6-2018

The Effects of a Blind Selection Process on Gender Discrimination in Applicant Selection

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THE EFFECTS OF A BLIND SELECTION PROCESS ON GENDER DISCRIMINATION IN APPLICANT SELECTION

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Psychology:

Industrial/Organizational

by

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ABSTRACT

The purpose of the current study was to examine the effect of a blind selection process on gender discrimination. Due to persistent gender discrimination in selection processes, the intention of the current study was to investigate a blind selection process as a means to decrease gender discrimination against women. A total of 391 individuals were recruited through SONA and convenience sampling to participate in the current study. Materials included a selection scenario, three applicant résumés with applicant names and three with applicant ID numbers, a rank order form, and measures for procedural justice and fairness, modern sexism inventory, and the attitudes towards women scale. Participants were randomly assigned to one of three conditions; one with applicant names, one with applicant ID numbers with no explanation for the ID numbers, and one with applicant ID numbers without an explanation. Results illustrated partial support for hypothesis 1a (H1a) and H2a, such that there was a significant difference in rank orders (H1a) and job suitability scores (H2a) as a function of condition assignment, though in the opposite direction than hypothesized. There was support for H1b, H1c, H2b, and H2c such that in blind conditions, qualified applicants received similar rank orders (H1b) and job suitability scores (H2b), while the unqualified applicant received the lowest rank order (H1c) and job suitability scores (H2c). Procedural justice scores were similar between the two blind conditions, and as such, H3a and H3b was not supported. Participants with an explanation perceived blind conditions as fair and

non-blind conditions as unfair, thus H3c was supported. However, H3d was not supported, as participants without an explanation still perceived a blind process as fair and a non-blind process as unfair. Neither H4a nor H4b were supported, as sexism did not serve as a covariate with rank orders as a function of condition assignment. Last, H5 was not supported, as participants across all three conditions were similarly confident in their rank order decisions. Limitations included an imbalanced sample of primarily female (N = 320) psychology students (N = 380). Possible explanations for results obtained include the effects of similarity bias, identification, sophistication and education, and experimenter effects. Results expand the current body of literature in personnel selection processes and create implications for blind selection processes and practical use in organizations to decrease gender discrimination.

Keywords: Blind selection processes, gender discrimination, personnel selection, biases, sexism

ACKNOWLEDGEMENTS

I would like to thank the California State University, San Bernardino Industrial and Organizational Faculty for their unwavering support! Thank you, Dr. Kottke, for providing guidance throughout the master's program and being my mentor in both course work and social maneuvers. Thank you, Dr. Agars, for initiating my interest in psychological research. Thank you, Dr. Diaz for facilitating my knowledge of statistics. Thank you, Dr. Shultz for always reminding me that I was often overcomplicating easy concepts. Thank you, Dr. Gilbert, for continuously offering encouragement. I do not know that I would have been able to complete this program without support from everyone as I fought a battle with multiple sclerosis throughout the duration of this program.

I would also like to thank my sister for always being there for hospital visits, my significant other for battling multiple sclerosis through gradate school beside me.

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CHAPTER ONE

LITERATURE REVIEW

The Effects of a Blind Selection Process on Gender Discrimination in Applicant Selection

Despite equal opportunity employment mandated by the Civil Rights Acts of 1964 and 1991, as well as the Equal Pay Act of 1965, gender discrimination has been and still is a frequent occurrence in the workplace (Bendick & Nunes, 2012). As illustrated in a meta analysis conducted by Swim, Borgida, Maruyama, and Meyers (1989), historically, male candidates were frequently selected over equally qualified female candidates. While Swim et al. (1989) examined jobs that may have been perceived as gender specific (i.e., leadership jobs as being masculine, and clerical or secretarial jobs as being feminine) in the meta analysis, Swim et al. (1989) discovered that the effect size for gender discrimination in the work place was a small one. Yet, gender discrimination at entry level jobs may ultimately lead to fewer women than might be expected in managerial positions (Dick & Nadin, 2006). This outcome may be explained by Agars (2004) and others (Martell, Lane, & Emrich, 1996) in that the trickledown consequences of a small effect size can result in a larger impact later in time. This explanation is congruent with the larger issue that has presented in the form of minimal representation of women in leadership and/or managerial positions across industry and organizations.

Role Congruity Theory: Background

A number of possible explanations exist for persistent gender discrimination with one leading theory, role congruity, which was investigated in the meta-analysis by Swim et al. (1989). The introduction of the Joan vs. John study illustrated that when a job was male-stereotyped, male candidates were selected more frequently than equally qualified or more qualified female candidates (Swim et al., 1989). Delving more deeply into factors that may explain gender discrimination between men and women (addressing additional gender identities is outside the scope of this paper), role congruity theory suggests that a woman will more likely experience prejudice and/or discrimination upon attempting to obtain a position associated with male stereotyped characteristics and traits. Eagly and Karau (2002) suggested that discrimination toward women attempting to obtain leadership roles occurred because, historically, leadership has predominantly been a masculinized role. Socially, there are perceived differences between the traditional female traits and the traits that are deemed necessary in a leadership position. Research has previously supported the notion that both men and women preferred their boss to be male across most situations (Eagly & Karau, 2002). New research conducted by Vial, Brescoll, Napier, Dovidio, and Tyler (2017) suggest that this trend for male leadership preference by all followers may be changing; researchers found that female participants rated female supervisors more highly than their male supervisors, while male participants still rated their male supervisors more highly than their female

supervisors. Nevertheless, the historical trend of male leadership preference could be a result of gender biases in favor of males as opposed to women with regards to the workplace. Gendered situational factors include, but are not limited to, whether the leadership position required traits such as: caring, communal, direct, assertive, communicative, independent, and so forth (Gartzia, Ryan, & Aritzeta, 2012). Leadership positions have often been perceived to require masculine-stereotyped traits such as independence, directness, and assertiveness (Koenig, Eagly, Michell, & Ristikari, 2011). While women may be praised for having leadership related abilities, they might be less likely to obtain and hold a position of authority because of the male stereotypical nature of the position (Ryan et al., 2016).

Johnson, Murphy, Zewdie, and Reichard (2008) conducted a plethora of testing to examine role congruity theory as posited by Eagly and Karau (2002). Qualitative, experimental, and survey data were used to test the participant biases against male and female prototypes. As a result, researchers found that across both male and female participants, leaders were expected to exhibit different characteristics, depending on their gender. Male leaders were expected to display strength to be perceived as an effective leader, and even tyranny was strongly associated with male leadership (Johnson et al., 2008). Conversely, female leaders were expected to display sensitivity more so than male leaders; however, to be considered effective in leadership, female leaders were expected to display a combination of sensitivity and strength (Johnson et al., 2008). No

such combination was required of male leaders in the studies conducted by Johnson et al. (2008). Additional support for preferred differences in male and female behavior was found by Bongiorno, Bain, and David (2014) when examining assertive versus tentative qualities. Researchers found that female leaders were more favorably evaluated when they portrayed assertiveness as opposed to tentativeness. However, male leaders could display either assertiveness or tentativeness and still be evaluated positively (Bongiorna et al., 2014). Recent research on role congruity theory continues to support the notion that, in regards to managerial positions, male stereotypical characteristics were preferred over female stereotypical characteristics in leadership (Cuadrado, Garcia-Ael, & Molero, 2015). In their study, Cuadrado et al. (2015) examined characteristics between real and hypothetically ideal managers. Across three conditions consisting of male manager, female manager, and manager in general, characteristics which were stereotyped as being male in nature were selected significantly more than general or female characteristics (Cuadrado et al., 2015). As a result, men were selected more than women for managerial positions. Furthermore, Cuadrado et al. (2015) found that there was a stronger correlation of the male-manager selection across female subordinates as opposed to male subordinates. Women, more so than men in this sample, preferred their bosses to be male, and that these bosses possess male stereotyped qualities and characteristics.

The strong association and preference of male managers and male

characteristics across females is not a new finding in the role congruity research. For instance, Garcia-Retamero and Lopez-Zafra (2006), found that individuals' expectations of gendered roles impacted their prejudice (i.e., negative beliefs about men and women) against candidates of the opposite gender, but also that prejudice was stronger (more rigid) in female participants than male participants. Not only did female candidates experience participant prejudice while applying for a position considered incongruent with the female gender role, but as well as when applying for a position congruent with their gender role (Garcia-Retamero & Lopez-Zafra, 2006). Prejudice was more notable across female and older participants as opposed to male and younger participants (Garcia-Retamero & Lopez-Zafra, 2006), supporting the notion of role congruity theory as well as observer same-gender biases.

An inconsistency can be found in the role congruity theory literature, such that, although leadership positions are stereotyped as being male or masculine in nature, there could be a preference for feminine leadership styles (Caudrado, Morales, Recio, & Howard, 2008). Eagly and Karau (2002) illustrated that female leaders were met with prejudiced evaluations upon adopting a role considered to be incongruent with their gender (i.e., a leadership role). However, Cuadrado et al. (2008) discovered that when competencies and efficacy were considered equal across male and female applicants for a leadership position, participants positively evaluated leaders who selected a feminine leadership style (i.e., caring, supportive, communal). This shift in leadership preferences could be a

result of a shift in focus from leader gender to other, more relevant information about the leader. Such a shift creates opportunities for research to examine factors other than gender that impact selection for leadership positions, such as the type of information presented in applicants' résumés for leadership positions.

The role congruity theory literature contains an overarching theme regarding the evaluations and expectations of male and female leaders. Specifically, female leaders appear to receive, more quickly, harsher evaluations and overall disapproval from subordinates upon their failure to meet expectations. This does not appear to be the case for male leaders, who are more accepted and positively evaluated, regardless of their style and qualities. Regardless of the underlying rationale, men are selected more frequently for a number of leadership and managerial positions over their female counterparts (Dick & Nadin, 2006; Eagly & Karau, 2002; Swim et al., 1989).

Gender Bias in the Selection Process

As previously noted, gender bias (preference for one gender over the other) could result in sexism (i.e., overt behavior of selecting an applicant of one gender over the other). An inherent bias in favor of men in the workplace could be a factor in the disparity between men and women in selection for leadership positions. The literature on gender bias has illustrated that there are two forms: implicit and explicit. Implicit gender bias is believed to be a result of underlying cognitive processes such as stereotyping and categorization (Greenwald & Krieger, 2006). Explicit gender bias has been described as the behavior (i.e.,

decision-making) that results from an implicit bias (Agerstrom & Rooth, 2011; Rooth, 2010). For example, in personnel selection, an implicit bias in favor of men would result in the selection of men for managerial positions. Such overt behavior is also known as sexism. Bosak and Sczesney (2011) suggested that, as a result of gender biases in favor of men, leadership and managerial positions consist predominantly of males, and because of the persistence of gender bias in favor of men, men in leadership roles continue to select other men for other leadership roles. This perpetual homophilous cycle as the social norm in the workplace has no doubt affected the selection decisions of the few female leaders (Bosak & Sczesney, 2011). Specifically, the pressures of the workplace social norm to select men for leadership roles has likely influenced women in leadership to select men for other leadership positions (Derks, Van Laar, & Ellemers, 2016).

As previously mentioned, stereotypes, defined as the knowledge, beliefs, and expectations that are associated with social groups and their members (Mackie & Smith, 1998), may be a cognitive process that underlies implicit biases (Greenwald & Krieger, 2006). Stereotyping occurs when knowledge or perceived beliefs and expectations about a social group result in a generalized application onto an individual (Mackie & Smith, 1998). It is important to note that stereotypes are not inherently negative, but function to help organize information from which an individual can then use to make a decision. Gender stereotyping may result in discrimination in the work place when an individual generalizes a negative

outlook or belief onto a specific person, e.g., a woman. An example of stereotyping might look something like: all females are detail-oriented so they must be micromanagers, therefore, this female will be a micromanager too. As a result of such stereotyping, qualified female candidates may be excluded from an application pool.

Another cognitive process potentially underlying implicit biases is categorization, the process of organizing information into groups and subgroups (Eagly & Karau, 2002). Once organized, information can be categorized into subgroups containing similar information. For example, food might be categorized as anything that might be edible. Subgroups for food might be healthy and unhealthy food. When information is grouped, it is easier to access and apply knowledge, and therefore make decisions that have the best outcomes (Eagly & Karau, 2002). The relationship between categorization and stereotyping is bidirectional, such that categorization can result in stereotyping and vice versa; both processes of implicit bias can result in explicit bias, which can take the form of discrimination in personnel selection against women.

While gender discrimination research is far from scarce, the literature regarding interventions (outside of discrimination and equal opportunity training) for mitigating gender discrimination in selection processes is sparse. The minimization of adverse impact for minority groups is a topic of common discussion for industrial and organizational psychologists, but as disparity still exists for women (as discussed in depth above), it would appear as though more

could be done to mitigate the occurrence of gender discrimination.

The Effects of Human Facilitation in Personnel Selection

Currently, there are several different methods employed by organizations during their personnel selection processes, a number of which do not result in adverse impact (Arthur, Glaze, Jarrett, White, Schurig, & Taylor, 2014; Gatewood, Field, & Barrick, 2016). Some of these assessments are often administered via the internet. As a result, human facilitation is not necessary, and can potentially decrease overt biases in the screening process of selection. By limiting the human factor in the administration, scoring process, and assessment, the assessments are less likely to be biased, subjective, and discriminatory in nature. Gender discrimination might likely begin occurring in the first phase of selection that requires human facilitation: the application and résumé screening phase.

Though organizations employ several screening processes that require no human facilitation, including online applications, various levels of online assessments, and scoring algorithms which are designed to screen applicants out, human facilitation is required after these initial screenings. At some point in the screening process, human resource personnel are required to further screen applications and résumés deemed worthy by assessments and software. It is at this phase in the personnel selection process that bias and discrimination may be introduced. It is at this point in which human resource managers are exposed to the names of applicants, and while this information does not include gender,

applicant gender can be inferred simply by becoming aware of the applicant's name (with the exception of gender neutral names and foreign names). Thus, making it more likely that gender discrimination first occurs at this phase of the selection process.

The Promise of Blind Selection to Mitigate Gender Discrimination

As a result of a large disparity in the ratio of male to female musicians, some orchestras devised a different audition method throughout the 1970s to 1980s (Goldin & Rouse, 1997). A "blind" audition method was created to select musicians exclusively on the basis of talent; this procedure had the ultimate effect of correcting for the disparity in selection of female orchestra players. This method consisted of a screen set up on the stage, blocking the candidate from the view of the selection panel, without obstructing the music (Goldin & Rouse, 1997). As a result, the selection panel relied solely on the sound of the music played by the orchestra applicant, and by the early 2000s, orchestras were comprised of 25% female players, which was a drastic increase from the 5%-10% female composition between 1965 and 1980 (Goldin & Rouse, 1997). There may be additional explanations for this increase in female players, such as an increase in women attending college at prestigious musical arts universities. However, a blind selection process may not only decrease the disparity in selection between men and women, but may also increase the perceptions of procedural justice for an organization both externally (public perception) and internally (employee perception).

Other Potential Consequences of “Blind” Selection

Procedural justice is described as the perception of fairness regarding the process of implementing policies, organizational change (from downsizing: Brockner & Greenberg, 1990), and resource allocation. Levinthal, Karuza, and Fry (1980) noted several factors that will impact perceptions of procedural justice. For procedures to be perceived as fair, they should be applied consistently, there should be a manner in which incorrect decisions can be corrected, procedures ideally should contain ethical and moral guidelines such that individuals are not being treated differently or adversely, and last, procedures will be perceived as fair if individuals impacted by a procedure are allowed to voice concerns and opinions. An organization that adopts and implements new procedures and processes should be aware of the subsequent effects on perceptions of justice. Individuals who believe that procedures are unbiased and ethical, consistent, and allow for feedback and correction will perceive the organization as being fair (Levinthal et al., 1980). A facet of procedural justice is known as *informational justice*, and refers to the manner in which information is communicated, the type of information being communicated, and with whom information is being communicated (Bies & Moag, 1986). For increased perceptions of justice, individuals must feel that communication of information (offering reasons or explanations) is high, that everyone receives information, and that the information being shared is relevant or necessary to their job (Bies & Moag, 1986).

Perceptions of justice result in several beneficial outcomes for the organization, such as commitment (Cohen-Charash & Spector, 2001), trust for the organization (De Cremer & Tyler, 2007), and job satisfaction (Colquitt, Conlon, Wesson, Porter, and Ng, 2001), to name a few. Procedures that lack ethics, are inconsistent, do not allow for feedback, and do not provide relevant and necessary information to everyone may be perceived as unfair and can result in unfavorable consequences for organizations. A personnel selection process that could result in less bias between men and women could be perceived as more just than processes that continue to result in disparity in selection between men and women.

The Current Study

The purpose of the current study was to examine the effect of personnel selection processes on gender discrimination and procedural justice. Specifically, this researcher examined two résumé selection processes; one included applicant names (non-blind process), and one included applicant identification numbers instead of names (blind process). The researcher predicted the following:

H1a) Participants in the non-blind selection condition, in which applicant names will be available, will be more likely to rank order a male applicant as first (aka as the individual they would hire) or second, instead of the equally qualified female applicant.

H1b) Participants in the blind selection condition, in which applicant identification

numbers will be used instead of names, will rank order the qualified applicants without any consistent pattern emerging (i.e., rankings will be no different than random) in the first and second rank order.

H1c) Participants in the blind selection condition will rank order the least qualified (male) applicant last (as 3rd).

H2a) There will be a significant difference in job suitability scores between applicants in the non-blind condition, such that participants in the non-blind selection condition will rate the male applicants (both the qualified and unqualified) as having greater job suitability scores than the equally qualified female applicant.

H2b) Participants in the blind selection condition will rate the qualified male and female applicants in job suitability comparably.

H2c) Participants in the blind selection condition will rate the least qualified (male) applicant with the lowest scores in job suitability.

H3a) There will be a significant difference in procedural justice scores, such that participants in the blind selection condition who receive the explanation for receiving applicant ID numbers will report significantly higher scores in procedural justice than participants in the blind selection condition who do not receive the explanation.

H3b) Participants in the blind selection condition without an explanation for the applicant ID numbers will report significantly lower scores in procedural justice than participants in the non-blind selection condition.

H3c) Using the process comparison questions with the explanation for applicant ID numbers, participants will rate the blind selection process as being fair and the non-blind selection process as being unfair.

H3d) Using the process comparison questions with no explanation for the applicant ID numbers, participants will rate the blind selection process as being unfair and the non-blind selection process as being fair.

H4a) Participants in the non-blind selection condition who exhibit greater sexism will rank order a male for the leadership position significantly more highly than participants lower in sexism.

H4b) Participants in the non-blind condition who are lower in sexism will rank order a female for the leadership position significantly more highly than participants higher in sexism.

H5) Using the job suitability scale, participants in the non-blind selection condition will be more confident in their selection decision as a result of having the applicant names in comparison to participants in the blind selection condition.

CHAPTER TWO

METHOD

Participants

A total of 534 participants were recruited using California State University, San Bernardino's Research Management System (SONA) and Qualtrics. Convenience sampling was used to recruit participants. Of the initial 534 recruited, 391 (men = 66, women = 320, missing = 5) participants were used for the analyses. All participants were English speaking adults age of 18 years of age or older. Participants were asked to provide demographic information including: age, gender, ethnicity, education level, and experience working in personnel selection. Participants' ages ranged from 18 to 75 (M = 22.57, SD = 6.63); ethnicity included: 270 Hispanics/Latinos/Latinas (69.1%), 56 Whites/Caucasians (14.3%), 23 Asians (5.9%), 16 Blacks/African Americans (4.1%), 15 individuals with mixed race/ethnicity (3.8%), 8 individuals identified as "other" (2%), 2 American Indians/Alaskan Natives (.5%), and 1 Native Hawaiian/Pacific Islander (.3%). Participants' highest completed education level were as follows: 138 senior college level (35.3%), 94 freshman college level (24%), 81 junior college level (20.7%), 66 sophomore college level (16.9%), 11 completed a high school diploma (2.8%), and 1 completed a masters degree program (.3%). Participants acquired work experience in years ranged from 0 to 39 (M = 3.67, SD = 5.62) and acquired years of experience in some form of the

personnel selection process ranged from 0 to 25 (*M* = .44, SD = 2.1), though 303 participants (77.5%) indicated they had no experience in any form of personnel selection. Of the 88 participants who indicated having had some experience in the personnel selection process, 50 indicated they had experience in reviewing applications, 43 indicated they had reviewed résumés, 44 indicated they had invited applicants to an interview, 45 indicated they had interviewed applicants, and 37 indicated that they had made selection decisions to hire applicants. Participants in the psychology major received two extra credit points for their participation in the study, while other recruited participants received no incentives for their participation. All participants were treated in accordance with the American Psychological Association's code of Ethics (Ethical Principles of Psychologists and Code of Conduct, 2013).

Materials

The following materials were presented in an online format. The materials included an informed consent page, a demographics page, two versions of a personnel selection scenario (one with an explanation for using applicant ID numbers, one without the explanation), two sets of three applicant résumés (one set with applicant names, one set with applicant ID numbers), ranking and rating forms, an attention check, a procedural justice measure, process comparison questions, a sexism measure, an attitude towards women scale, and a debriefing form. The personnel selection scenario, applicant résumés, and applicant

selection rank-order form had been adopted and modified from Powell (2004).

The informed consent form (Appendix K) included information pertaining to the study and applicant selection task. The demographics form included questions associated with participant age, gender (biologically male or female), ethnicity, level of education, and amount of work experience (years) and experience working in personnel selection, both in years and type of personnel selection activity. The personnel selection scenario (Appendix A) described a situation in which an organization needed to hire a new leader, and three qualified applicants had applied for the leadership position. One version of the scenario included a brief statement explaining the rationale for using applicant ID numbers (Blind explanation condition), the other version did not include this explanation (Non-blind and Blind explanation conditions). This explanation was as follows, “Résumés will contain applicant ID numbers instead of names. Using ID numbers will help reviewers focus on applicant qualifications and therefore result in the most qualified candidate being selected.”

There were two sets of three applicant résumés; one set (non-blind set) included two male applicants’ résumés and one female applicant’s résumé (see Appendix B); the second set (blind set) included the same three applicants’ résumés, but the résumés contained application ID numbers (instead of names and gendered language) (see Appendix C). The three applicant résumés all possessed information regarding the applicants’ skills, knowledge, abilities, experience, and other qualifications.

The job suitability scale (Appendix D) (Bart, Hass, Philbrick, Sparks, & Williams, 1997; McIntyre, Morberg, & Posner, 1980) included instructions for participants to rate each of the applicants on dimensions of job suitability. The applicant selection rank-order form (Appendix E) included instructions for participants to rank-order the applicants from one to three (1 = whom they would choose to hire first, 3 = whom they would choose to hire last). The attention check question asked participants to select the industry of the organization in the scenario (several industry options were presented; Appendix F). A procedural justice measure adopted and modified from Colquitt (2001; see Appendix G) asked participants to rate the fairness of the personnel selection procedure. An additional fairness question was used that compared the two selection processes (non-blind & blind) and inquired about the fairness of the processes (see Appendix H). A sexism measure was adopted in its entirety from Swim, Aiken, Hall, and Hunter (1995) (Appendix I). Finally, an attitude toward women scale was adopted from Spence, Helmreich, and Strapp (1973) (Appendix J). The debriefing statement included the intent of the study, researcher contact information, and thanked participants for their participation.

Procedure

All participants used an electronic device with internet access to participate in the study. From their SONA account or Qualtrics link, participants were able to volunteer to participate in the study, in exchange for extra credit

points (for students). Upon selecting the study for participation, participants were first presented with an informed consent which included the IRB's stamp of approval; participants were instructed to select "Yes" or "No" to indicate their voluntary participation. Upon indicating "No," participants were redirected out of the survey, while an indication of "Yes," resulted in continuation to the study. Next, participants were provided with the demographics page which included instructions to fill-in/select answers corresponding to the demographic information. After completing demographics, participants were randomly assigned into one of three selection conditions, which included either applicants' non-blind résumés (condition 1), or applicants' blind résumés. In the blind condition, applicants were provided with the scenario that included the explanation for using applicant ID numbers (condition 2), or the scenario that did not include the explanation (condition 3). After reading the selection scenario and reviewing the résumés, participants were instructed to complete the job suitability scale for each applicant. After completing the suitability scale, participants were asked to rank-order the applicants in order of which applicant they would first select for the leadership position, whom they would select second, and whom they would select last. After completing the applicant selection rank-order form, participants were presented with an attention check question regarding the industry of the organization presented in the scenario, and then participants completed the procedural justice scale, along with the additional procedure comparison of fairness question. Participants were asked a second attention

check question regarding the number of male and female applicants. Participants then completed the sexism measure and then the attitudes towards women measure. Last, participants were presented with a debriefing form and were thanked for their participation in the study.

Measures

Résumés

One qualified male, one qualified female, and one un-qualified male résumés were used. To determine if the applicant résumés would reveal applicant gender, a pilot study was conducted using nine second year industrial and organizational (I/O) graduate students as subject matter experts. The I/O students were asked to indicate which applicant résumés were for a male or female applicant, or to indicate if they could not determine that information. Additionally, upon indicating an answer for male, female, the SMEs were asked to use information within the résumés to justify their determination of gender. Of the nine I/O students, seven could not determine applicant gender. Furthermore, the SMEs were also asked to select an applicant for the position illustrated in the scenario. All SMEs selected one of the two qualified applicants. As such, the three applicant résumés were used for this study.

Job Suitability

Three items ($\alpha = .7$) were borrowed from job suitability scales created by Bart, Hass, Philbrick, Sparks, and Williams (1997) and McIntyre, Morberg, and

Posner (1980). Items borrowed included, “Given all the information you read about the applicant, how suitable do you believe this applicant is for this [position]?” and “Given all the information you read about this applicant, what is the likelihood that you invite this individual for an interview?” Additional items of this nature were added to the scale by the current researcher to obtain additional information regarding the participants’ perceptions of applicant suitability for the position presented in the scenario. Additional items include, “Given all the information you read about this applicant, do you think this applicant would be a high performer in this position?” and “Given all the information you read about this applicant, how confident would you be in your decision to hire this candidate?”

Procedural Justice

Five items were borrowed from Colquitt’s (2001) procedural justice scale (α = .78). Items borrowed included, “Does this procedure appear to be free from bias?”, “Were you provided with accurate information to make your decision?” and “Did this procedure uphold ethical standards?” Additional items of this nature were added to the scale.

Modern Sexism

The modern sexism scale (8 items) (α = .84) was borrowed from Swim et al. (1995) and included questions such as, “Discrimination against women is no longer a problem in the United States” and “Society has reached the point where women and men have equal opportunities for achievement.”

Attitudes Towards Women

The Attitudes towards women scale (α = .50) was borrowed in its entirety, and consisted of 25 items such as, “Women should be concerned with their duties of childbearing and house tending rather than with desires for professional or business careers.” (Spence, Helmreich, & Strapp, 1973).

Design and Analysis

Design

The current study utilized a mixed design. The between variables were the résumé condition, for which there were three levels: non-blind condition, blind condition with explanation, and the blind condition with no explanation. The repeated measures variable included ratings on the job suitability scale, while between measures included the procedural justice perception of the process scale, comparison questions, the modern sexism inventory, and the attitudes towards women measure.

Analysis

A chi-square was used to detect whether there were significant differences in the applicant rank order as a function of the blind and non-blind condition assignment for hypotheses H1a and H1b. A chi-square was also used to determine if the least qualified applicant was rank ordered last (3^{rd}) significantly more than the other applicants across both selection conditions (H1c). A repeated measures ANOVA was used to examine differences in job suitability

ratings for applicants as a function of the blind and non-blind condition assignment (H2a, H2b, and H2c). A one-way ANOVA was also used to examine differences in procedural justice scores as a function of the blind and non-blind condition assignment (H3a, H3b). An additional chi-square analysis was used to detect differences in procedural justice as a function of the explanation present and no explanation present for H3c and H3d. Hypotheses H4a and H4b were tested with an ANCOVA to determine differences in selection and rank order for participants in the non-blind selection condition as a function of participants' scores on the modern sexism scale (sexism was used as a covariate). A between ANOVA was used to test for differences in scores for the confidence item on the job suitability scale between the non-blind and blind selection conditions (H5).

CHAPTER THREE

RESULTS

The analyses were conducted using SPSS v. 25. Of the initial sample of 534 participants, 391 participants remained in the analysis. A total number of 143 participants were excluded from the analysis for any of the following: incorrectly answering two attention checks, incorrectly answering the attention check regarding the industry of the organization in the scenario, and for not completing 70% or more of the survey questions. Data were screened for outliers, skewness, and kurtosis using a criterion of +/- 3.3 z. Cohen's (1988) rules for evaluations of effect size magnitudes were used when interpreting results obtained from statistical analyses. Specifically, the rules of thumb for evaluation of partial eta squared (small = .01, medium = .06, large = .14), eta squared (small = .02, medium = .13, large = .26), Cohen's d (small = .3, medium = .5, large = .8) and phi (small = .10, medium = .33, large = .5).

Screening

Of the 391 participants included in the sample, 10 presented as outliers in the age (*z skew* = 29.43*, z kurtosis* = 70.77) and years of work experience variables (*z skew* = 26.4*, z kurtosis* = 53.1). Both variables were positively skewed and kurtotic. Ten individuals who were 45 years of age to 75 years of age and had more years of work experience than the rest of the sample, ranging

from 23 years of experience to 39 years of experience. Removal of these 10 outliers did not normalize the distributions of either variable; these cases remained in the data set. Six outliers appeared in the number of years of experience in personnel selection variable. This variable was also positively skewed (*z skew* = 70) and kurtotic (*z kurtosis* = 343.31). Removal of the six outliers did not normalize the distribution for this variable, as a result these outliers remained in the data set. Furthermore, neither age nor years of experience were needed for the analysis testing the study hypotheses. The 391 participants were randomly assigned (by Qualtrics) into one of three conditions: 136 (34.8%) participants were assigned to the non-blind condition, 133 (34%) were assigned to the blind no explanation condition, and 122 (31.2%) were assigned to the blind with explanation condition.

Results: Hypotheses 1a, 1b, 1c

Hypothesis 1a predicted a significant difference between applicant rank orders, such that participants in the non-blind selection condition (applicant names available) would be more likely to rank order either male applicant (qualified and unqualified) as first or second as opposed to the qualified female applicant. The first and second rank orders of the applicants were significantly different: χ^2 *(*1, 205*)* = 19.72*, p* < .05*,* ϕ = .31 (the magnitude of this effect size is medium). Hypothesis 1a was partially supported, for while there was a significant difference in the manner in which male and female applicants were rank ordered

by participants, the significant difference was in the opposite direction than predicted, such that the female applicant was rank ordered significantly more often in the first and second rank order than either of the male applicants. See Table 3.1 for the rank order frequencies.

Hypothesis 1b predicted that participants in the blind selection conditions (applicant ID numbers) would rank order the qualified male and qualified female applicants similarly (aka without a consistent pattern), with no significant pattern emerging in the first and second rank orders. The first and second rank order between the qualified male and female applicants were not significantly different in the blind-no-explanation condition: χ^2 (1, 199) = 1.98, *ns,* ϕ = .1 (the magnitude of this effect size is small). Additionally, the first and second rank orders between the qualified male and female applicants were not significantly different in the blind-explanation condition: χ^2 (1, 190) = .13, *ns,* ϕ = .02 (the magnitude of this effect size is small). Hypothesis 1b was supported, such that the first and second rank order for the qualified male and female applicants were similar, with no pattern emerging in both of the blind selection conditions (see Table 3.1).

Hypothesis 1c predicted that participants in the blind selection conditions would significantly rank order the least qualified male applicant with less frequency for the first rank order in comparison to either of the qualified candidates, and with a higher frequency for the third rank order in comparison to either of the two qualified applicants. In the blind-no-explanation condition, there was a significant difference in the frequency for which the qualified applicant (63)

was rank ordered first in comparison to the frequency in which the unqualified applicant was rank ordered first (20): χ^2 (1, 172) = 9.94, $p < .05$, $\phi = .24$ (the magnitude of this effect size is small to moderate). Additionally, there was a significant difference in the frequency in which the unqualified applicant was rank ordered third (70) and the frequency in which the qualified applicant was rank ordered third (24): χ^2 (1, 183) = 14.32, $p < .05$, $\phi = .28$ (the magnitude of this effect size is small to moderate). In the blind-explanation condition, there was also a significant difference in the frequency for which the qualified applicant (54) was rank ordered first in comparison to the frequency in which the unqualified applicant was rank ordered first (15): χ^2 (1, 153) = 39.19, $p < .05$, $\phi = .51$ (the magnitude of this effect size is large). Furthermore, there was a significant difference in the frequency in which the unqualified applicant was rank ordered third (69) and the frequency in which the qualified applicant was rank ordered third (31): χ^2 (1, 184) = 9.59, $p < .05$, $\phi = .29$ (the magnitude of this effect size is small to moderate). Thus, hypothesis 1c was supported, the unqualified candidate was rank ordered first significantly less frequently than either of the qualified candidates, and was rank ordered third significantly more frequently than either of the qualified candidates (see Table 3.1).

Table 3.1. Rank Order Frequencies

Condition	First Rank	Second Rank	Third Rank
Non-Blind			
JR (qual. F)	70	46	19
JW (qual. M)	38	57	45
JM (unqual. M)	26	37	71
BlindNoExp			
JR (qual. F)	63	44	24
JW (qual. M)	45	47	38
JM (unqual. M)	20	42	70
BlindExp			
JR (qual. F)	54	45	22
JW (qual. M)	52	39	31
JM (unqual. M)	15	38	69

Note. JR denotes the qualified female applicant, JW denotes the qualified male applicant, and JM denotes the unqualified male applicant. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Results: Hypotheses 2a, 2b, 2c

Hypothesis 2a predicted that there would be a significant difference in job suitability scores between applicants in the non-blind condition, such that participants in non-blind selection condition would rate the male applicants (both qualified and unqualified) with significantly higher job suitability scores than the equally/more qualified female applicant. A repeated measures ANOVA was used to test hypothesis 2a, and there was a significant difference in the job suitability scores for the applicants: *Wilk's* $\lambda = .724$, $F(2, 132) = 25.143$, $p < .001$, $\eta_p^2 = .28$

(the magnitude of this effect size is large). While there was a significant difference in job suitability scores between the applicants, the significant difference was found in the opposite direction of the hypothesized direction, such that the female applicant received significantly higher job suitability scores (M = 4.34) than the qualified male applicant (M = 4.03): *Wilk's* λ = .906*, F (*1, 1333*)* = .13.808*, p* < .001*,* η_p^2 = .09 (the magnitude of this effect size is medium); and significantly higher job suitability scores than the unqualified male applicant (M = 3.76): *Wilk's* λ = .746*, F (*2, 132*)* = .45.261*, p* < .001*,* η_p^2 = .25 (the magnitude of this effect size is large). Therefore, hypothesis 2a was partially supported, as a significant difference in job suitability scores was found but not in the hypothesized direction. See Table 3.2 for mean job suitability scores. See Table 3.3 for ANOVA and Post Hoc comparisons between applicants mean job suitability scores per selection condition.

Hypothesis 2b predicted that participants in the blind selection conditions would rate the qualified male and qualified female applicant with similar job suitability scores, ergo, there would be no significant difference between these two applicants' job suitability scores. In the blind-no-explanation condition, the statistical evidence obtained may be interpreted as non-significant when evaluating the job suitability scores between the qualified male (M = 3.96) and female applicant (M = 4.18): *Wilk's* λ = .97*, F (*1, 129*)* = 3.945*, p* = .049 (unrounded), η_p^2 = .03 (the magnitude of this effect size is small). While the p-value is less than .05 unrounded, rounding would result in a p-value equal to .05;

due to a small F-value reported in the Wilk's λ, a small effect size, and a rounded p-value, this researcher will acknowledge these results as non-significant, indicating that there was no significant difference in the job suitability scores between the qualified male and female candidate in the blind-no-explanation condition. In the blind-explanation condition, there was no significant difference in the job suitability scores between the qualified male (M = 4.14) and female applicant (M = 4.20): *Wilk's λ* = .995*, F (*1, 119*)* = .578*, p* = .45*,* η_p^2 = .005 (the magnitude of this effect size is very small). Both the qualified male and female applicant received similar job suitability ratings in both of the blind selection conditions, lending support for hypothesis 2b (refer to Table 3.3).

Hypothesis 2c predicted that participants in the blind selection conditions would rate the least qualified male applicant with significantly lower job suitability scores than the two qualified applicants. In the blind-no-explanation condition, there was a significant difference in the job suitability scores between the unqualified male applicant (M = 3.69) and the qualified male applicant (M = 3.96): *Wilk's λ* = .953*, F (*1, 129*)* = 6.421*, p* < .05*,* η_p^2 = .05 (the magnitude of this effect size is small to medium); and a significant difference in job suitability scores between the unqualified male applicant (M = 3.69) and the qualified female applicant (M = 4.18): *Wilk's λ* = .863*, F (*1, 129*)* = .20.541*, p* < .001*,* η_p^2 = .14 (the magnitude of this effect size is large). The unqualified male did receive significantly lower job suitability scores in the blind-no-explanation condition. In the blind explanation condition, there was a significant difference in job suitability

scores between the unqualified male (*M* = 3.76) and the qualified male (*M* = 4.14): *Wilk's λ* = .886, *F* (1, 119) = 15.304, $p < .001$, $\eta_p^2 = .11$ (the magnitude of this effect size is medium to large); and a significant difference in job suitability scores between the unqualified male applicant (*M* = 3.76) and the qualified female applicant (*M* = 4.20): *Wilk's λ* = .824, *F* (2, 132) = 25.351, $p < .001$, $\eta_p^2 = .18$ (the magnitude of this effect size is large). The unqualified male did receive significantly lower job suitability scores in the blind-explanation condition. Therefore, hypothesis 2c was supported (refer to Table 3.3).

Table 3.2. Applicant Job Suitability Mean Scores per Condition

	Condition		
Applicants	Nonblind	BlindNoExp	BlindExp
JR (qual. F)	4.344	4.179	4.204
JW (qual. M)	4.028	3.964	4.136
JM (unqual. M)	3.763	3.689	3.725

Note. JR denotes the qualified female applicant, JW denotes the qualified male applicant, and JM denotes the unqualified male applicant. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Table 3.3. Statistics for Least Significant Difference Post Hoc Comparisons of Job Suitability Scores Between Applicants per Condition

	F	*df*	Error *df*	Sig.	η_p^2
NonBlind					
Comparison: JR & JW	13.808c	1	133	.000*	0.094
Comparison: JR & JW	45.261c	1	133	.000*	0.254
Comparison: JW & JM	6.011c	1	133	0.016*	0.043
BlindNoExp					
Comparison: JR & JW	3.945c	1	129	0.049	0.03
Comparison: JR & JW	20.541c	1	129	.000*	0.137
Comparison: JW & JM	6.421c	1	129	0.012*	0.047
BlindExp					
Comparison: JR & JW	.578c	1	119	0.448	0.005
Comparison: JR & JW	25.351c	1	119	.000*	0.176
Comparison: JW & JM	15.304c	1	119	.000*	0.114

Note. * denotes significance of $p < .05$. The comparison for JR & JM in the BlindNoExp condition should be interpreted with caution, as rounding would push the p-value to .05. Additionally, the effect size for this comparison is fairly small. JR denotes the qualified female applicant, JW denotes the qualified male applicant, and JM denotes the unqualified male applicant. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Results: Hypotheses 3a, 3b, 3c, 3d

Hypothesis 3a predicted that participants in the blind-explanation (explanation for the use of applicant ID numbers) condition would report significantly higher procedural justice scores than the participants in the blind-no-explanation (no explanation for the use of applicant ID numbers) condition. A one-way ANOVA with an LSD post-hoc analysis was used to test H3a. The one-way ANOVA used to test for significant differences in procedural justice scores

as a function of the three conditions illustrated that a significant difference did exist between the procedural justice mean scores as a function of the condition assignment: $F(2, 388) = 3.755$, $p < .05$, $\eta^2 = .02$ (the magnitude of this effect size is small). An LSD post-hoc analysis was run to test hypothesis 3a, to determine if there was a significant difference between the procedural justice mean score for the blind-no-explanation condition ($M = 5.4$) and the blind-explanation condition ($M = 5.37$). There was no statistical significant difference between the blind selection conditions procedural justice scores: Mean difference = .03333, Standard error = .1245, p = .789, Lower bound confidence interval = -.2114, Upper bound confidence interval = .278. Hypothesis 3a was not supported. See Table 3.4 for mean procedural justice scores and mean differences in procedural justices between conditions.

Hypothesis 3b predicted that participants in the blind-no-explanation condition would report significantly lower procedural justice scores than participants in the non-blind selection condition. A post-hoc analysis was run to determine if there was a significant difference in mean procedural justices scores between the blind-no-explanation condition ($M = 5.4$) and the non-blind condition ($M = 5.1$). There was a significant difference between the blind-no-explanation condition and the non-blind condition regarding procedural justice scores: Mean difference = -.3034, standard error = .1211, $p < .05$, lower confidence interval = -.542, upper confidence interval = -.065. Participants in the blind-no-explanation condition reported significantly higher procedural justice scores than participants

in the non-blind condition, therefore hypothesis 3b was not supported, as the results obtained indicated a significant difference on the opposite direction of that predicted (see Table 3.4).

Hypothesis 3c predicted that, when given an explanation for applicant ID numbers in a blind selection process, participants would report a blind selection process as being fair, and a non-blind selection process as being unfair with a higher frequency than the reports of a non-blind selection process as fair and a blind selection process as being unfair. A chi square analysis illustrated a significance difference in the frequencies in which participants reported a blind selection process as being fair and a non-blind selection process as being unfair (108) in comparison to the frequency in which participants reported a non-blind selection process as being fair and a blind selection process as being unfair (14); χ^2 (1, 243) = 144.85, $p < .05$, $\phi = .77$ (the magnitude of this effect size is large). Participants reported with a significantly high frequency that they perceived a blind selection process as fair and a non-blind selection process as unfair when given an explanation for the use of applicant ID numbers, therefore, hypothesis 3c was supported. See Table 3.5 for frequencies of fairness and unfairness between the selection conditions.

Hypothesis 3d predicted that, when no explanation was given for the use of applicant ID numbers in a blind selection condition, participants would report a blind selection process as being unfair, and a non-blind selection process as being fair with higher frequency than the reports of blind selection process as

being fair and a non-blind selection process as being unfair. There was a significant difference in the frequencies in which participants reported a blind selection process as being unfair and a non-blind selection process as being fair (27) in comparison to the frequency in which participants reported a blind selection process as being fair and the non-blind selection process as being unfair (106); χ^2 (1, 265) = 93.85, $p < .05$, $\phi = .59$ (the magnitude of this effect size is large). While there was a significant difference in frequencies of reported perceived fairness and unfairness of selection processes, the outcome was in the opposite direction than hypothesized, such that even without an explanation for the use of applicant ID numbers, participants still perceived a blind selection process as fair and a non-blind selection process as unfair. Therefore, hypothesis 3d was not supported (see Table 3.5).

Table 3.4. Mean Scores and Mean Score Comparisons of Procedural Justice per Condition

	Condition		
	NonBlind	BlindNoExp	BlindExp
Mean Scores	5.096	5.4	5.366
Mean differences			
NonBlind		-.3034*	-.2701*
BlindNoExp	-.3034*		0.033
BlindExp	-.2701*	.2701*	

Note. * denotes a significant mean difference using p < .05. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Table 3.5. Frequencies for Perceptions of Fairness and Unfairness for Blind and Non-Blind Selection Conditions

Condition	Blind condition is Fair & Nonblind condition is Unfair	Nonblind condition is Fair & Blind condition is Unfair
NonBlind	102	34
BlindNoExp	106	27
BlindExp	108	14

Note. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Results: Hypotheses 4a and 4b

Hypothesis 4a predicted that participants in the non-blind selection condition who had greater sexism scores would rank order a male applicant first (as the applicant they would choose to hire) with a significantly higher frequency than participants who had lower sexism scores. Hypothesis 4b predicted that participants in the non-blind selection condition who had lower sexism scores would rank order the female applicant first (as the applicant they would choose to hire) with a significant higher frequency than participants with higher sexism scores. An ANCOVA to asses for this prediction was not statistically significant: $F(1, 126) = .621$, $p = .432$, $\eta_p^2 = .005$ (the magnitude of this effect size is small). Applicant rank orders did not covary with modern sexism scores in the non-blind

selection condition, therefore, neither hypothesis 4a nor 4b were supported. See Table 3.6 for mean sexism scores and ANOVA statistics.

Table 3.6. Mean Scores for Modern Sexism and Analysis of Covariance for Non-Blind Condition

	Mean	F	Sig.	Partial eta
Condition				
NonBlind	3.463	0.621	0.432	0.005
BlindNoExp	3.412			
BlindExp	3.487			

Note. Modern sexism was tested as a covariate with applicant rank orders in the non-blind selection condition. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Results: Hypothesis 5

Hypothesis 5 predicted that participants in the non-blind selection condition would report higher confidence scores in regards to their applicant selection decisions in comparison to participants in the blind selection conditions. A one-way ANOVA revealed no significant difference in confidence scores between the non-blind condition (M = 3.96), blind-no-explanation condition (M = 3.82), nor the blind-explanation condition (M = 3.9): F (2, 384) = 1.037, p = .356, η_p^2 = .005 (the magnitude of this effect size is small). Hypothesis 5 was not supported, as the confidence scores were similar across all three selection

conditions. See Table 3.7 for mean scores and ANOVA statistics. For a review of the hypotheses and results in the current study, please review Table 3.8.

Table 3.7. Between Analysis of Variance and Mean Scores for Confidence per Condition

	Mean Score	F	*df*	Error *df*	Sig.
		1.037	2	384	0.356
Condition					
NonBlind	3.956				
BlindNoExp	3.842				
BlindExp	3.895				

Note. Nonblind refers to the condition which included applicant names. BlindNoExp refers to the condition with applicant ID numbers, and no explanation for the use of applicant ID numbers. BlindExp refers to the condition with applicant ID numbers and an explanation for the use of applicant ID numbers.

Table 3.8. Hypotheses and Results

Hypoth.	Point of Hypothesis	Result
1a	Nonblind: significant difference in rank orders; first & second rank order = male applicants > female applicants	Partial Support
1b	Blind: qual. male applicants rank orders = qual. female applicant rank orders	Supported
1c	Blind: unqualified male applicant = third rank order	Supported
2a	Nonblind: significant difference in job suitability scores; male applicants > female applicants	Partial Support
2b	Blind: qual. male job suitability scores = qual. female job suitability scores	Supported
2c	Blind: unqual. male applicant = lowest job suitability scores	Supported
3a	Procedural Justice Scores: BlindExp > BlindNoExp	Not Supported
3b	Procedural Justice Scores: BlindNoExp < BlindExp	Not Supported
3c	BlindExp: Blind process as fair & Nonblind as unfair > Nonblind as fair & Blind as unfair	Supported
3d	BlindNoExp: Nonblind as fair & Blind as unfair > Blind process as fair & Nonblind as unfair	Not Supported
4a	Nonblind: first rank order of a male; higher in sexism > lower in sexism	Not Supported
4b	Nonblind: first rank order of a female; lower in sexism > higher in sexism	Not Supported
5	Confidence Scores: Nonblind participants > Blind participants	Not Supported

Ancillary Results

A supplemental correlation analysis, *t*-test, and ANOVA were run in an effort to examine the modern sexism variable as a potential covariate of several of the sample demographics. There was a significant correlation between sexism and gender (r = -.3) and the supplemental *t*-test illustrated a significant difference in modern sexism means between men (N = 66, *M* = 3.81) and women (N = 320, *M* = 3.38): $t(384) = 6.103$, $p < .001$, *Cohen's d = .17* (the magnitude of this effect

size is small). Additionally, the supplemental ANOVA illustrated a significant difference in modern sexism means between the different ethnicities: F (6, 389) = 3.606, $p < .05$, $\eta^2 = .05$ (the magnitude of this effect size is small). For a review of the participant demographics and supplemental data, please refer to Appendix L.

CHAPTER FOUR

DISCUSSION

The purpose of the current study was to examine the effect of personnel selection processes, gender discrimination, and procedural justice on applicant rank orders and selection. This researcher sought to examine two résumé selection processes; one of which included applicant names (non-blind process), and one of which included applicant identification numbers instead of names (blind process) for the purpose of investigating whether gender discrimination in a leadership selection scenario could be ameliorated.

Overview of the Results

Hypotheses 1a, 1b, and 1c predicted that the participants would rank order the applicants as a function of the condition in which they were assigned. Applicant rank orders were indeed skewed in the non-blind selection condition in favor of the qualified female applicant. In the blind conditions, applicant rank orders were similar between the two qualified male and female applicants. In each condition, the least qualified male applicant was consistently rank ordered less favorably. These results illustrate that the absence of irrelevant applicant information, such as names, may facilitate a decrease in gender discrimination and an increased emphasis on relevant applicant information such as knowledge, skills, abilities, and experience (KSAOs).

Hypotheses 2a, 2b, and 2c predicted that the participants would rate the job suitability scores for the applicants as a function of the condition in which they were assigned. The applicants' job suitability scores were skewed in favor of the female applicant in the non-blind selection condition. In the blind selection conditions, the two qualified male and female applicants were rated with similar job suitability scores. The least qualified male applicant was rated with the lowest job suitability scores in all three selection conditions. These results further supported the notion that applicant names, from which gender may be derived, does appear to increase gender discrimination in applicant selection processes, while blind processes appear to decrease gender discrimination by emphasizing a focus on KSAOs.

Hypotheses 3a, 3b, 3c, and 3d predicted that participants would rate procedural justice and fairness as a function of the condition to which they were assigned. An explanation for the use of applicant ID numbers appeared to have no impact on perceptions of procedural justice, as both blind conditions received similar procedural justice scores from participants. Participants in the non-blind selection condition provided the lowest procedural justice scores, indicating that the presence of applicant names made the process less procedurally just. Additionally, a majority of applicants, regardless of their assigned condition perceived non-blind selection conditions as being unfair and blind selection conditions as being fair. These results illustrated that procedural justice and perceptions of fairness could be increased through the use of blind selection

conditions.

Hypotheses 4a and 4b predicted that participants in the non-blind selection condition would rank order the applicants as a function of the selection condition and their modern sexism scores. There was not enough evidence to support either of these hypotheses, as a large majority of participants had average sexism scores. Researchers were unable to determine if sexism served as a covariate or had any impact on the manner in which participants rank ordered the applicants.

Hypothesis 5 predicted that participants in the non-blind selection condition would be more confident in the rank order decisions as a function of having the applicants' names in comparison to the participants in the blind selection conditions. However, the type of information provided in the selection conditions, or lacking in the selection conditions, appeared to have no impact on participants' confidence scores. There are several possible explanations available which may serve to explain the results obtained in the current study.

Rank Orders and Selection as a Function of Selection Condition: H1a, H1b, H1c

A possible explanation for the partial support obtained in H1a in regards to the female applicant obtaining a higher frequency for the first rank order could include categorization based on similarity and the effect of similarity and attraction (Van Hoye & Turban, 2015). Contrary to the literature, the female applicant was rank ordered first significantly more often as the applicant to be

hired as opposed to either of the male applicants. Of a sample of 391 participants, 320 (82%) were female; female participants may have felt more similar to the only female applicant in the experiment scenario, and as a result of similarity and higher identification, this could explain the manner in which female participants selected the female candidate with a higher frequency for the first rank order. Tajfel and Turner (2004) along with Van Hoye and Turban (2015) discussed in depth the manner in which individuals made decisions about others based on similarities, categorization, and identification. Specifically, individuals were more likely to identify with those who had similar characteristics and traits, and as a result, tended to make categorization decisions based on similarity and identification (Tajfel & Turner, 2004; Van Hoye & Turban, 2015). In this experiment, female participants were the majority at 82%, and female participants' possible identification with the female applicant could have influenced the significant frequent rank order of the female applicant as first as a function of a subconscious cognitive categorization mechanism. These results could indicate that when information about applicants is present, individuals making selection decisions may be more likely to be biased towards applicants who are more similar to themselves (Bendick & Nunes, 2012; Bosak & Sczesney, 2011). Additionally, since the sample was comprised predominantly of Hispanic females, it might be possible that these participants may have been influenced by the Anglicized applicant names in the non-blind condition, such that the participants may have attributed some form of merit to the female applicant as a

function of the Anglicized name. In either case, the presence of irrelevant information such as names and gender may be facilitating bias in decision-making processes.

On the contrary, when less irrelevant information is present, it may be such that individuals in decision-making positions will be more likely to rely on relevant information. Results from H1b illustrated that, in blind conditions, where there was little irrelevant applicant information (i.e., names and gender), individuals relied on the applicants' KSAOs to make comparisons between the two qualified applicants, and thereby rank ordered the two with similar frequency for the first and second rank orders. Similarly, for H1c, the unqualified male applicant was consistently rank ordered with a significantly high frequency for the third rank order. Again, this could be a result of participants utilizing the present relevant information to make thoughtful comparisons using the applicants' qualifications, as opposed to irrelevant information (i.e., names and gender) which could have caused gender biases to emerge.

Applicant Job Suitability Scores as a Function of Selection Condition: H2a, H2b, H2c

The explanation for the partial support obtained for H1a extends to the partial support obtained for H2a. There was a significant difference between the applicants' job suitability scores, but in the opposite direction than hypothesized, such that the female applicant received higher job suitability scores than the male applicants, contrary to the literature. The large majority (82%) of women in the

sample, who may have relied on similarity and categorization in applying scores to applicants (Bendick & Nunes, 2012; Bosak & Sczesney, 2011; Tajfel & Turner, 2004), may provide an explanation for these results. Furthermore, the explanation for the supportive results obtained for H1b and H1c can also be applied to the supportive results obtained for H2b and H2c; applicants in blind conditions only had relevant qualification information of the applicants to use when providing job suitability scores. Without irrelevant information to potentially bias applicants, such as gender derived from applicant names, individuals in decision-making positions may be more likely to rely on relevant information pertaining to applicant qualifications to provide job suitability scores. This may be an explanation for participants providing similar scores for both of the qualified applicants (H2b) and significantly lower job suitability scores to the unqualified applicant (H2c). As previously mentioned, stereotypes, defined as the knowledge, beliefs, and expectations that are associated with social groups and their members (Mackie & Smith, 1998), may be a cognitive process that underlies implicit biases (Greenwald & Krieger, 2006). Stereotyping occurs when knowledge or perceived beliefs and expectations about a social group result in a generalized application onto an individual (Mackie & Smith, 1998). A lack of irrelevant information in blind selection processes may have prevented stereotyping and gender biases from occurring, leading to the results obtained in H1b, H1c, H2b, and H2c.

Procedural Justice Scores and Perceptions of Fairness: H3a, H3b, H3c, H3d

Hypothesis 3a was not supported, participants provided similar procedural justices for both blind conditions, indicating the explanation for the use of applicant ID numbers did not have a significant effect on procedural justice perceptions. Likewise, hypothesis 3b was also not supported, because participants provided higher procedural justice scores for both of the blind conditions in comparison to the lower procedural justice scores for the non-blind condition. The procedural justice literature has illustrated that when explanations, reasoning, or additional information in general is provided, individuals would perceive a process as procedurally just (Bies & Moag, 1986). As such, researchers hypothesized that conditions with more information (i.e., names or the explanation) would receive higher procedural justice scores; this was not the case in the current study. A possible explanation for the results obtained could be a possible sophistication or education effect. The sample was comprised of 96.9% of college level psychology students, most of whom could have been familiar with basic psychological concepts including bias, prejudice, discrimination, and automatic cognition. The educated participants may have perceived the blind conditions as being less biased by applicant ID numbers, and the non-blind condition as containing information that could result in bias, such as the applicant name from which gender could be derived. Additionally, research has indicated that educated or sophisticated individuals may be more likely to judge information they have access to as relevant or irrelevant, and rely on the

relevant information to make evaluations about candidates in an online format (McGraw, Lodge, & Stroh, 1990). A potential education and/or sophistication effect could have been present with the current study's sample, and may explain the participants' evaluations of the processes procedural justice, in consideration of relevant information and irrelevant information that could create bias. This may explain the manner in which participants perceived the blind selection processes as being more procedurally just, since those conditions had less information that could have created some bias.

The possible education and sophistication effect explanation could also serve to explain the supported results for H3c, in which participants in the explanation condition reported that the blind selection process was fair in comparison to a non-blind selection process, which was perceived as unfair. The educated psychology students may have been aware that applicant names could result in gender biases, and could have obtained affirmation of this potential for bias through the explanation for the use of applicant ID numbers, and therefore perceived blind conditions as more fair. However, even without the affirmation from the explanation, participants still perceived the blind selection condition as more fair than the non-blind selection condition, as illustrated by the results obtained for H3d. These results illustrated that the included explanation may have had no impact on the participants' evaluations of procedural justice. The educated participants could have relied on previously obtained information regarding biases, or the emphasis of relevant applicant qualification information

in the experiment to evaluate procedural justice, and in so doing, evaluated the potentially biased non-blind selection process as unfair in comparison to the blind selection processes. McGraw et al. (1990) noted that participants made evaluations based on included information, and since the included information in the experiment emphasized applicant qualifications, this too could have influenced participants' evaluations of the blind processes as fair. The emphasis on qualification information in both blind conditions could explain why the included explanation had no effect, because perhaps the qualification information was evaluated as more important in the blind selection conditions. An additional explanation for lack of effect of the included explanation could possibly be that the included explanation may have served as a cue in the blind-explanation condition, such that participants may have attempted to guess the intent of the study, and therefore, reacted in the opposite manner than they believed the researchers wanted. Rosenthal (1980) described such an effect as *experimenter effects*; a participant's reaction in either the opposite direction or expected direction of the participant's perceived intention of the researcher. An experiment effect could have been present in the blind-explanation condition, and could have influenced the obtained results.

Sexism as a Covariate of Rank Order: H4a and H4b

Neither H4a nor H4b were supported, as sexism did not covary with rank order decisions. A possible explanation for these results could be in the sample

size for the non-blind condition. There were 136 participants in the non-blind selection condition, of which only 6 (4.4%) participants were one standard deviation below the mean for the sexism scale, and were therefore identified as having “low” sexism scores, while 11 participants (8.1%) were one standard deviation above the mean for the sexism scale and were therefore identified as having “high” sexism scores. There may not have been enough participants either high or low in sexism in comparison to the number of participants with the average sexism scores (*M* = 3.46, N = 117) to accurately determine if sexism scores could have served as covariate with the participants’ rank orders of the applicants. This imbalance may have impacted the analysis and results for H4a and H4b. Additionally, the sample was predominantly composed of Hispanic women, which could serve to explain why the majority of participants had similar sexism scores, because participants were predominantly of the same ethnic and gender make up. Furthermore, because the sample was comprised primarily of college educated individuals in the psychology major, there may have been an education effect on levels of sexism. Yoder, Mills, and Raffa (2016) found that continued exposure to psychological theories regarding social and cognitive biases could facilitate a decrease in sexist attitudes. Education and exposure could explain the participants having average sexism scores, and could potentially explain the participants’ non-sexist judgments and decisions in the current study.

Confidence Scores as a Function of Selection Condition: H5

The illusion of confidence may be a potential explanation for the non-supported results for H5, such that participants across all three conditions provided similar scores regarding their confidence in the participant rank-orders. The type and amount of information present in each condition did not appear to have a differential impact on participants' confidence about their selection decisions. In general, individuals use present information from which to derive a decision, and additional factors such as the probability of being right or wrong, the knowledge that information is missing, and the time allotted to make the decision can impact an individual's confidence in their decision (Baranski & Petrusic, 1994; Boldt, de Gardelle, & Yeung, 2017; Moran, Teodorescu, & Usher, 2015; Pleskac & Busemeyer, 2010). In the current study, participants had unlimited time, were not faced with "right" or "wrong" decisions, and had all of the information needed to make selection decisions. These factors have been noted by researchers to either increase or decrease confidence in individuals' decision-making processes. It might be possible that these factors facilitated participants in all three conditions feeling similarly confident in their selection and rank order decisions.

As illustrated by some of the above potential explanations for the obtained results, there were some limitations in the current study, specifically regarding the sample. The sample was comprised predominantly of female psychology students with average sexism scores. Female participants in the non-blind

condition may have been more likely to identify with the lone female applicant, and therefore rank and rate the female applicant more favorably. Additionally, educated individuals may be more aware of the concept of bias, and may have been more likely to favor blind selection processes as opposed to a non-blind process. Additionally, there may not have been enough variation in sexism scores, which could have also been impacted by the large sample of educated individuals. As such, these results may not be generalizable to other populations in organizations which employ large samples of males, and depending on the organization, may have fewer college educated individuals, or a more diversely educated sample, spanning more majors than psychology. Future researchers in the selection field should seek a balanced sample of males and females, education levels, students across several majors, business professionals, and individuals who vary in sexism. This could illustrate different or more supportive results.

The obtained results enhance the current body of the selection literature, especially since there has not been much experimentation in the area of blind selection processes as a means to decrease gender bias and discrimination. The hypotheses regarding rank order and job suitability scores illustrated that bias was decreased in the blind selection conditions, which has positive implications for candidate screening and selection procedures. The blind selection processes utilized in the current study could possibly combat the persistent gender bias that may be occurring as an effect of role congruity theory. By eliminating applicant

names, decision-makers would not be able to rely on selecting male and female applicants for perceived male and female stereotypical positions and jobs. Thus, the impact of role congruity and gender bias would be decreased. Industries and organizations could apply similar blind procedures through their screening processes, which may facilitate an increase in female applicants in leadership positions and otherwise male-stereotyped jobs. An emphasis on relevant qualification information would result in the more skilled applicants being selected and invited to interviews. Further research into blind selection processes, depending on the obtained results, could then be extended into blind interview processes to further decrease gender bias and increase equal selection practices. This research is important because, thus far, despite discrimination laws and trainings emphasizing consequences for stereotyping and prejudice, discrimination continues to problematic for women seeking to obtain leadership positions. Strategic change to personnel selection processes appears to be necessary, and the current study has created a potential solution for discrimination in at least one of the critical phases in the personnel selection. The current study may be perceived as paving the way for more research on applied strategies for decreased discrimination in personnel selection.

APPENDIX A

SCENARIO

Powell, G. N. (2004). *Managing a diverse workforce: Learning activities (2nd ed.)*. Thousand Oaks: CA. Sage Publications.

High Performance Bicycle Components, Inc. (HPBC)
Company Background Information

High Performance Bicycle Components, Inc. (HPBC) currently has two plants that manufacture bicycle components and a smaller plant (Biking Basics) that makes athletic supplies for the serious biking enthusiast. The bicycle plants are in Indianapolis (corporate headquarters) and in Sacramento; the Biking Basics plant is in Houston. The company was started 53 years ago in Indianapolis. The California plant began operation 5 years after that, and the Biking Basics Equipment plant was purchased 2 years ago. Having experienced steady growth since its inception, HPBC has the reputation of being an excellent employer. Employees are well paid, quality and innovation in product design are emphasized, and self-managed work teams are the way the employees work together on a daily basis in all production departments.

The company employs 3,051 people; last year's sales totaled approximately $1.3 Billion. It is the only manufacturer of bicycle components in the United States; its competitors are located in Europe and Japan. By December of last year, HPBC was the third major producer of bicycle components in the world. Because further growth requires opening markets in other countries, HPBC plans to open a plant overseas, probably in Taiwan or Singapore (but no final decision has been made).

The current vice president of operations at HPBC, William Smith, will retire at the end of the year. Frank Flaherty, the CEO, believes that this position is critical to HPBC's future success. This person will oversee production in both Sacramento and Indianapolis and will also play a major role in establishing the overseas plant-including locating the site, determining staff and other resources needed, and so on.

The CEO is looking for someone who is visionary and energetic, has strong strategic planning and negotiation skills, is active in the community; and is willing to work long hours. He is also planning to groom this person for his own position once he retires.

No Explanation condition: You are a member of HPBC's board of directors. The board must choose the next vice president of operations from among three candidates. To help you in your task, you have been given résumés, including professional experience, education, service activities, and hobbies.
Explanation condition: You are a member of HPBC's board of directors. The board must choose the next vice president of operations from among three candidates. To help you in your task, you have been given résumés, including professional experience, education, service activities, and hobbies. Résumés will contain applicant ID numbers instead of names. Using ID numbers will help reviewers focus on applicant qualifications and therefore result in the most qualified candidate being selected.

APPENDIX B

APPLICANT RESUMES: APPLICANT 1, 2, AND 3 – NON-BLIND GROUP

Applicant 1 – Non-blind Group

Jennifer Rappaport
27226 Lochinvar Court
Carmel, Indiana, IL

Professional Experience

Plant Manager, HPBC, Indianapolis Plant: 2008-present. Responsible for all functions at HPBC's Indianapolis plant, the larger of the two bicycle-component manufacturing facilities. In this role, guided the implementation of the vision for growth through implementation of plans to meet the strategic goals set for the Indianapolis plant and its 1,820 employees. Supervised nine direct reports.
Assistant Plant Manager, HPBC, Indianapolis Plant: 2005-2008. Responsible for directing operations at the Indianapolis plant. Managed all manufacturing functions, including interface with engineering under the newly implemented integrated-systems process. Supervised six direct reports.
Director of Systems Design, HPBC, Indianapolis Plant: 2001-2005. Responsible for company-wide systems design functions. Supervised three managers as direct reports, located in two facilities and representing five specialty areas: research, spares, technical support, model shop, and computer-aided design.
Project Engineer, HPBC, Indianapolis Plant: 1998-2001. Responsible for guiding 10 projects through successful completion, including 2-year, 30-person Innovation Project credited with revolutionizing the headset components and having the greatest market share worldwide in this product line.
Senior Engineer, HPBC, Indianapolis Plant: 1996-1998. Assisted with research and development on Horizon and Starburst projects.
Design Engineer, HPBC, Indianapolis Plant: 1991-96.
Design Engineer, General Motors Corporation, Truck and Bus Division: 1989-91.
Co-op Student Employee, General Motors Corporation, Truck and Bus Division: 1986-89.

Education

- MBA, California State University, San Bernardino
- BS, California State University, San Bernardino
    - (Major: Mechanical Engineering, Minor: Industrial Management)
    -

Professional Affiliations

- National Society of Professional Engineers
- Theta Tau, professional engineering

Service Activities

- Big Brothers/Big Sisters of Northeast Indianapolis-Chairperson of Renovation Project,
- Board Member, Finance Committee Member

- Carmel High School Band Boosters-President
- CSUSB School of Engineering-Alumni Advisory Board Member
- Cardiff Junior High School Parents' Board-Member
- Committee Service Committee Chairperson

Awards and Honors

- High Performance Bicycle Components, Inc. (HPBC) Quality Now Award. This is a corporate-level award acknowledging the importance of quality processes and production in the company.
- Volunteer of the Year, Big Brothers/Big Sisters of Northeast Indianapolis. An annual award voted by the membership for outstanding volunteer service

Hobbies and Interests

- Bicycling
- Collecting collectibles
- International Travel

Applicant 2 – Non-blind Group

Jason Whittiker
1865 North Michigan Ave
Chalmers, Indiana, IL

Professional Experience

Vice President, Research and Development, HPBC, Corporate Headquarters Facility: 2007-present. Manage all aspects of the research and development functions HPBC reporting directly to the corporate vice president of operations. Responsibilities include supervision of five direct reports and each have additional teams to staff special projects and conduct ongoing research for our current products. Also, responsible for budgeting and staffing for all R&D groups for HPBC. Accountable for development and updating of organization's strategic planning process to ensure it is linked with research and development initiatives and the business planning processes for the assembly plant.
Research and Development Director, HPBC Products Division, Milwaukee Facility: 2004-2007. Managed a three-person research and development team assigned to reconfigure braking mechanisms to optimize efficiency and reliability. Efforts resulted in the team's winning the HPBC Quality and Innovation Award.
Plant Manager, Schwinn, Wauwatosa Facility: 2001-2004. Led all aspects of the production process. Instituted work teams to facilitate production and create a more positive culture in the organization to address high turnover rates. Production increase 14% and turnover was reduced 29% during my tenure in this position.
Research and Development Manager & Project Engineer, Schwinn Bicycle Products, Wauwatosa Facility: 1996-2001. Led research team to develop new products address key market needs. Co-directed the Eaglepeak Project, which spanned 12 months; supervised five staff. Also directed four other projects, all successfully completed. The largest project, Hawk II, involving 16 months of work and 10 staff members, was completed early and under budget.
Senior Engineer, Harley-Davidson Motorcycle Products, Wauwatosa , Facility: 1991-1996.
Design Engineer, Harley-Davidson Motorcycle Products, Tomahawk Facility 1989-1991.

Education

- MBA, California State University, San Bernardino
- BS, California State University, San Bernardino
    - (Major: Interdisciplinary Engineering, Minor: French)

Professional Affiliation

- Tau Beta Pi, engineering honors society

Service Activities

- Society of Professional Engineers-Member, Strategic Planning Committee Chair
- Member, Advisory Board (Wauwatosa), Board of Directors (Milwaukee), Funds for the Future Campaign Chairperson (Indianapolis)

Awards and Honors

- Who's Who in the Midwest
- Indiana Community Hospital-Volunteer of the Year
- Research and Development Award for Eagles-Peak Project (which represented a strategic shift in the design of braking systems for non-automotive vehicles)

Hobbies and Interests

- International Travel and Languages- traveled to 17 countries and three continents; speak three languages fluently (French, Spanish, And English)
- Cycling competitively (in both the U.S. and France)
- Published a writing guide to key cities in France for business travelers in 2012

Applicant 3 – Non-blind Group

Jonathan Mitchell
10259 Milan
Italy

Professional Experience

Plant Management, AJI Corporation, Milan, Italy: 2007-present. Overseas assignment to an AJI corporation subsidiary experiencing financial difficulty. Manage company of 350 employees. Major accomplishments include 20% increase in sales of bicycle components since 2008, 15% reduction in employee turnover since 2007, and change in positioning from sixth to fifth major producer of bicycle components of the world.

Production Director, AJI Corporation, Lexington, KY: 2003-2007. Directed automotive-parts production operation at Lexington plant. Responsibilities included overseeing six departments consisting of 550 employees. Major accomplishments included production operation winner of the "Productivity Plus" award for three consecutive years and winner of the company-wide quality award in two different years.

Production Manager, AJI Corporation, Lexington, KY: 1999-2003. Managed 320 employees in assembly operations. Major accomplishments included retooling department and implementing department information system.

Quality Assurance Manager, Worthington Industries, Columbus, OH: 1996-1999.

Industrial Engineer, Worthington Industries, Columbus, OH: 1994-96.

Education

- MBA, California State University, San Bernardino
- BS, California State University, San Bernardino
    - (Major: Industrial Engineering, Minor: Military History)

Professional Association

- American Institute of Industrial Engineers

Service Activities

- United Way-Campaign Chairperson
- Lexington Memorial Hospital-Board Member
- Board Member (Lexington), Finance Committee Chairperson (Columbus)

Awards and Honors

- Fellowship Award
- AJI Corporation-Manager of the Year
- Worthington Industries--Outstanding Young Professional

Hobbies and Interests

- Golf
- International travel
- Hiking

APPENDIX C

APPLICANT RESUMES: APPLICANT 1, 2, AND 3 – BLIND GROUP

Applicant 1 – Blind Group

JR27226

Professional Experience

Plant Manager, HPBC, Indianapolis Plant: 2008-present. Responsible for all functions at HPBC's Indianapolis plant, the larger of the two bicycle-component manufacturing facilities. In this role, guided the implementation of the vision for growth through implementation of plans to meet the strategic goals set for the Indianapolis plant and its 1,820 employees. Supervised nine direct reports.
Assistant Plant Manager, HPBC, Indianapolis Plant: 2005-2008. Responsible for directing operations at the Indianapolis plant. Managed all manufacturing functions, including interface with engineering under the newly implemented integrated-systems process. Supervised six direct reports.
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Design Engineer, HPBC, Indianapolis Plant: 1991-96.
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Education

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    -

Professional Affiliations

- National Society of Professional Engineers
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Service Activities

- Big Brothers/Big Sisters of Northeast Indianapolis-Chairperson of Renovation Project,
- Board Member, Finance Committee Member
- Carmel High School Band Boosters-President
- CSUSB School of Engineering-Alumni Advisory Board Member

- Cardiff Junior High School Parents' Board-Member
- Committee Service Committee Chairperson

Awards and Honors

- High Performance Bicycle Components, Inc. (HPBC) Quality Now Award. This is a corporate-level award acknowledging the importance of quality processes and production in the company.
- Volunteer of the Year, Big Brothers/Big Sisters of Northeast Indianapolis. An annual award voted by the membership for outstanding volunteer service

Hobbies and Interests

- Bicycling
- Collecting collectibles
- International Travel

Applicant 2 – Blind Group

JW186585

Professional Experience

Vice President, Research and Development, HPBC, Corporate Headquarters Facility: 2007-present. Manage all aspects of the research and development functions HPBC reporting directly to the corporate vice president of operations. Responsibilities include supervision of five direct reports and each have additional teams to staff special projects and conduct ongoing research for our current products. Also, responsible for budgeting and staffing for all R&D groups for HPBC. Accountable for development and updating of organization's strategic planning process to ensure it is linked with research and development initiatives and the business planning processes for the assembly plant.
Research and Development Director, HPBC Products Division, Milwaukee Facility: 2004-2007. Managed a three-person research and development team assigned to reconfigure braking mechanisms to optimize efficiency and reliability. Efforts resulted in the team's winning the HPBC Quality and Innovation Award.
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Design Engineer, Harley-Davidson Motorcycle Products, Tomahawk Facility 1989-1991.

Education

- MBA, California State University, San Bernardino
- BS, California State University, San Bernardino
    - (Major: Interdisciplinary Engineering, Minor: French)

Professional Affiliation

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Service Activities

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Awards and Honors

- Who's Who in the Midwest
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- Research and Development Award for Eagles-Peak Project (which represented a strategic shift in the design of braking systems for non-automotive vehicles)

Hobbies and Interests

- International Travel and Languages- traveled to 17 countries and three continents; speak three languages fluently (French, Spanish, And English)
- Cycling competitively (in both the U.S. and France)
- Published a writing guide to key cities in France for business travelers in 2012

Applicant 3 – Blind Group

JM102591

Professional Experience

Plant Management, AJl Corporation, Milan, Italy: 2007-present. Overseas assignment to an AJI corporation subsidiary experiencing financial difficulty. Manage company of 350 employees. Major accomplishments include 20% increase in sales of bicycle components since 2008, 15% reduction in employee turnover since 2007, and change in positioning from sixth to fifth major producer of bicycle components of the world.

Production Director, AJl Corporation, Lexington, KY: 2003-2007. Directed automotive-parts production operation at Lexington plant. Responsibilities included overseeing six departments consisting of 550 employees. Major accomplishments included production operation winner of the "Productivity Plus" award for three consecutive years and winner of the company-wide quality award in two different years.

Production Manager, AJl Corporation, Lexington, KY: 1999-2003. Managed 320 employees in assembly operations. Major accomplishments included retooling department and implementing department information system.

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Industrial Engineer, Worthington Industries, Columbus, OH: 1994-96.

Education

- MBA, California State University, San Bernardino
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Professional Association

- American Institute of Industrial Engineers

Service Activities

- United Way-Campaign Chairperson
- Lexington Memorial Hospital-Board Member
- Board Member (Lexington), Finance Committee Chairperson (Columbus)

Awards and Honors

- Fellowship Award
- AJI Corporation-Manager of the Year
- Worthington Industries--Outstanding Young Professional

Hobbies and Interests

- Golf
- International travel

- Hiking

APPENDIX D

JOB SUITABILITY SCALE

Bart, B. D., Hass, M. E., Philbrick, J. H., Sparks, M. R., & Williams, C. (1997). What's in a name? *Women in Management Review, 12,* 299-308.

McIntyre, S., Morberg, D., & Posner, B. (19080). Preferential treatment in pre-selection decisions according to sex and race. *Academy of Management Journal, 22,* 738-749.

Job Suitability Scale

1) Given all the information you read about the applicant, how suitable do you believe this applicant is for this position? (Circle one).

1	2	3	4	5
Not Suitable		Moderately Suitable		Very Suitable

2) Given all the information you read about this applicant, what is the likelihood that you'd invite this individual for an interview? (Circle one).

1	2	3	4	5
Not Likely		Possibly		Very Likely

3) Given all the information you read about this applicant, do you think this applicant would be a high performer in this position? (Circle one).

1	2	3	4	5
Not a high Performer		Moderate Performer		Very High Performer

4) Given all the information you read about this applicant, how confident would you be in your decision to hire this candidate? (Circle one).

1	2	3	4	5
Not Confident		Moderately Confident		Very Confident

APPENDIX E

APPLICANT RANK ORDER FORM

Applicant Rank Order Form

Instructions:

After reviewing the applicant résumés, please rank order the applicants in the order of which you would choose to hire them. By placing an applicant in the first spot (Spot 1), you are indicating that you would hire that applicant first; by placing an applicant in the second spot (Spot 2), you are indicating that you would hire that applicant second; by placing an applicant in the third spot (Spot 3), you are indicating that you would hire the applicant last (third). Please only place one applicant in each spot. Do not use any applicant twice.

1) _____ would be hired first

2) _____ would be hired second

3) _____ would be hired third

APPENDIX F

ATTENTION CHECKS

Attention Checks

Please select the industry that was presented in this scenario

Electronics

Financial Services

Bicycles

Food

Fashion

Cosmetics

How many male and female applicants were there?

Males _____

Females _____

Not Possible to know _____

APPENDIX G

PROCEDURAL JUSTICE SCALE

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Pscyhology, 86*(3), 386-400. doi: http://dx.doi.org.libproxy.lib.csusb.edu/10.1037/0021-9010.86.3.386

Procedural Justice Scale

When assigning numbers to the scale items below, think about the selection process you just participated in, specifically, think about the details you were provided with and the task(s) you were asked to complete (the previous scale, and the rank order process).

1) This procedure was free from bias (select one).

1	2	3	4	5
Strongly Disagree		Somewhat Agree		Strongly Agree

2) Enough information was provided to me to make my decision(s) (select one).

1	2	3	4	5
Strongly Disagree		Somewhat Agree		Strongly Agree

3) This procedure upholds ethical standards (select one).

1	2	3	4	5
Strongly Disagree		Somewhat Agree		Strongly Agree

4) This procedure is fair (select one).

1	2	3	4	5
Strongly Disagree		Somewhat Agree		Strongly Agree

5) I would trust an organization that uses this procedure (select one).

1	2	3	4	5
Strongly Disagree		Somewhat Agree		Strongly Agree

6) This procedure should be used for promotion decisions as well (select one).

1	2	3	4	5
Strongly Disagree		Somewhat Agree		Strongly Agree

APPENDIX H

SELECTION PROCESS COMPARISON QUESTIONS

Selection Process Comparison Questions

Blind Selection Question: What additional information about the applicants would you have liked to see?

Blind Selection Question: Do you think a selection process in which the applicants' names are made available to you is more fair than a selection process in which only applicant ID numbers appear? Select one.

Yes, the process in which applicant names appear is more fair

No, the process which applicant names appear is unfair

Non-Blind Question: Do you think a selection process in which applicant ID numbers are made available to you is more fair than a selection process in which applicants' names appear? Select one.

Yes, the process in which applicant names appear is more fair

No, the process which applicant names appear is unfair

APPENDIX I

MODERN SEXISM SCALE

Swim, J. K., Aiken, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: Old fashioned and modern prejudices. *Journal of Personality and Social Psycholigy, 68*(2), 199-214. doi: http://dx.doi.org.libproxy.lib.csusb.edu/10.1037/0022-3514.68.2.199

Modern Sexism Scale

1)*Discrimination against women is no longer a problem in the United States. Circle one

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

2)Women often miss out on good jobs due to sexual discrimination. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

3)It is rare to see women treated in a sexist manner on television. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

4)*On average, people in our society treat husbands and wives equally. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

5)*Society has reached the point where women and men have equal opportunities for achievement. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

6)*It is easy to understand the anger of women's groups in America. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

7) It is easy to understand why women's groups are still concerned about societal limitations of women's opportunities. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

8) Over the past few years, the government and news media have ben showing more concern about the treatment of women than is warranted by women's actual experiences. Circle one.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

APPENDIX J

ATTITUDES TOWRDS WOMEN SCALE (SHORTENED)

Spence, J. T., Helmreich, R., & Strapp, J. (1973). A short version of the attitudes towards women scale (AWS). *Bulletin of the Psychonomic Society, 2*, 219-220.

Attitude Towards Women Scale (Shortened)

1. Swearing and obscenity are more repulsive in the speech of a woman than of a man.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

2* Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

3.* Both husband and wife should be allowed the same grounds for divorce.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

4. Telling dirty jokes should be mostly a masculine prerogative.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

5. Intoxication among women is worse than intoxication among men.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

6.* Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

7.* It is insulting to women to have the "obey" clause remain in the marriage service.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

8.* There should be a strict merit system in job appointment and promotion without regard to sex.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

9.* A woman should be free as a man to propose marriage.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

10. Women should worry less about their rights and more about becoming good wives and mothers.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

11.* Women earning as much as their dates should bear equally the expense when they go out together.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

12.* Women should assume their rightful place in business and all the professions along with men.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

13. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

14. Sons in a family should be given more encouragement to go to college than daughters.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

15. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

16. In general, the father should have greater authority than the mothr in the bringing up of the children.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiancés.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

18.* The husband should not be favored by law over the wife in the disposal of family property or income.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

19. Women should be concerned with their duties of childbearing and house tending rather than with desires for professional or business careers.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

20. The intellectual leadership of a community should be largely in the hands of men.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

21.* Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

22. On the average, women should be regarded as less capable of contributing to economic production than are men.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

23. There are many jobs in which men should be given preference over women in being hired or promoted.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

24.* Women should be given equal opportunity with men for apprenticeships in the various trades.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

25.* The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

1	2	3	4	5
Strongly Agree		Somewhat Agree		Strongly disagree

APPENDIX K

INFORMED CONSENT

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

College of Social and Behavioral Sciences
Department of Psychology

INFORMED CONSENT:

Principle Investigators:
Stephanie Ingalls (BA - psychology)
Dr. Janet Kottke

Approval Statement
This study has been approved by the Department of Psychology Institutional Review Board Sub-Committee of the California State University, San Bernardino, and a copy of the official Psychology IRB stamp of approval should appear on this consent form. The University requires that you give your consent before participating in this study.

Description of the Research
The purpose of the current study is to examine the personnel selections decisions made by individuals as a function of the information presented.

Statement of Time Required
This study should take no more than 60 minutes to complete.

Compensation
You will receive 2 extra credit units on SONA for your participation in this study.

Risks and Benefits Statement
This study involves no risks that are greater than expected in everyday life, nor any direct benefits to you as a participant.

Voluntary Participation
Your participation in this study is voluntary. You are free to withdraw your participation at any time during the study. You are also free to skip any questions you feel uncomfortable answering without loss of credit.

Confidentiality
As no identifying information will be connected with your responses in this study, all your responses are completely confidential. Only the primary investigators and faculty advisor will have access to the results of this study and these will only be reported as group data, not individual responses. The data will be evaluated, but no connection between your identity and the results will be made.

Sharing Results
Data from this study will be used for a graduate thesis. All data will be reported as aggregate, or group data, and no individual responses will be reported. The data may also eventually be presented at a professional conference and possibly submitted for publication, depending on the results of the study.

Opportunity to Ask Questions and Right to Receive a Copy
Any questions regarding this study can be answered by contacting Dr. Janet Kottke (jkottke@csusb.edu) and/or Stephanie Ingalls (Stephanie.ingalls@csusb.edu). You may also contact the CSUSB Psychology department IRB Sub-Committee at psyc.irb@csusb.edu.

Consent
You are voluntarily making the decision to participate in the research study. By clicking on "Agree" below, you are certifying that you have decided to participate and have read and understood the information presented to you.

I acknowledge that I understand and have been informed of the purpose and nature of the study and consent to participate. I am at least 18 years of age.

California State University Psychology Institutional Review Board Sub-Committee			
Approved	2/9/18	Void After	2/9/19
IRB # H-18WI-07		Chair	

APPENDIX L

ANCILLARY RESULTS

APPENDIX L

Table L1. Ethnicity Demographics

Ethnicity	Frequency	Percent	Valid Percent	Cumulative Percent
American Indian or Alaskan Native	2	0.5	0.5	0.5
Asian	23	5.9	5.9	6.4
Black or African American	16	4.1	4.1	10.5
White or Caucasian	56	14.3	14.3	24.8
Hispanic or Latino/Latina	270	69.1	69.1	93.9
Native Hawaiian or Pacific Islander	1	0.3	0.3	94.1
Mixed Ethnicity	15	3.8	3.8	98
Other	8	2	2	100
Total	391	100	100	

Note. Males = 66, Females = 320, Missing = 5.

Table L2. Mean Differences and Statistics on Modern Sexism

	Mean	Mean Diff.	F	*t*	df	p	Effect size
Gender				6.103	1	0.0001	cohen's d = .17
Men	3.81						
Women	3.38						
		0.43					
Ethnicity			3.606		6	0.002	eta sqrd = 0.053
American Indian/Alaskan Native	3.13						
Asian	3.67						
Black/African America	3.31						
White/Caucasian	3.64						
Hispanic	3.39						
Mixed	3.63						
Other	3.81						
Ethnicity Differences							
Amer. Ind. & Asian		0.548				0.029	
Amer.Ind. & Black		0.565				0.027	
Amer. Ind. & Other		0.692				0.01	
Asian & White		-0.243				0.004	
Black & White		-0.26				0.007	
White & Hispanic		0.164				0.001	
White & Other		0.386				0.003	
Mixed & Other		0.309				0.039	

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