender of the person in the vignette (male, female) on femininity gender role. The interaction between participant's power and the vignette person's gender was found to be significant at the .05 level, $F(1, 173) = 4.34, p = .04$. The ANOVA results and descriptive statistics for femininity gender role as a function of the two factors are presented in Table 11. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on female gender stereotypes was supported.

Table 11. ANOVA Results and Descriptive Statistics for BSRI-Femininity by Power of Participants and Gender of the Person in the Vignette.

Gender of Person in Vignette	Power of Participants	M	SD	N
Male	High		1.07	45
	Low	3.56	1.14	46
		3.91		
Female	High		1.04	46
	Low	4.32	1.13	40
		3.99		

Source	SS	Df	MS	F	P
Gender of Person in Vignette	7.86	1	7.86	6.58**	.01
Power of Participants	.01	1	.01	.00	.95
Gender of Person in Vignette X Power of Participants	5.18	1	5.18	4.34*	.04
Error	206.82	173	1.20		
Total	219.87	176			

Note. BSRI-Femininity = Femininity items in Bem Sex-Role Inventory; SS = Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

Because the interaction between power levels of participants and gender of the person in the vignette was significant, the main effects of participant's power status and gender of the person in the vignette were ignored, and instead the simple main effects were examined. There were no significant differences between power status over male vignette, $F(1, 173) = 2.37, p = .13$, and power status over female vignette, $F(1, 173) = 1.98, p = .16$. The simple main effects results are presented in Table 12.

The hypothesis predicting that a specific type of interaction between participant's level of power status and the gender of the vignette person would have an impact on female gender stereotypes was not supported.

Table 12. Simple Main Effect Results for Differences between Power Status over Male Vignette, and Power Status over Female Vignette.

Gender of Person in Vignette	SS	Df	MS	F	<i>p</i>	$\eta^{2\dagger}$
Male	2.84	1	2.84	2.37	.13	.01
Error	206.82	173	1.20			
Female	2.37	1	2.37	1.98	.16	.01
Error	206.82	173	1.20			

Note. SS =Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

$\dagger \eta^2$ = the effect size eta squared. Green, Salkind & Akey (2000) indicate that the range of effect sizes for eta squared is .01 (small), .06 (medium), and .14 (large).

The second part of the last prediction in hypothesis 5 was examined by conducting a two-way ANOVA of participant's power (high, low) and gender of the person in the vignette (male, female) on masculinity gender role. The interaction between participant gender and the vignette person's gender was not significant, $F(1, 173) = .05, p = .82$. Despite the insignificance, the main effects of participant gender and the vignette person's gender were still conducted. A significant main effect of power of participants on masculinity gender role was found, $F(1, 173) = 6.84, p = .01$. The main effect of the gender of the person in vignette was not significant, $F(1, 173) = .14, p = .71$. The ANOVA results and descriptive statistics for masculinity gender role as a function of the two factors are presented in Table 13. Generally, the hypothesis regarding interaction between participant's level of power status and the

gender of the vignette person having an impact on male gender stereotypes was not supported.

Table 13. ANOVA Results and Descriptive Statistics for BSRI-Masculinity by Gender of Participants and Gender of the Person in the Vignette.

Gender of Person in Vignette	Power of Participants	M	SD	N
Male	High	4.26	.97	45
	Low	4.70	1.14	46
Female	High	4.23	1.04	46
	Low	4.61	.92	40

Source	SS	Df	MS	F	P
Gender of Person in Vignette	.15	1	.15	.14	.71
Power of Participants	7.24	1	7.24	6.84**	.01
Gender of Person in Vignette X Power of Participants	.05	1	.05	.05	.82
Error	183.08	173	1.06		
Total	19.66	176			

Note. BSRI-Masculinity = Masculinity items in Bem Sex-Role Inventory; SS = Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

The last part of the prediction in hypothesis 5 was examined by conducting a two-way ANOVA of participant's power (high, low) and gender of the person in the vignette (male, female) on neutral gender role. The interaction between participant gender and the vignette person's gender was not significant, $F(1, 173) = .01, p = .93$.

Despite the insignificance, the main effects of participant gender and the vignette

person's gender were still conducted, and they were found to be non-significant [$F(1, 173) = .74, p = .39$; $F(1, 173) = 2.80, p = .10$, respectively]. The ANOVA results and descriptive statistics for neutral gender role as a function of the two factors are presented in Table 14. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on neutral gender stereotypes was not supported.

Table 14. ANOVA Results and Descriptive Statistics for BSRI-Neutral by Gender of Participants and Gender of the Person in Vignette.

Gender of Person in Vignette	Power of Participants	M	SD	N
Male	High	3.77	.68	45
	Low	3.98	.97	46
Female	High	3.88	.70	46
	Low	4.07	.64	40

Source	SS	Df	MS	F	<i>p</i>
Gender of Person in Vignette	.43	1	.43	.74	.39
Power of Participants	1.64	1	1.64	2.80	.10
Gender of Participants X Power of Participants	.01	1	.01	.01	.93
Error	101.21	173	.59		
Total	103.23	176			

Note. BSRI-Neutral = Neutral items in Bem Sex-Role Inventory; SS = Sum of Square; df = degrees of freedom; MS = Mean Square.

** = Significant at the .01 level; * = Significant at the .05 level.

Post Hoc Analyses

Main Effects Analysis of International Sample

Post-hoc analyses were conducted to examine the three main effects with the international participants being excluded. In examining the main effect of participants' power, the one-way ANOVA tests were found to be statistically non-significant for ASI, $F(1, 146) = 1.64, p = .20$; for GDPI, $F(1, 84) = 3.92, p = .05$; for femininity gender role, $F(1, 147) = .00, p = .95$. The one-way ANOVA test for masculinity gender role, however, showed statistically significant results, $F(1, 147) = 11.82, p = .001$. This is an additional significance only observed in post hoc analysis. Because the main effect of participants' power showed to be significant for masculinity gender role, hypothesis 5 was re-analyzed by using only non-international participants.

In examining the main effect of participant gender, the one-way ANOVA tests were found to be statistically non-significant for GDPI, $F(1, 146) = .34, p = .56$; for femininity gender role, $F(1, 84) = .07, p = .79$; for masculinity gender role, $F(1, 147) = .41, p = .53$. The one-way ANOVA test for ASI, however, showed statistically significant results, $F(1, 146) = 32.43, p < .001$.

In examining the main effect of vignette person's gender, the one-way ANOVA tests were found to be statistically non-significant for ASI, $F(1, 146) = 1.36, p = .25$; for GDPI, $F(1, 146) = 2.95, p = .09$; for masculinity gender role, $F(1, 147) = .07, p = .79$. The one-way ANOVA test for femininity gender role, however, showed statistically significant results, $F(1, 147) = 7.46, p = .01$.

Post Hoc Analysis of Hypothesis 5 – Using Non-international Sample.

The fifth hypothesis made three predictions, and the post hoc analysis of each prediction is discussed separately. The first prediction was that compared to low power participants, high power participants would hold more sexist attitudes toward women than toward men. A two-way ANOVA of participant's power (high, low) and the gender of the person in the vignette (male, female) on sexist attitudes was conducted. The interaction between participants' power and the vignette person's gender was not statistically significant, $F(1, 147) = .23, p = .63$. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on sexism was not supported in the sample of non-international participants.

The second prediction of hypothesis 5 was that compared to low power status participants, high power participants would show more discriminatory behaviors toward women than toward men. A two-way ANOVA of participant's power (high, low) and the gender of the person in the vignettes (male, female) on gender discrimination was conducted with exclusively non-international participants. The interaction between participant's power and the vignette person's gender was not statistically significant, $F(1, 147) = .60, p = .44$. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on discrimination was not supported in the sample of non-international participants.

The last prediction of hypothesis 5 was that compared to low power participants, high power participants would endorse more gender stereotypes toward women than toward men. Because there are two kinds of gender stereotypes (femininity gender role, masculinity gender role), two separate two-way ANOVAs were conducted and discussed separately.

The first two-way ANOVA examined participant's power (high, low) and gender of the person in the vignette (male, female) on femininity gender role. The interaction between participant's power and the vignette person's gender was found to be statistically significant at the .05 level, $F(1, 148) = 4.94$ $p = .03$. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on female gender stereotypes was supported in the non-international sample.

The second part of the last prediction in hypothesis 5 was examined by conducting a two-way ANOVA of participant's power (high, low) and gender of the person in the vignette (male, female) on masculinity gender role. The interaction between participants' power and the vignette person's gender was not significant, $F(1, 148) = .09$, $p = .77$. Generally, the hypothesis regarding interaction between participant's level of power status and the gender of the vignette person having an impact on male gender stereotypes was not supported.

CHAPTER V

DISCUSSION

Women often experience unique barriers at the workplace that hinder their career development (Whitley & Kite, 2010). Three of these barriers are focused on in this study: gender stereotypes, sexist attitudes, and gender discrimination. Although research shows that the endorsement of such stereotypes, attitudes, and behaviors negatively impacts women's career identity, there were limited studies examining how power status impacts such endorsement. The purpose of this study was to examine the endorsement of negative beliefs of women between people who have higher and lower power status, as well as the impact on women's career development. This is an important endeavor for research and multiculturalism, as women are a growing group in the workforce (U.S. Department of Labor, 2008).

Discussion of the Results

Hypothesis 1

The first research question investigated whether there was a difference in participants' endorsement of gender stereotypes, sexist attitudes, and gender discrimination depending on their assigned level of power status. Hypothesis 1 postulated that participants in higher power positions would endorse more gender stereotypes, hold more sexist attitudes, and show more discriminatory behaviors than participants in lower power positions. This hypothesis was not supported in this study.

Participants' assigned level of power status was not significantly associated with increased endorsement of gender stereotypes, sexist attitudes, and gender discrimination.

Sachdev and Bourhis (1985) have found support for the idea that having higher power status leads people to display significantly more discriminatory behaviors. Specifically, subjects in this study were categorized into different groups, and were instructed to distribute resources to people other than themselves. Sachdev and Bourhis (1985) found that when group members were assigned more power to distribute resources, they allocated much more resources to members in their own group, and significantly limited resources to people in other groups. As consistent with the concept of discrimination, subjects showed behaviors that resulted in different outcomes for members of different groups (Benokraitis & Feagin, 1995), and therefore committed discriminatory behaviors. This current study, however, did not support the argument that high power results in more discrimination. Participants did not limit more career development resources such as employment, promotional, or training opportunities just because they had more power to make such decisions. One of the reasons these studies yielded different results may be the differences in the designs of these two studies. Instead of being categorized with clear group labels as in the Sachdev and Bourhis (1985) study, no differences or similarities between participants and the person they read about in the vignette were explicitly mentioned in this study. Therefore, there were not obvious in- and out-group labels, which may be part of the reason higher power did not lead to added discrimination.

There are no existing studies examining the relationship between power status and gender stereotypes, or between power status and sexism. A possible explanation for the non-significant results of this study could be related to the artificial setting. Specifically, participants were briefly informed of their role as an employer or as an employee before beginning the survey. Participants may not have internalized this artificially and temporarily assigned identity enough to observe a measurable change on stereotypical beliefs and attitudes. Such lack of internalization of the identity assigned to them might have contributed to the insignificant results.

Another conclusion to be drawn from these insignificant results is that higher power, as a matter of fact, did not cause an increased endorsement of stereotypes, sexism, and discrimination. More than 30 years have passed since Sachdev and Bourhis' (1985) study. One can reasonably argue that the working environment has been changing and has become more friendly and inclusive for women. Especially considering that the majority of participants in this study were relatively young (under 40), they represent a completely different population and culture compared to what Sachdev and Bourhis (1985) investigated 30 years ago. The conclusion that beliefs, attitudes, and behaviors toward working women are changing among younger generations is suggested by the results, and this possibility should be seriously considered.

Hypothesis 2

The second research question examined whether there was a difference in participants' endorsement of gender stereotypes, sexist attitudes, and gender

discrimination depending on the gender of participants. Hypothesis 2 postulated that male participants would endorse more gender stereotypes, sexist attitudes, and gender discrimination than female participants would. This hypothesis was partially supported in this study. Results suggested that male participants seemed to endorse significantly more sexist attitudes than female participants. This finding is consistent with Fernández and colleagues' (2006) finding that male college students showed more hostile sexist attitudes toward women than female college students did (Fernández et al., 2006). This study also found that people who study in fields that are most associated with masculinity (e.g., technical fields such as physical sciences, engineering, and applied mathematics) showed the most sexist attitudes. The fact that men endorsed more sexism in the current study is consistent with Fernández and colleagues' (2006) finding that men and masculinity are often associated with increased sexist attitudes. As previous studies examined, sexism promotes acceptance of prejudicial attitudes (Barreto & Ellemers, 2005) and contributes to the perpetuation of biases in evaluative judgments of women and gender inequalities (Heilman, Wallen, Fuchs & Tamkin, 2004). Because men are the more privileged gender at the workforce (Messerschmidt, 1986; Whitley & Kite, 2010; Syverson 2003; Gutek, 2001), and have more access to career advancement resources (Ragins & Sundstrom, 1989; Dipboye, 1987; Rannold; 1987), such stronger sexist attitudes could be explained as fulfilling the function of maintaining the perceived privilege.

Despite the significant association between sexism and gender of participants, gender stereotypes and discrimination were not significantly associated with gender of

participants. It is worth mentioning the Ambivalent Sexist Inventory, measuring sexist attitudes, was the only scale that measured the attitudes of the participants in general, independent of the vignette. The results suggested that male participants tended to agree with general sexist attitudes, but when it came to endorsement of a specific individual, their attitudes were not translated into significant gender stereotypes or discriminatory behaviors against that person. It is possible that participants perceived it as more socially acceptable to affirm sexist attitudes than to act unfairly toward a specific person.

Further explanation for the insignificant results regarding gender stereotypes can be revealed through comparison with previous studies. Schein (1973, 1975, and 2001) found that over the years, women have had reductions in their stereotypical thinking. For instance, they believed women and men were as equally likely to possess characteristics necessary for managerial success, and they expected to be treated equally in selection and promotion process. Men, however, have continuously endorsed the same gender stereotypes over the 30 years of Schein's (1973, 1975, and 2001) study. Such differences in stereotype endorsement among the two genders were not confirmed in this study; female and male participants did not differ in their endorsements of sexist attitudes. Because subjects used in Schein's (1973, 1975, and 2001) work were mid-level managers who already possessed career-related power in real life, one possibility is that female managers must reduce stereotypical thinking about gender in order to defend the legitimacy of their high status. Male managers, on the other hand, must perpetuate gender stereotypes in order to legitimize their high

status and privilege. Thus the significant discrepancy between stereotype endorsement in female and male managers was a result of the different needs of female and male managers. In this current study, participants did not necessarily hold such tangible power, and that may have contributed to the non-significant results.

Because gender discrimination is a behavioral application of gender stereotypes, and gender stereotyping is a contributing factor to gender discrimination (Bobbitt-Zeher, 2011), the non-significant results regarding stereotypes may be part of the reason discrimination was also found to be non-significant in this hypothesis. Further explanation for the insignificant results regarding discrimination can also be revealed through comparison with previous studies. Snizek and Neil (1992), for example, found that when male privilege was not threatened by women, minimal discrimination against women was observed. However, when women occupied jobs and job ladders where power and money were at stake, men discriminated against women significantly more. One conclusion drawn from this study was that the perception of women as threats to male privilege determined the amount of discriminatory behaviors men endorsed (Snizek & Neil, 1992). Because the vignette was a hypothetical scenario not connected with participants' real lives in any way, it is reasonable to argue that the male participants in the current study did not perceive the woman they read about in the vignette as substantial threats to their career status, and that may have contributed to the non-significant results.

Looking beyond the design of the study, one can also argue that social expectations have changed over the past decade; what was once socially acceptable,

such as thinking about women in stereotypical ways, and discriminating against women based on such thinking, has become socially undesirable. Social desirability bias (Crowne & Marlow, 1960) describes the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others. It can take the form of over-reporting desirable behaviors or under-reporting undesirable behaviors (Crowne & Marlow, 1960). While this tendency could pose serious problems, especially in research with self-report designs (discussed in more depth in the Limitations section), it could also suggest that participants are complying with a specific set of social norms (Nederhof, 1985). A conclusion to be surmised from the insignificant results of this hypothesis is that people with gender privilege (i.e., men) still hold general sexist attitudes, but to comply with a new and changing social norm, they inhibit such attitudes when articulating beliefs about and actions toward women.

Hypothesis 3

The third research question examined whether there was a difference in participants' endorsement of gender stereotypes, sexist attitudes, and gender discrimination depending on the gender of the person in the vignette. Hypothesis 3 postulated that participants would endorse more gender stereotypes, sexist attitudes, and gender discrimination toward women than toward men. This hypothesis was again partially supported in this study. Participants endorsed significantly more female gender stereotypes toward women than toward men. However, they did not endorse significantly more sexist attitudes, discriminatory behaviors, or male gender stereotypes. It is important to note that when the person in the vignette was given a

female name (“Kate”), and was addressed using female pronouns, participants perceived her as more feminine compared to when a male name (“Dan”) and male pronouns were used, even though the rest of the content in the vignette was the same. The results suggest that perceived gender was enough to activate gender stereotypes, and this is consistent with previous findings. For example, studies found that gender-based stereotypes have two and only two clusters of traits, and are directly associated with women and men (Deaux & LaFrance, 1998; Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968). Such stereotypes emphasize not only the differences between women and men, but that the differences are oppositional, polarized and mutually exclusive of each other (Bem, 1993; Heilman 2001). Therefore, in judging our vignette woman (“Kate”), the endorsement of feminine traits in participants also suggests a lack of endorsement of masculine traits in them. Given that the femininity gender role does not include “assertiveness,” “leadership abilities,” “willing to take a stand,” or other beliefs suggesting work competence, such stereotypical images can be very concerning to women’s career identity development.

In testing the third hypothesis, perceived gender was not linked with more sexist attitudes or discriminatory behaviors against women. A closer look at previous studies might provide possible reasoning to explain this result. Heilman’s (2010) study found evidence that women experienced more sexist attitudes, and their work was judged as inferior when they produced identical work accomplishments compared to their male counterparts. These negative reactions, however, occurred only when women’s success diverged from traditional female gender roles (such as being a

leader in a company; Heilman, 2001). Similar findings about gender discrimination were supported by Snizek and Neil's (1992) study. They found that when women pose little or no threat to men, they perceive minimal discrimination. In the current study, the descriptive information provided about "Kate" or "Dan" does not include accomplishments distinctively male in character. Perhaps participants did not perceive "Kate" as a threat to men, therefore leading to insignificant results.

Yet another possibility in interpreting the data is that in the current era, sexist attitudes and gender discrimination against women are significantly reduced at workplaces, although stereotypical thinking about what women and men should and should not do are still observed. Despite the fact that, as discussed before, stereotypes are an important contributing factor to discrimination, they may not always result in discriminatory behaviors. This result might speak to a better implementation and enforcement of laws such as Equal Employment Opportunity (Department of Labor, 2016), as well as Discrimination and Harassment Trainings currently adopted by many organizations (Hemphill & Haines, 1997). One can reasonably argue that such laws and policies have brought positive cultural changes to career settings. In addition, considering the results of this hypothesis, such reasoning could further suggest that laws and policies tend to intervene more effectively at the behavioral and attitudinal levels, such as providing equal employment opportunities and creating a sexual-harassment free environment. Despite that, laws and policies may have limited power in changing biased beliefs endorsed by individuals, such as gender stereotypes.

Hypothesis 4

The fourth research question examined whether there was a difference in participants' endorsement of gender stereotypes, sexist attitudes, and gender discrimination depending on the interaction of power status and gender of participants. Hypothesis 4 postulated that male participants in higher power positions would endorse more gender stereotypes, sexist attitudes, and gender discrimination toward women than female participants in lower power positions would. This hypothesis was once again partially supported in this study. Men with high power did not show significantly more sexist attitudes or gender discrimination than women with low power. However, when power was high, men endorsed significantly more female gender stereotypes than women did. At the same time, when power was low, women endorsed significantly more female gender stereotypes than men did. These results are consistent with Schein's (1973, 1975, and 2001) studies as he found that over the span of 30 years, compared to male managers, female managers changed their once biased beliefs more quickly and considered women and men as equally likely to possess characteristics necessary for managerial success. Furthermore, similar to the current study, male managers, or men in power, in Schein's (1973, 1975, and 2001) studies endorsed more female gender stereotypes. Because gender stereotypes have the function of legitimizing the inequalities between women and men (Bruckmüller, Hegarty, & Abele, 2012), Schein's (1973, 1975, and 2001) results were consistent with the fact that men with high power and women with low power are the ones fulfilling the gender stereotypes. However, people may be using the stereotypes for

different reasons. A possible reason for this is that those men with high power use gender stereotypes to justify their power and privilege. There are limited studies examining the endorsement of gender stereotypes in women. However, it might be reasonable to suggest that women with low power have the need to use gender stereotypes to explain and make sense of their lack of privilege.

As part of the results of the fourth hypothesis, men in high power did not endorse more sexism or discrimination than women in low power. As discussed in the third hypothesis, when women pose little or no threat to male privilege, they perceived minimal sexism (Heilman, 2001) and discrimination (Snizek & Neil, 1992). It seems logical to argue that men in high power are in a solid position to not easily feel threatened, and therefore are not likely to endorse more sexism and discrimination than women in low power. It seems that when men are in high power status, they have the need to legitimize their power with gender stereotypes, but they do not have the need to be hostile toward or discriminate against women as long as they do not perceive women as a threat to their status. Sachdev and Bourhis (1985) found that participants assigned to the highest power group exhibited a certain degree of benevolent paternalism or “noblesse oblige.” This concept suggested that when power was so high and absolute, some favoritism toward those less powered was affordable (Sachdev & Bourhis, 1985). In the current study, male participants who were assigned to the high power condition might engage in similar reasoning, and that might explain the lack of endorsement of sexism and discrimination.

Another way to explain the insignificant results regarding sexism and discrimination in this hypothesis is to consider that, again, the way women are treated at the workplace might be improving. Men, especially men in high power, are adopting more inclusive attitudes and behaving more friendly toward their female colleagues. We might need further studies to confirm such a possibility, but based on the current results, the possibility that men in high power have started to appreciate more of what female workers could contribute to workplaces is worth considering.

Hypothesis 5

The fifth research question examined whether there was a difference in participants' endorsements of gender stereotypes, sexist attitudes, and gender discrimination depending on the interaction of power status and gender of the person in the vignette. Hypothesis 5 postulated that compared to low power participants, high power participants would endorse more gender stereotypes, sexist attitudes, and gender discrimination toward women than toward men. This hypothesis is again partially supported in this study. High power participants did not show significantly more sexist attitudes toward women than low power participants did. Fernández and colleagues (2006) found that people in the fields associated with masculinity, status, and power, such as technical fields, endorsed more sexist attitudes than people in other fields. Therefore, Fernández and colleagues (2006) argued that having high power leads to more sexist attitudes. A similar conclusion was not supported in this study. One way of explaining this discrepancy is that participants in Fernández's (2006) study held power in their real lives, versus in the current study; participants

were assigned to a pretend and temporary power position. Participants may not have internalized their assigned power status enough for the results to be significant.

In addition, high power participants in the current study did not show significantly more discriminatory behaviors towards women than low power participants did. A previous study showed that having higher power status leads to more discriminatory behaviors toward out-group members (Sachdev & Bourhis, 1985). The Social Identity Theory developed by Festinger (1954) stated that people develop a concept of in- and out- group, and tend to favor in-group members more than out-group members. Due to the design of the current study, participants may not have identified with the person described in the vignette as an in- or out-group member, which might explain the lack of significant results about discrimination.

While the results do not suggest measurable endorsements of sexism and discrimination, one should be very careful in arguing that today's working environment is becoming drastically more gracious toward women. The results also showed that when power was high, participants endorsed significantly more female stereotypes toward the woman ("Kate") than endorsing male stereotypes toward the man ("Dan"). It seems that high power people tended to have more biased views about women than about men. But when power was low, participants did not endorse significantly more female or male gender stereotype toward "Kate" or "Dan." There is a lack of studies examining the impact of power status on individuals' formations of gender stereotypes. However, because gender stereotypes have the functions of rationalizing the distribution of sexes into social occupational roles, legitimizing the

inequalities between women and men, and enhancing men's higher power status (Bruckmüller, Hegarty, & Abele, 2012; Hoffman & Hurst, 1990), emphasizing female gender stereotypes might help high powered people maintain their power. The results suggested that women are more vulnerable to becoming the easy target of high powered people in maintaining their power. Endorsing a biased view about women might significantly impede women's career development, because occupations consistent with such views are almost always low power status ones (Anker, 1998). Because gender stereotypes influence evaluations of women in work settings, even when women are equally as competent as men, they still would not gain the same working opportunities, and would not develop their career identities to the same levels, as men would (Swim et al., 1989). Therefore, emphasizing female gender stereotypes may be one way to keep the less privileged where they are.

Post Hoc Analyses

In post hoc analysis, non-international participants were separated from international participants, and were analyzed again for the three main effects and for hypothesis 5. In main effects analysis, it was found in the international sample that participants' power has a significant main effect for male stereotypes. There is very limited research that study power and male stereotypes with international sample. Reading from our data, however, it is reasonable to consider that international participants with high power might be more likely to endorse male stereotypes. In hypothesis 5 analyses, the results showed no significant differences between these the whole samples and the non-international sample. Both samples showed that the

interaction was significant for female stereotypes endorsement. This is consistent with other studies where endorsement of gender stereotypes of women was evidenced (Miller, et al., 1991) and where gender stereotypes were found to be more strongly endorsed by people of power (Schein, 1973, 1975, 2001).

Summary of Results Discussion

To integrate the results of each hypothesis, significant results mostly pointed to the endorsement of female stereotypes. Some contributing factors included the gender of the perceiver, the gender of the perceived, and the power status of the perceiver. Specifically, women tended to be especially vulnerable to female gender stereotypes when the perceivers were men who had high power, and when the perceivers were women who had low power. The latter part of this result suggests that women face internalized gender biases in addition to external gender biases. Such a combination could create a very disturbing situation for women at the lower levels of the career totem pole and wanting to advance into leadership roles. They would have to manage both external and internal pressures to stay where they are. Another significant result is that men tended to show much more sexist attitudes than women. Such results suggest that women at the workplace still have to deal with biases suggesting that they are not as competent as men, and still have to face many more barriers than their male counterparts in developing their career identities. The largely insignificant results regarding gender discrimination may have been caused by flaws in the methodology of this study. However, they could also suggest a climate change

in workplaces, such as decreased tolerance of a hostile working environment against women. Such inferences are discussed in more detail in the Implications section.

Limitations

Sampling Methods

While the current study examined the relationship between power status and gender stereotypes, sexism, and discrimination closely and comprehensively, it is not without its limitations. The first limitation to discuss is the sampling method. A drawback and limitation to online sampling is the possibility that only those individuals that have access to computers, the internet, and the knowledge of how to use them would participate. The integrity of the data from the sample cannot be guaranteed because respondents were not supervised and there were no requirements to follow up with participants. Fortunately, there is some research suggesting that online sampling is just as adequate if not preferred in some situations (Birnbaum, 2004). For instance, investigators who have conducted research using these techniques have, for the most part, judged the method to be successful (Birnbaum, 2004). Krantz and Dalal (2000) reviewed nine studies comparing web-based and lab versions and concluded that results from the two methods yielded surprising agreement. Furthermore, web studies, by having larger samples, usually have greater power and more demographic diversity than lab studies (Krantz & Dalal, 2000). Although some methodological problems have emerged in web-based research because of the lack of control in web studies, many investigators consider the

advantages in experimental power, low cost, and convenience of testing via the web to outweigh its disadvantages (Birnbbaum, 2004).

Another drawback is that the study required respondents to self-report their endorsement of gender stereotypes, sexism, and gender discrimination, and relied on the honesty of participants in reporting accurate scores. Wilcox (2005) argued that the degree to which self-report is a problem varies with the topic of the questionnaire; for example, participants are less likely to be honest about measures related to sexual behavior or drug use than they are about caffeine consumption. Honesty of participants can be a real threat to the current study, because endorsement of gender stereotypes, sexism, and gender discrimination can be seen as socially undesirable, and could easily provoke dishonest responses (Crowne & Marlow, 1960). Despite that, social desirability is highly influenced by social norms (Nederhof, 1985); results could nonetheless reflect critical information about the current social norms. How much gender stereotypes are tolerated by social norms, for example, could still provide valuable information about women's working environments.

Sample Demographics

Related to the sampling method, the individuals sampled for this study were largely homogeneous. Specifically, the sample was largely White, heterosexual, and between the ages of 20 and 40. Fortunately, men and women were about equally represented in this study. Nonetheless, the sampling method and the sample itself should still be scrutinized in considering the data's external validity. More specifically, when generalizing to racial minorities (African American, Native

America, Asian American, Hispanic, and Multiracial) and sexual minorities (gay/lesbian, bi-sexual, asexual, and pansexual), the representation of them in the sample should be considered (27% to 12%, respectively). In addition, results may not be generalized to people who are not represented in the study, such as those who identify as transgender, or other gender or sexual minorities. The results are also only applicable to those within the U.S. majority culture. The data represented some people with international status (7.9%), but the size does not seem to be large enough for the results to be applicable to international non-immigrants residing in the US, nor could the results represent international populations outside of the US.

Another limitation of the sample is that it contains an uncommonly large size of international participants. This portion of the sample seemed to endorse statically different features comparing to the rest of the sample, as evidenced by the significant results of the main effect of power showed in post hoc analysis of the international sample. It is reasonable to consider that international participants reaction to power status differently in endorsing certain types of stereotypes. The overall sample may be compounded because of the large size of international participants.

Design of Methodology

In this study, power status was controlled by randomly assigning clients as an employer or an employee at the beginning of the survey. Such power status assignment was artificial and temporary. It was unclear how strongly participants identified themselves as employer/employee, and how much their answers were influenced by their assigned power status. The design of the current study is

considerably different, for example, from Schein's (1973, 1975, 2001) study, where participants were mid-level managers and held substantial career power in their real lives. The pretend power status might cause insignificant results, and may be a limitation in this study.

In this study, a vignette technique was used to elicit beliefs, attitudes, and planned behaviors from responses to a story depicting a made-up person. Vignettes can be very useful in allowing actions to be explored in a context, and providing a less personal and therefore less threatening way of exploring sensitive topics (Neale, 1999). For this reason, the use of a vignette in this study has important value. Especially considering how gender biases can be seen as socially undesirable, responding to a vignette could be a less threatening way to report honestly. However, the use of vignettes can pose another set of limitations in this study. There is wide debate in the field of social sciences surrounding the differences between the real world and the vignette world, which remains critically unresolved (Hughes & Huby, 2012). Vignettes were used in this study with the intention of making links between what participants believe they might do (for example, ascribe stereotypes to a vignette person) and their actual actions (actually ascribe stereotypes to a real person). The indeterminate relationship between beliefs and actions is the biggest danger in using vignettes (West 1982). Some studies have concluded that responses to vignettes reflect how individuals would actually respond in reality (Rahman, 1996), and some other studies found contrary results (Carlson, 1996). Hughes (1998, p. 384) concluded, "We do not know enough about the relationship between vignettes and real

life responses to be able to draw parallels between the two.” Therefore, the generalization of the results may be compromised by the use of vignettes.

Measurements

In addition to the setup of the investigation, measurements used in the study have limitations to be noted as well. Because sexism often exists in a subtle form, and gender biases are often hidden and implicit, the Gender-Career Version of the Implicit Association Test (IAT) was suggested to this writer. The IAT is a measure within social psychology designed to detect the strength of a person's automatic associations between mental representations of objects or concepts in memory (Greenwald, McGhee, & Schwartz, 2008). The IAT assesses strengths of associations between concepts by observing response latencies in computer-administered categorization tasks. The Gender-Career Version of the IAT measures subtle sexism and implicit attitudes and assesses whether hidden gender biases are endorsed (Greenwald et al., 2008). For example, faster responses for the {male+career/female+family} task than for the {male+family/female+career} task would indicate a stronger association of male than of female with career valence (Greenwald, Poehlman, Uhlmann & Banaji, 2009). Because of cost and other practical reasons, the IAT was not used in our study, which is a limitation not to be ignored. Although a measure used in this study (e.g., the BSRI) captured benevolent and covert forms of sexism, in addition to hostile and overt forms, it is nonetheless an explicit self-report measure that is qualitatively different from an implicit association measure. Therefore, one could still suspect that subtle and implicit gender biases are not fully captured by the current measurements.

Hofmann and his colleagues (2005), for example, found low correlations between implicit and explicit measures. In explaining the low correlations, they studied several potential causes, including motivational biases in explicit self reports, lack of introspective access to implicitly assessed representations, and difficulties in retrieving information from memory (Hofmann, Gawonski, Gschwendner, Le, & Schmitt, 2005). The lack of the IAT could also help in explaining the largely insignificant results of this study, which is discussed more fully in the Implications section.

Another relevant limitation of measurement is that measures were not timed during the administration of them. That means participants could stay on a certain page as long or as short as they wanted. It is argued that if the administration time was recorded, we could obtain statistics on the average time consumed for each instrument, and we could potentially better detect invalid results by discarding outliers.

Another limitation of design is that this study exclusive investigate the social construct of gender. It is imperative to restate that socially constructed categories of differentiation interact to create a social hierarchy as well as overlapping and interdependent systems of oppression and domination (DeFrancisco, et al., 2013). It is important to bring up that this study has very limited ability in reporting how different forms of oppression are interrelated with each other, as well as the impact of intersectionality on women's working experience.

To conclude, as with most research, there are limitations to this study that are critical to consider when interpreting the results. Researchers should always interpret

the results and implications with caution, and remain thoughtful of the relational attributes of this study.

Implications

Although gender stereotypes, discrimination, and sexism against women at the work setting have been comprehensively studied, the effects of power status are largely unknown. This dissertation project is an attempt to examine the effects of power status on the endorsement of gender stereotypes, discrimination, and sexism. The impact of gender stereotypes, discrimination, and sexism are experienced by women on a regular basis in career settings, and these factors have significant negative impacts on women's career development (Bruckmüller, Hegarty, & Abele, 2012; Cuddy, Fiske, & Glick, 2004; Fernández, et al., 2006; Lyness & Judiesch, 1999). Women, compared to men, are the less privileged group in career settings (Dworkin, Maurer, & Schipani, 2012; Fitzpatrick & Rappoport, 2011; Ragin & Sundstrom, 1989). Our results provide important theoretical and research implications, as well as practical and clinical implications related to women's working experiences. It is hypothesized that in career settings, women are targets of gender stereotypes, sexism, and gender discrimination, especially when encountering people in high power positions. Findings regarding these hypotheses are important steps in explaining the barriers women experience at the workplace, as well as informing the development of new policy and legislation to promote gender equality at workplaces in the United States.

Research Implications

The significant results of this study suggest that women are targets of female gender stereotypes of 1) high power men and 2) low power women. The first part of the results is undoubtedly concerning. Given that men predominantly occupy high power positions at workplaces (Dworkin, Maurer, & Schipani, 2012; Ragin & Sundstrom, 1989), it implies the disturbing fact that women are very likely the victims of gender stereotypes in a top-down hierarchical relationship. The second part of the results, however, is also not to be taken lightly. Although low power women have less hierarchical power over others and are less likely to impose a threat to others, they tend to be the majority of women in any given work setting (Whitley & Kite, 2010). The results suggest that the massive bulk of female workers tend to internalize gender stereotypes. In other words, they are not likely to see themselves as assertive, having leadership abilities, and otherwise as competent as male workers. This internalized self-image combined with external threat imposed by high power men would predictably make it very difficult for these women to advance their careers. It would be worth the attention of future research to examine the interaction between these two barriers, and the impact on female workers on their development of career aspirations.

One of the main results of this study is that power status did not have much impact on gender discrimination. This is contradictory to the results of Sachdev and Bourhis' (1985) finding that high power led to significantly more discrimination. This contradiction suggests several implications. First, it might suggest that the design of and measures used in the study need to be refined so measurable discrimination can

be captured. For instance, the instrument used to measure discrimination (GDPI) may not have successfully captured discrimination, and a better instrument, such as the Implicit Association Test, may be needed. This provides an recommendation for future research that one might consider use of a different measure or development of a better measure to examine discrimination. Other possible suggestions for future research include using an experimental design to substitute the vignette design, and using an implicit association measure to substitute the explicit self-report measure, as discussed later in this section.

Another implication to be considered is that a few decades have passed since Sachdev and Bourhis' (1985) study. Our results might imply that the working environment has changed toward the direction of gender equality. The workplace culture may have evolved in a way that people who have hiring, promoting, and other career-related powers are expected to use the power more responsibly and to create a more inclusive environment for women. This interpretation also suggests implications for future studies. For instance, researchers could hypothesize about such positive change, and examine as well as find a way to quantify such change.

As one of the limitations of this study, an Implicit Association Test (IAT) was not included as a measurement. The Gender-Career Version of the IAT is especially powerful at detecting subtle sexism and implicit attitudes and assessing whether hidden gender biases are endorsed (Greenwald et al., 2008). Compared to explicit self-report measures, the IAT effectively overcomes social desirability bias (Greenwald et al., 2008). Because this study did not include an IAT measure, one

could argue that the validity of the study is threatened. Specifically, an argument could be made that the measures used in this study such as the BSRI, ASI and GDPI do not capture subtle gender biases and the impact on one's behavior. This limitation might have contributed to the insignificant results. As one of the implications of this study, it would be interesting for future studies to include an IAT measure and find out if additional gender biases are detected.

Furthermore, the use of vignettes, as discussed before, might have limited the information regarding the differences between what participants believe they might do and their real actions (West, 1982). A possible direction for future research is to repeat the study with a different research design. For instance, instead of using vignettes, participants may be asked to act in experimental situations, where they might be conducting mock interviews with a real person, and making hiring decisions or answering questionnaires afterward. Another possibility is to recruit among regular employees and employers with hiring power and look at the differences they endorse on questionnaires. These alternative research designs might provide us additional information on the impact of power status on gender biases.

The current study also enriches further understanding and application knowledge of career development theories. For instance, Bandura's Social Cognitive Theory (2001) stated that self-efficacy, or the belief that one is capable to organize and execute the courses of action required to produce given attainments, is the most influential predictor of human behaviors (Bandura, 2001). Strengthening self-efficacy, therefore, would be an important task in developing career identity (Bandura, 2001).

The current study provides important implications for factors that might negatively impact women's self-efficacy. While it is beyond the scope of this study to look at if women, compared to men, significantly lacking on same-gender managerial role models and mentors in high power positions, it is important to understand some of the specific psychological factors associated with this important process. Our study suggested, however, that having higher power status tends to lead people to more dichotomous thinking about gender roles, and could potentially result in more discouraging messages for women in developing their careers. As a result, it might be particularly challenging for women to develop self-efficacy in attaining leadership roles at work. Future studies could examine specifically about how male and female leadership role models help men and women develop leadership self-efficacy. It would also be interesting to examine specifically how gender stereotypes, discrimination, and sexism influence women's career self-efficacy, career turnover, and career success.

Clinical Implications

Almost 75% of married women ages 25 to 54 years old are in the labor force in the United States. Many are in occupations that are below their potential or are not personally satisfying (Hughes, Brame, Vaughn & Ward, 1998). Beyond theoretical and practical implications, this study also provides implications for supporting women in developing their careers in vocational counseling. Our results showed that, for both men and women, more gender stereotypes were endorsed toward women. In addition, women in low power endorsed significantly more female gender stereotypes.

Furthermore, people with high power tended to endorse more gender stereotypes toward women than toward men. This suggests that women are vulnerable not only in becoming the victims of female gender stereotypes, but also in internalizing gender stereotypes. These results are valuable educational information for counselors in training and may be added to career counseling classes. Counselors who work with women on career issues need to be aware of any gender biases they may hold regarding types of professions that are suitable for each gender and regarding women in leadership (Chae, 2002). Furthermore, counter-transference problems may arise if the counselor has unresolved issues concerning ambition, risk taking, or being in leadership positions (Chae, 2002). And finally, in counseling women for career choices, gender stereotypes endorsed by clients and clients' social environments must be recognized and acknowledged. In doing so, the counselor becomes a change agent and a voice for changing organizations and social systems that maintain gender stereotypes and sexist attitudes (Hansen, 2003).

Practical Implications at the Workplace

Besides theoretical implications, this study also provides practical implications for policy makers and law enforcers in creating an equal, inclusive, and pleasant working environment. Our study found that men endorsed more sexist attitudes than women did, and men in high power tended to engage in more dichotomous thinking in gender roles. These findings suggest that to create a more equal and inclusive working environment for women, more women need to be represented at high power status levels. However, existing studies showed that women are severely under-represented

at managerial and high power positions in many fields (Fitzpatrick & Rappaport, 2001; Guteck, 2001). For instance, only 15% of senior managers and fewer than 3% of CEOs of Fortune 500 companies are women (Dworkin, Mauer, & Shipani, 2012). Such gender distribution at the workplace puts women at high risk of becoming recipients of sexist attitudes and gender stereotypes. Therefore, these findings also suggest that sexism and gender stereotypes are real threats for women at the workplace, and need to be addressed in policies and laws.

To counteract such risks, it is recommended that awareness about career barriers women might be facing should be raised. For example, male and female leaders in high power positions should be educated about what sexist attitudes and gender stereotypes might look like, and the potential negative consequences on female workers and on the organization. In other words, people in leadership positions should know why it is important to avoid sexism and gender stereotypes at the workplace (Buchanan, Settles, Hall, & O'Connor, 2014). In addition, policy makers should make extra efforts in ensuring a working environment that is free from sexism and gender stereotypes. For instance, guidelines for workers to complain about unpleasant experiences should be created and enforced. Such unpleasant treatment should include being treated with sexist attitudes and/or being classified to a stereotypical image (Buchanan et al., 2014).

Although our study did not find that women were discriminated against by our participants, previous studies have suggested that gender stereotyping may contribute to discrimination (e.g., Glick & Fiske, 2007; Ridgeway & England, 2007). Bobbitt-

Zeher (2011) found that gender stereotypes predictably combine institutional policies across work settings to contribute to gender discrimination. Stereotypes of women as less invested workers, views of women as sexual objects, and notions of women's traits as incompatible with specific jobs are connected to gender discrimination in a variety of organizational contexts (Bobbitt-Zeher, 2011). Through interactional dynamics of discretionary policy usage, gender stereotypes are combined with sex composition of workplaces and organizational policies in very predictable ways to result in discrimination (Bobbitt-Zeher, 2011). For example, institutional actors use policies that appear gender-neutral on the surface in ways that, in actuality, treat women and men workers differently (Bobbitt-Zeher, 2011). Consistent with Bobbitt-Zeher's findings, our study suggests that gender stereotypes should be taken seriously at the workplace, and should be addressed by policies and policy makers.

Such findings are consistent with existing findings; for instance, Buchanan and colleagues (2014) found that sexual victimization rooted in sexism continues to be one of the most common forms of workplace mistreatment. According to their study, in order to reduce sexual harassment, a clear and consistent anti-harassment message from organizational leaders is essential (Buchanan et al., 2014). It was also recommended that organizations conduct regular self-assessments of sexual harassment and perceptions of the organizational climate as proactive efforts to effectively intervene and eliminate its occurrence (Buchanan et al., 2014).

Summary

Women in the United States are steadily obtaining higher levels of education as well as greater representation in the workforce (Syverson, 2003; Whitley & Kite, 2010). Women make significant contributions in the workplace, and achieving success in a high-paying career has become increasingly important to them (National Center for Education Statistics, 2007; Pew Research Center, 2010-2011). Despite women's high career aspirations, women in nontraditional roles are still expected to behave submissively or fulfill the roles of being wives and mothers, and women often experience unique barriers at the workplace that hinder their career development (Whitley & Kite, 2010).

Although research shows that the endorsement of gender stereotypes, sexist attitudes, and discriminatory behaviors against women negatively impacts women's career identities, few studies examining how power status impacts such endorsements. This study made an important effort in examining the endorsement of negative beliefs of women between people who have higher and lower power status, as well as the impact on women's career development. More specifically, this study suggests that women nowadays are still vulnerable targets of female gender stereotypes and sexist attitudes. Such biased thinking and negative attitudes are most strongly endorsed by men with power and women without power. Such a working environment would impose the most barriers to women at lower power status, as they must negotiate both external oppression and internalized biases. The largely insignificant results related to

discrimination, however, also suggest that a climate change might be taking place in the workforce, where hostile working environments against women are less tolerated.

The insignificant results also prompted reflection on future research implications. For instance, different research designs, such as an experimental design, and different measures, such as implicit association measures, are suggested. Further, this study offered clinical implications, such as the possibility that unique external and internal threats women face in their career development should be emphasized in career counseling trainings. Counselors' roles as changing agents (Chae, 2002) are also stressed. Finally, we offered practical implications in creating a more inclusive and just workplace, such as addressing threats in policies and laws, implementing anti-harassment messages from organizational leaders, and conducting self-assessments of sexual harassment (Buchanan et al., 2014).

APPENDICES

APPENDIX A

DEMOGRAPHICS SURVEY

Your gender:

Male

Female

Other: _____

Your Age: _____

Your race/ethnicity:

African American/Black

American Indian/Native American/First Nations

Asian American/Pacific Islander

Caucasian/White

Hispanic/Latino/Latina

International Status (please specify): _____

Mixed/Multiracial (please specify): _____

Other (please specify): _____

Your sexual orientation:

Bisexual

Lesbian/Gay

Heterosexual

Other (please specify): _____

What is the income in your household?

_____ Under \$15,000

_____ \$15,000-25,000

_____ \$25,000-40,000

_____ \$40,000-60,000

_____ \$60,000-90,000

_____ \$90,000-120,000

_____ \$120,000-150,000

_____ \$150,000+

What is your generational status in regard to US/Canadian citizenship?

1st generation (you were born outside of the US/Canada)

If so, what country were you born in? _____

2nd generation (you were born in the US/Canada and one or both parents were born outside of the US/Canada)

My parents and I were all born in the US/Canada

APPENDIX B

INSTRUCTIONS AND SCENARIOS

This is a study that looks at how people quickly form first impressions, and making important decisions from little information. Participants will be asked to imagine themselves working in the McKinsey & Company's Manhattan office, and their office is looking for an employee to hire. They should try to decide if they want to hire this person from very little information. They should read the profile of this applicant and give their first impressions of them.

Condition 1

Imagine you work as a manager at the McKinsey & Company's Manhattan office and are looking for an employee to hire for your office. You are trying to decide if you want to hire this person from very little information. We'd like you to read the profile of this applicant at McKinsey & Company's Manhattan office and give us your first impressions of them. Please try to respond with your first, uncensored impressions.

Kate is a 36-year-old associate consultant who graduated with an MBA. She's been working in her current field for ten years. When working with a client, her duties include identifying issues, planning and conducting interviews and analyses, synthesizing conclusions into recommendations, and helping to implement change in her client's organizations. Her hobbies include swimming and tennis. She lives in central New Jersey, commuting to work five days a week.

Condition 2

Imagine you work as a manager at the McKinsey & Company's Manhattan office and are looking for an employee to hire for your office. You are trying to decide if you want to hire this person from very little information. We'd like you to read the profile of this applicant at McKinsey & Company's Manhattan office and give us your first impressions of them. Please try to respond with your first, uncensored impressions.

Dan is a 36-year-old associate consultant who graduated with an MBA. He's been working in his current field for ten years. When working with a client, his duties include identifying issues, planning and conducting interviews and analyses, synthesizing conclusions into recommendations, and helping to implement change in his client's organizations. His hobbies include swimming and tennis. He lives in central New Jersey, commuting to work five days a week.

Condition 3

Imagine you work as an employee at the McKinsey & Company's Manhattan office. We'd like you to read the profile of your boss at McKinsey & Company's Manhattan office and give us your first impressions. Please try to respond with your first, uncensored impressions.

Kate is a 36-year-old associate consultant who graduated with an MBA. She's been working in her current field for ten years. When working with a client, her duties include identifying issues, planning and conducting interviews and analyses, synthesizing conclusions into recommendations, and helping to implement change in her client's organizations. Her hobbies include swimming and tennis. She lives in central New Jersey, commuting to work five days a week.

Condition 4

Imagine you work as an employee at the McKinsey & Company's Manhattan office. We'd like you to read the profile of your boss at McKinsey & Company's Manhattan office and give us your first impressions. Please try to respond with your first, uncensored impressions.

Dan is a 36-year-old associate consultant who graduated with an MBA. He's been working in his current field for ten years. When working with a client, his duties include identifying issues, planning and conducting interviews and analyses, synthesizing conclusions into recommendations, and helping to implement change in his client's organizations. His hobbies include swimming and tennis. He lives in central New Jersey, commuting to work five days a week.

APPENDIX C

BEM SEX ROLE INVENTORY

On each item, on a scale from “not at all accurate ” (1) to “extremely accurate ” (7), please rate how accurately each of the characteristics describes the person in the scenario.

Mark a 7 if it is considered EXTREMELY DESIRABLE

Mark a 6 if it is considered VERY ACCURATE

Mark a 5 if it is considered QUITE ACCURATE

Mark a 4 if it is considered MODERATELY ACCURATE

Mark a 3 if it is considered SOMEWHAT ACCURATE

Mark a 2 if it is considered SLIGHTLY ACCUATE

Mark a 1 if it is considered NOT AT ALL ACCURATE

1. Defend own beliefs
2. Affectionate
3. Conscientious
4. Independent
5. Sympathetic
6. Moody
7. Assertive
8. Sensitive to needs of others
9. Reliable
10. Strong personality

11. Understanding
12. Jealous
13. Forceful
14. Compassionate
15. Truthful
16. Have leadership abilities
17. Eager to soothe hurt feelings
18. Secretive
19. Willing to take risks
20. Warm
21. Adaptable
22. Dominant
23. Tender
24. Conceited
25. Willing to take a stand
26. Love children
27. Tactful
28. Aggressive
29. Gentle
30. Conventional

APPENDIX D

AMBIVALENT SEXISM INVENTORY

The statements on this page concern women, men, and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement by circling on the numbered buttons below.

(1) No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(2) Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."

Disagree strongly 0 1 2 3 4 5 Agree strongly

(3) In a disaster, women ought not necessarily to be rescued before men.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(4) Most women interpret innocent remarks or acts as being sexist.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(5) Women are too easily offended.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(6) People are often truly happy in life without being romantically involved with a member of the other sex.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(7) Feminists are not seeking for women to have more power than men.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(8) Many women have a quality of purity that few men possess.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(9) Women should be cherished and protected by men.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(10) Most women fail to appreciate fully all that men do for them.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(11) Women seek to gain power by getting control over men.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(12) Every man ought to have a woman whom he adores.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(13) Men are complete without women.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(14) Women exaggerate problems they have at work.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(15) Once a woman gets a man to commit to her, she usually tries to put him on a tight leash.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(16) When women lose to men in a fair competition, they typically complain about being discriminated against.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(17) A good woman should be set on a pedestal by her man.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(18) There are actually very few women who get a kick out of teasing men by seeming sexually available and then refusing male advances.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(19) Women, compared to men, tend to have a superior moral sensibility.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(20) Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(21) Feminists are making entirely reasonable demands of men.

Disagree strongly 0 1 2 3 4 5 Agree strongly

(22) Women, as compared to men, tend to have a more refined sense of culture and good taste.

Disagree strongly 0 1 2 3 4 5 Agree strongly

APPENDIX E

GENDER DISCRIMINATION PROXY ITEMS

Condition 1

Please rate the following on a 5-point scale, from 1 "extremely unlikely" to 5 "extremely likely."

1. As the employer, how likely will you hire Kate in the scenario for your office?
2. As the employer, how likely will you promote Kate if she is hired?
3. As the employer, how likely will you provide training resources for Kate that is beneficial for her future promotion?

Condition 2

Please rate the following on a 5-point scale, from 1 "extremely unlikely" to 5 "extremely likely."

1. As the employer, how likely will you hire Dan in the scenario for your office?
2. As the employer, how likely will you promote Dan if he is hired?

3. As the employer, how likely will you provide training resources for Dan that is beneficial for his future promotion?

Condition 3

Please rate the following on the 5-point scale.

1. How strongly do you think your boss (Kate in the scenario) should or should not be hired?

(rate from 1 "very strong not to hire" to 5 "very strong to hire")

2. How strongly do you think your boss Kate should or should not promote?

(rate from 1 "very strong not to promote" to 5 "very strong to promote")

3. How strongly do you think your boss Kate should or should not be provided training resources that are beneficial for his/her future promotion?

(rate from 1 "very strong not to provide" to 5 "very strong to provide")

Condition 4

Please rate the following on the 5-point scale.

1. How strongly do you think your boss (Dan in the scenario) should or should not be hired?

(rate from 1 "very strong not to hire" to 5 "very strong to hire")

2. How strongly do you think your boss Dan should or should not promote?

(rate from 1 "very strong not to promote" to 5 "very strong to promote")

3. How strongly do you think your boss Dan should or should not be provided training resources that are beneficial for his/her future promotion?

(rate from 1 "very strong not to provide" to 5 "very strong to provide")

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