The Representativeness of Gender Typicality and Attractiveness Bias in Personnel Selection

by

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Abstract

Bias in selection procedures has the potential to hinder effective decision making and disparage members of underrepresented groups. Thus, it is important to investigate factors which may contribute to biased judgments in an effort to mitigate harmful effects. Specifically, this research explored the effect of gender typicality and attractiveness bias in personnel selection. We posited that employers use mental shortcuts to make judgments about job candidates, based upon similarity between candidates and perceived gender roles. Participants were asked to make assessments and hypothetical hiring decisions for applicants based upon social media profiles. These profiles contained candidates of varying levels attractiveness/gender typicality via profile pictures and posted information. We expected applicant masculinity and femininity, in conjunction with perceived attractiveness, to influence a job candidate's likelihood of being hired across various job roles. Our findings indicated that masculine profiles (both male and female) were rated, on average, more hirable than feminine profiles. Thus, attractive males were considered more hirable than their unattractive counterparts. Surprisingly, we found that the gender non-typical female profiles (i.e., masculine) were preferred over gender typical female profiles (i.e., feminine), even when being considered for a female dominant job role. Implications for illuminating these biases as well as potential organizational impact are discussed.

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Introduction

There are approximately 5 million hires in the United States each month (U.S. Bureau of Labor Statistics, 2016), Each of these represents a major process in which organizations recruit and evaluate candidates, eventually making a selection decision. This rigorous task often includes a large number of potential employees applying for a limited number of positions. In these cases, employers face feelings of uncertainty as to which candidate will be the best hire (i.e., the most effective employee). Under uncertainty, humans tend to rely on the use heuristics (e.g., the availability heuristic, where one assumes information immediately coming to mind is most important) to make judgments about the probability of an event (Tversky & Kahneman, 1974). These judgments are susceptible to bias and often hinder effective decision making. For example, in the representative heuristic humans make judgments of a present situation as a representation of previous similar situations, and this heuristic may explain how hiring managers might make gender biased decisions. An example from Tversky and Kahneman's classic paper on heuristics and biases known as the Steve problem states (p.1124): How do we assess the likelihood of Steve's occupation from a list of possibilities (e.g., farmer, salesman, librarian, engineer)? Ignoring important factors such as prior probabilities and sample size insensitivity, people are likely to rely on biased judgment in determining whether Steve's attributes fit the stereotype of each occupation. This example demonstrates the propensity to associate job roles with certain types of individuals simply based on the degree to which the person fits with the stereotype for a given job role. One can see how this phenomenon can be extended to gender bias in selection context, especially, where employers may use their representation of leaders (i.e.,

often male dominated) in selecting new leaders that match existing representations. This is dangerous since the representation of a candidate's job ability is influenced by preconceived notions of that candidate's represented group. In this way, hiring managers may evaluate job applicants based upon the gender, ethnicity, social class, etc. to which the applicant belongs, clouding accurate judgment and hindering the decision process.

Although many nuances of gender bias exist and require further investigation, the focus of this project was on the gender typicality (i.e., masculinity/femininity) of applicant faces, and thus how attractiveness influences employer perceptions of job ability and hirability via gender norms. The literature review delineates how gender and attractiveness biases influence decision making under multiple contexts as well as describes the salience of gender norm congruence amongst differing job roles. Moreover, we discuss the impact of social media as a medium for candidate evaluations in the digital age. Altogether, these constructs convey a means by which we can better understand, measure, and mitigate the detrimental effects of gender-related biases in the personnel selection process.

In this study, we investigated the role of specific heuristics associated with attractiveness in selection. Our objectives included determining the relationship between gender typicality and attractiveness as well as how these constructs effect job applicant hirability. We presented a hypothetical selection scenario in which study participants acted as raters, differentiating between various applicants' job ability and expected performance based upon perceptions of physical appearance.

Literature Review

Bias in Personnel Selection

Bias can be detrimental to accurately assessing a candidate's competency in relation to a specific job role. Members of disadvantaged groups are often underrepresented in leadership roles because they do not fit employers' representation of leaders (Oakley, 2000). Additionally, stereotypes are rigid to the point that minorities who defy stereotypes may actually be reinforcing biased perceptions, with high performance being interpreted as nothing more than an exceptional circumstance (Swim & Sanna, 1996). Moreover, it appears bias is often implicit, or unconsciously activated (Greenwald, McGhee, & Schwartz, 1998), and raters unaware of their own stereotyping can impedes addressing the issue. Although many hiring decision aids exist to reduce the effects of human judgement error (e.g., paper-and-pencil tests, structured interviews), there remains a major reliance on human intuition in the selection process (Highhouse, 2008). Continued use of unstandardized methodology (i.e., unstructured interviews) in conjunction with the lack of bias awareness may lead organizations run the risk of excluding members of unrepresented groups because of ineffective decision making.

Gender Bias

Although many types of biases permeate the hiring process, the focus of this study was on applicant gender typicality, specifically investigating to what extent masculinity and femininity affect decision making. As previously stated, bias against hiring members of disadvantaged subgroups is largely based on the perception of uncertainty. Uncertainty is viewed as an aversive state, and humans are motivated to reduce, categorized by a lack of information

(Hogg, 2000). Bosak and Sczesny (2011) found that male raters report higher levels of uncertainty when choosing females for leadership job positions, compared to their male counterparts. Moreover, raters consistently preferred male applicants in the absence of clear leadership competence by male and female candidates. One meta-analysis concluded that men are generally preferred for male-dominated jobs, whereas there is no strong gender preference for female-dominated jobs (Koch, D'Mello, & Sackett, 2015). Additionally, these researchers report a reduction in gender bias when there is a clear indication of high competence amongst applicants. In other words, during times of uncertainty (i.e., no clear signal of applicant competence), employers largely view male applicants as a safer option than their female counterparts. In university settings, it is apparent that gender discrimination awareness is steadily increasing (Sipe, Larson, Mckay, & Ross, 2015); however, there is much work to be done in translating awareness into actual organizational change.

One obstacle hindering the implementation of gender bias interventions is the fact that, like all biases, prejudice against females can be implicit (i.e., the decision maker is not consciously aware of his/her bias). In this way, many employers are unaware of the dangers or even existence of their own female stereotyping. Nadler (2010) had participants complete an Implicit Association Task in which they linked pictures of men and women with either agentic (i.e., dominate and self-asserting) or communal (i.e., agreeable and cooperative) traits. Results showed a consistent bias against associating women with agentic terms, implying a systematic resistance to viewing females as leaders. Alternatively, Hideg and Ferris (2016) discuss how benevolent sexism (i.e., positive attitudes towards women as objects of protection, idealization, and affection) influences the promotion of women, but only for feminine job roles. In this way,

employers refrain from appointing females to leadership positions under the assumption that women are communal and simply happier working with other women.

These misrepresentations can be attributed to role congruity theory (Eagly & Karau, 2002). Based on this theory, women are underrepresented in managerial roles due to a perceived incongruity between stereotypical female traits and the traits required of a leader. In this way, the gender typicality of a job applicant (e.g., level of femininity) makes salient the associations between the applicant's represented gender role and the attributes of the job role. In the case of women and leadership positions, this instills a sense of incongruity in the decision maker. One meta-analysis (Koenig, Eagly, Mitchell, & Ristikari, 2011) investigated three paradigms that explain to what extent humans associate leadership roles with men. The think manager-think male paradigm (Schein, 1973) posits that male stereotypical traits (e.g., emotionally stable, logical, consistent) positively correlate with conceptions of managers and leaders, but female traits do not. Furthermore, the agency-communion paradigm (Powell & Butterfield, 1979) is measured by delineating whether ideal leadership ratings are represented by either masculine (i.e., agentic) or feminine (i.e., communal) traits. Consistently, agentic traits are rated as more representative of good leadership. Lastly, the masculinity-femininity paradigm (Shinar, 1975) ascribes different occupational groups a rating based upon their perceived masculinity-femininity. This paradigm is often criticized for restricting masculinity-femininity to a single continuum, thus limiting their abilities to vary independently (Koenig et al., 2011). Taken together, each of these paradigms supports the notion that leadership perceptions are widely influenced by applicants possessing masculine features and portraying agentic traits. The current study concerned applicant gender typicality as a function of physical appearance; as such, we

focused on the physical attributes associated with masculinity and femininity as they relate perceived gender norms and applicant attractiveness.

Attractiveness Bias

Because perceived attractiveness can fuel gender typicality judgments (Braun et al., 2012), it is important to discuss the role of attractiveness in personnel selection. The construct validity of gender typicality has been investigated for decades. Bem (1974) describes masculinity/femininity as one's sex-role according to social desirability. Perceptions of masculinity and femininity are highly related to level of attractiveness. Using Bem's scale of androgyny, Gillen (1981) determined that perceived femininity increases with physical attractiveness for females, but not males. Additionally, perceived masculinity increases with physical attractiveness for males, but not females. Taken together, these findings conclude that attractive female job applicants should possess high levels of femininity, and attractive male applicants should possess high levels of masculinity.

Applicant physical attractiveness is often conducive to hirability due to inflated perceptions of job ability. This effect is known as the "what is beautiful is good" stereotype and, like gender typicality, stems from perceptions of social desirability (Dion, Berscheid, & Walster, 1972). In this study, the authors found that attractive individuals are assumed to be more successful and happy, as well as possess more desirable personalities. Extending these findings to the workplace context, employers should judge attractive job candidates as more qualified than their unattractive counterparts. This assumption holds true for both males and females in most contexts, with the largest effects for jobs considered gender neutral (i.e., neither masculine nor feminine dominated; Cash, Gillen, & Burns, 1977). Additionally, attractiveness facilitates gender typicality so that perception inflations largely occur within the applicant's represented

gender role. In this way, male attractiveness benefits hirability in masculine job roles, and female attractiveness is beneficial for feminine job roles. For both genders, attractive candidates are weighted more heavily than those unattractive when the job role has no gender dominance.

We recognize that masculinity/femininity is not thought to be a single, bipolar construct (Marsh, 1985). What this means is that although the constructs of masculinity and femininity have a strong, negative correlation, it is possible for applicants to possess both masculine and feminine traits. Because this concept of androgyny (i.e., the possession of both male and female characteristics; Bem, 1974) does not represent the norm, we used human faces that were high in both gender typicality as well as attractiveness based on pilot testing (and discussed later in paper).

Hypothesis 1a (H1a): Male applicant gender typicality/attractiveness will be positively related to perceived hirability, job ability, and expected performance in a stereotypical male job role.

Hypothesis 1b (H1b): The hiring decision will coincide with this effect (i.e., choosing attractive males over their unattractive counterparts)

Hypothesis 2a (H2a): Female applicant gender typicality/attractiveness will be positively related to perceived hirability, job ability, and expected performance in a stereotypical female job role.

Hypothesis 2b (H2b): The hiring decision will coincide with this effect (i.e., choosing attractive females over their unattractive counterparts)

Hypothesis 3a (H3a): Applicant gender typicality/attractiveness will be positively related to perceived hirability, job ability, and expected performance for both males and females in gender neutral job roles.

Hypothesis 3b (H3b): The hiring decision will coincide with this effect (i.e., choosing attractive males and females over their unattractive counterparts)

Because gender bias in hiring represents the extent to which an applicant possesses traits that align with her/his represented group, there are many contextual factors that yield varying outcomes. In this study, we analyzed how a job applicant's level of attractiveness evokes an assessment of role congruity as well as circumstances in which attractiveness benefits/hinders hirability. In line with gender typicality, the mechanisms behind attractiveness bias are heavily influenced by perceptions of gender norms. Stockhausen, Koeser, and Sczesny (2013) found that gender typicality of applicants' faces greatly affects leadership selection, regardless of applicant gender. This means that for masculine-type job roles (i.e., manager, leadership), both males and females possessing high levels of femininity are disadvantaged, with larger discrimination towards women due to larger predispositions of femininity. As such, physical attractiveness is not always associated with higher levels of ability in personnel selection, for attractiveness can be detrimental for females applying to masculine oriented job roles. Braun, Peus, and Frey (2012) argue that female levels of attractiveness fuel perceptions of femininity for employers. Thus, attractive women are not seen as hirable for leadership positions on account of their lack of masculine attributes (i.e., role incongruity). In contrast to the notion that beauty is always good, Heilman and Saruwatari (1979) refer to this as the "beauty is beastly" effect. Because female attractiveness facilitates gender role stereotypes in the employer, the applicant's femininity hinders hirability for leadership roles via role incongruity. In 1983, Heilman proposed the "lack

of fit model" to further explain this occurrence. According to this model, women experience employment discrimination and exhibit self-limiting behaviors that attribute to the dearth in female leadership. Both of these are the result of stereotypical female attributes lacking fit with masculine job roles. More recently, Johnson, Podratz, Dipboye, and Gibbons (2010) investigated the current state of the beauty is beastly effect and found that attractive women still face adversity when applying for managerial positions in which physical appearance has no job-relatedness.

Hypothesis 4a (H4a): Female applicant gender typicality/attractiveness will be negatively related to perceived hirability, job ability, and expected performance in a stereotypical male job role.

Hypothesis 4b (H4b): The hiring decision will coincide with this effect (i.e., choosing unattractive females over their attractive counterparts)

It is important to note that biases are more likely to surface during uncertainty, and as such, humans tend to rely on heuristics that can exacerbate pre-existing biases. In this way, the attractiveness bias also appears to surface during times of uncertainty. Hiring managers were found to rely on applicant attractiveness when granting promotions only when job performance was determined to be mediocre (i.e., not high quality: Chung & Leung, 1988). Thus, these biases are moderated by perceptions of ability, such that when a difference in ability is clearly delineated between two job applicants, the effect of gender typicality can be expected to decrease. As such, in the current study, we kept content explicitly indicative of job ability (e.g., level of education, years of work experience) constant across applicant profiles, as to maintain experimental control.

Social Media in Personnel Selection

In the past decade, social media use has grown rapidly as means for people to stay connected online. Despite being originally developed solely for entertainment purposes, sites such as Facebook, Twitter, and LinkedIn now pervade all aspects of daily life beyond recreation (Caers & Castelyns, 2011). Within organizational settings, social media has evolved into a means for employers to evaluate job candidates via their personal online profiles, attempting to assess hirability (Goodman, Smith, Ivancevich, & Lundberg, 2014). Goodman and colleagues report that the number of organizations using social media in their selection systems is ever-increasing. Whereas most social media sites exist for non-work related networking, sites such as LinkedIn, which has accrued 467 million users as of November, 2016 (About-linkedin), allows users to create profiles in attempts to market themselves to potential employers. Thus, much of the content on one's profile resembles a résumé (e.g., education, work experience, office skills). The practice of using social media in personnel selection is widespread, with over 40% of organizations reporting using internet searches and online social media to screen job applicants (Haefner, 2009).

Despite some inherent ethical and legal risks associated with using social media in hiring decisions, many employers choose to use this new tool to screen for risk factors, such as drug use or explicit language (Weathington & Bechtel, 2012), or to determine an applicant's perceived fit into an organization's culture (Brown & Vaughn, 2011). Because social media profiles combine portraying one's job-relevant information in addition to her/his appearance, they offer a context that resembles the selection procedure, in which both of these criteria are evaluated. In the current study, we created LinkedIn profiles for a hypothetical selection procedure, manipulating the gender typicality/attractiveness of applicants. Applicant headshots served as profile pictures and personal content was altered to resemble comparable degrees of application/resume strength

between applicant profiles. By doing this, we ensured that disparities of perceived competency and job ability between applicants are truly the result of gender and attractiveness manipulation.

The current study design required participants to complete a hypothetical selection procedure in which they analyzed applicant social media profiles. In order for effective independent variable manipulation, the social media profiles had to contain faces which were distinct in applicant attractiveness and gender typicality across four levels (i.e., male masculinity, male femininity, female masculinity, female femininity). Thus, was necessary to use faces which best fit the these constructs, in which gender typicality is significantly correlated with perceived attractiveness. A pilot study was conducted to determine which faces will be used in the main study.

Pilot Study

The goal of the pilot study was to determine eight faces which could accurately reflect each of the four distinct groups (i.e., two faces per group) of gender typicality (i.e., male masculine, male feminine, female masculine, female feminine). This was accomplished by the research team creating a list of 24 photograph portraits of human faces from various online databases, using best judgment of gender typicality categorization. Then, the pilot study was conducted using an undergraduate sample to narrow this number of faces down to eight—choosing that two that best fit each of the four categories.

Participants.

127 undergraduate students participated in the pilot study [71.7% female; ages 18 through 39 (M = 19.83, SD = 2.53)].

Procedure.

All participants came to the research lab to participate in the pilot study, where they were seated in front a computer screen and asked to make judgments of 24 faces and complete a brief questionnaire relating to one's gender and racial discriminatory attitudes.

Materials.

Digital photographs of faces were obtained from various internet databases [Ma, Correll, & Wittenbrink, 2015; DeBruine & Tiddeman 2017; (see Appendix A)]. The images featured headshots of 24 human faces (i.e., above the shoulders-see Appendix A), and were presented to the participants one at a time on the screen. The participants rated each face on nine different attributes (i.e., masculinity, femininity, attractiveness, competitiveness, likability, extraversion,

hirability for a management position, trustworthiness, and leadership ability; see Appendix B), using a 5-point Likert scale from strongly disagree to strongly agree. Although the main variables of interest were masculinity, femininity, and attractiveness, we introduced the other attributes to conceal the explicit research question to curtail the possibility of socially desirable responses. Additionally, each participant completed the Quick Discrimination Index (Ponterotto et al., 1995; see Appendix B), a 30-item inventory assessing one's sex and racial discriminatory attitudes ($\alpha = .898$) and a demographics questionnaire (see Appendix C).

Results.

The goal of the pilot study was to find and determine eight faces from original 24 that best fit the manipulations for the full study's stimuli. As such, two faces were chosen for each gender typicality group (i.e., male masculine, male feminine, female masculine, female feminine), for a total of eight faces. Faces were chosen based upon their respective mean scores of masculinity, femininity, and attractiveness, such that masculine men possessed high mean scores of both masculinity and attractiveness, feminine men possessed high levels of femininity and low levels of attractiveness, masculine females possessed high levels of masculinity and low levels of attractiveness, and feminine females possessed high levels of both femininity and attractiveness (see Table 1). Averaged scores were created to rank the faces between genders according to their attributes. For each male face, the average masculinity score was added to the average attractiveness score, then subtracted by the average femininity score. In this way, those with higher masculinity scores were ranked higher, femininity lower, while taking attractiveness scores into consideration. The faces with the top two scores were chosen to represent male masculinity and the bottom two scores were chosen for male femininity. This process was also

used in determining female faces, with the exception that the scaled score consisted of average femininity plus average attractiveness subtracted by average masculinity.

For all four female faces, levels of femininity significantly correlated with attractiveness ($r = 0.427$, $p < .001$; $r = 0.341$, $p < .001$; $r = 0.479$, $p < .001$; $r = .308$, $p < 001$). Additionally, levels of masculinity significantly correlated with attractiveness in all four male faces ($r = 0.466$, $p < .001$; $r = 0.381$, $p < .001$; $r = 0.271$, $p = .002$; $r = 0.178$, $p = .045$). Overall mean levels of masculinity and femininity were significantly negatively correlated ($r = -0.997$, $p <. 001$), indicating a strong indirect relationship between the two constructs (i.e., explaining 99.4% of the variance in each other). Taken together, these results support our proposed procedure to use these eight faces to represent four distinct categories of gender typicality and attractiveness.

Once we successfully determined which eight faces met our criteria of distinct levels of gender typicality and attractiveness, we developed our stimuli (i.e., LinkedIn profiles) and tested our hypotheses in the study described below.

Method

Participants

178 undergraduate students (M = 19.33 years of age, 77.5% female) at a large southeastern university completed the study for extra credit towards a psychology course.

Design

We employed a 3 x 2 x 2 mixed design in our study. The between-subjects variable was job type (i.e., male dominant, female dominant, or gender neutral). Participants were randomly assigned to one of the three job type conditions. Additionally, there were two within-subjects variables: gender typicality (typical and atypical) and profile gender (male and female). Taken together, this means that each participant provided hirability ratings for four unique profiles: one gender typical male (i.e., masculine), one gender non-typical male (i.e., feminine), one gender typical female (i.e., feminine), and one gender non-typical female (i.e., masculine).

Materials

The three job conditions were determined according to the 2016 United States occupational gender demographics (U.S. Bureau of Labor Statistics, 2016). The three conditions will be: male dominant (i.e., general branch manager of a large corporation; ~70% male), female dominant (i.e., event planner; ~77% female), and gender neutral (i.e., postal service clerk; ~53% male). Job descriptions (see Appendix D) were sourced from various employment search websites ("General Manager Job Description Sample", n.d.; "What Does an Event Planner Do?", n.d.; "Postal Service Clerks", n.d.).

The eight faces from the pilot study were used to make hypothetical LinkedIn profiles, representing applications/resumes in the personnel selection process. There were four versions of profile content, comparable in quality. This means that each participant was exposed to four of 32 possible LinkedIn profiles (research design ensured that the four profiles did not contain the same face or profile content). An example of a LinkedIn profile can be found in Appendix E.

To rate the profiles, participants responded to a five-item hirability inventory (Gilmore, Beehr, & Love, 1986). The measure contained two questions related to applicant hiring and salary decision [i.e., "Would you hire this applicant for the job described on this job description form?", "The typical beginning salary for this job is between $40,000 and $70,000 per year if this applicant were hired, what salary would you offer the applicant?" (adapted from $12,0000 and $18,000)]. The remaining three questions regard analyzing job specific attributes (i.e., "Rate the applicant's *ability* for the job described on the job description form", "Rate the applicant's personality, describing how well it fits the job describes on the job description form", " Rate the applicant's expected performance if the person were hired for the job described on the job description form"). All responses were recorded on a five point Likert-type scale. An overall score for hirabilty, job ability, and expected job performance (see *H1-4*) was created using an average score of items 1, 3 and 5 (i.e., "would you hire this applicant...", "rate the applicant's ability...", and "rate the applicant's expected performance...", respectively).

Participants also completed the 30-item Quick Discrimination Index (Ponterotto et al., 1995), which assesses the extent to one's sensitivity and awareness to cultural and gender equity (see Appendix B). An example includes: "It is as easy for women to succeed in business as it is for men"; all items will be recorded on a five point Likert-type scale. Lastly, participants completed a demographics questionnaire (see Appendix C).

Procedure

Participants came into the research lab and used a computer screen to view applicant profiles and perform corresponding tasks. Participants were provided with a job description for one of three possible job positions. The participant made judgments of the applicants in the context of a specific gendered job position (i.e., male dominant, female dominant, gender neutral). Within one of these three conditions, each participant rated the perceived job ability/competence of four applicants. Each applicant profile represented one of the four possible gender typicality conditions: masculine male, feminine male, masculine female, and feminine female. Participants were asked to rate four different profiles and then make a hiring decision, choosing one of the four applicants. Content between profiles were comparable in indicating job ability (e.g., same level of education and years of work experience). After making the hiring decision, participants completed the Quick Discrimination Index (Ponterotto et al., 1995) and a brief demographics questionnaire.

Results

To ensure that overall rater discriminatory attitudes were not contributing to hirability scores beyond our experimental manipulations, we ran a correlation analysis between participants discrimination scores (as indicated by the Quick Discrimination Index),on all applicant average hirability scores (i.e., masculine female, feminine female, masculine male, feminine male). Table 2 presents the correlations. We wanted to make sure that predisposed rater discrimination was controlled for between profile types. Additionally, controlling for overall rater discriminatory attitudes helps ensure equality between raters in differing job conditions. Results indicated a significant relationship between rater discrimination and hirability scores of feminine females within the male dominant and gender neutral job conditions (r = .372, p = 0.004; r = .304, p = .015, respectively). Because of this relationship, we analyzed our hypotheses controlling for participant scores on the Quick Discrimination Index.

First, the omnibus test of the variables was analyzed where a 3 (job condition) x 2 (profile gender) x2 (gender typicality) ANCOVA with rater discrimination as a covariate on the average hirability scores.

A significant 3-way interaction by profile gender by gender typicality by job type was present, F (2,173) = 3.719, p = .026, η^2_p = .041. The average hirability scores are presented for male (Figure 1a) and female (Figure 1b) profiles by gender typicality and job condition. This interaction suggests that applicant gender and level of gender typicality interact across levels of gendered job conditions. As shown in Figures 1a and 1b, gender typicality was associated with an overall increased hirability for males, yet decreased hirability for females. A significant 2-way

interaction between profile gender and gender typicality occurred, F (1,174) = 4.905, p = .028, η^2_p = .027. However, as suggested by the significant 3-way interaction, the effects of gender typicality increasing hirability for males and decreasing hirbaility for females did not manifest consistently across job conditions (i.e., the 2-way interaction between applicant gender and gender typicality varied between job types). Additionally, the main effect of gender typicality was approaching significance F (1,174) = 3.623, p = .059, η^2_p = .02. It appears that gender typicality is an important factor when assessing the likelihood of hiring a candidate, but this evaluation is greatly influenced by contextual factors such as the applicant's gender and prospective job role. To address each hypothesis specifically, we analyzed the simple main effect of gender typicality for each gender within job conditions using a 2x2 repeated measures ANCOVA. Additionally, non-parametric Wilcoxon Signed-Ranks Test was used to test the second part of each hypothesis (i.e., the actual hiring decision). We compared participants' hiring decisions within each job condition to determine if one profile type was chosen to "hire" more often over another.

As a reminder, *Hypothesis 1a* indicated that male applicant gender typicality would be positively related to perceived hirability, job ability, and expected performance in a stereotypical male job role. We analyzed the simple main effect of gender typicality for males within the masculine dominant job condition, and the main effect of gender typicality was significant, F (1,57) = 5.758, p = .02, η^2_p = .092. Masculine male profiles (M = 3.757, SE = .115) were rated more hirable than feminine male profiles (M = 3.35, SE = .118). Thus, *Hypothesis 1a* was supported. Figure 1a shows the comparison in hirability between gender typical and non-typical male profiles across all job conditions.

Hypothesis 1b stated that the hiring decision would correspond to the effect in *H1a*, and we used a non-parametric test to determine if masculine male profiles were chosen significantly more often than feminine male profiles. For hiring decisions within the male dominant job condition, 44.07% of participants chose the masculine male profile, yet only 16.94% of participants chose the feminine male profile. A Wilcoxon Signed-Ranks Test indicated a significant difference between these ratios, $Z = -2.667$, $p = .008$. Thus, *Hypothesis 1b* was also supported.

Hypothesis 2a stated that female applicant gender typicality would be positively related to perceived hirability, job ability, and expected performance in a stereotypical female job role, and we analyzed the simple main effect of gender typicality for females within the feminine dominant level of job type. Contrary to the original hypothesis, masculine female profiles ($M = 3.518$, $SE = .123$) were rated as more hirable than feminine female profiles ($M = 2.964$, $SE = .122$). Thus, *Hypothesis 2a* was not supported. The simple main effect was significant, $F(1,54) = 11.068$, $p = .002$, $\eta^2_p = .17$. This finding of masculine female profiles being rated as more hirable than feminine female profiles was consistent across all three job conditions. Figure 1b shows the comparison in hirability between gender typical and non-typical female profiles across all job conditions.

In regard to *Hypothesis 2b,* hiring decision would correspond to the effect in *H2a*, we expected feminine female profiles to be chosen significantly more often than masculine female profiles. When asked to make the hiring decision within the female dominant job condition, 33.93% of participants chose the masculine female profile, yet only 17.86% of participants chose the feminine female profile. A Wilcoxon Signed-Ranks Test indicated no significant difference between these ratios, $Z = -1.671$, $p = .095$. Similar to *H2a, H2b* was not supported. This is may

be explained by the fact the masculine male profiles (M = 3.54, SE = .143) were comparable to masculine female profiles (M = 3.52, SE = .123), within the female dominant job condition. Thus, not only was masculinity on average preferred to femininity across the gendered job conditions, masculine males were considered more hirable than feminine males (M = 2.79, SE = .144) and on par with masculine females within the female job condition.

Hypothesis 3a stated that applicant gender typicality would be positively related to perceived hirability, job ability, and expected performance for both males and females in gender neutral job roles. We expected for masculine males and feminine females to have higher average hiring scores than feminine males and masculine females. To test this hypothesis, we analyzed the two simple main effects of gender typicality between both males and females within the gender neutral job condition. Consistent with our hypothesis, masculine male profiles ((M = 3.709, SE = .089) were rated more hirable than feminine male profiles (M = 3.349, SE = .109). This main effect of gender typicality was significant, F (1,61) = 11.072, p = .001, η^2_p = .154. However, similar to our finding for *Hypothesis 2,* masculine female profiles (M = 3.667, SE = .096) were rated as more hirable than feminine female profiles (M = 3.545, SE = .104), however, the main effect of gender typicality was not significant, F (1,61) = 1.370, p = .246. Overall, *Hypothesis 3a* was partially supported.

In regard to *Hypothesis 3b,* the hiring decisions will correspond to the effects in *H3a*, we expected masculine male profiles to be chosen over feminine male profiles as well as feminine female profiles to be chosen over masculine female profiles. When asked to make the hiring decision within the gender neutral job condition, 34.92% of participants chose the masculine male profile, yet only 15.87% of participants chose the feminine male profile. A Wilcoxon Signed-Ranks Test indicated a significant difference between these ratios, Z = -2.121, p = .034.

However, in regard to the female profiles: 30.16% of participants chose the masculine female profile, yet only 17.46% of participants chose the feminine male profile. A Wilcoxon Signed-Ranks Test indicated no significant difference between these ratios, $Z = -1.461$, $p = .144$.

Overall, within the gender neutral job condition (i.e., postal service worker), masculine male profiles were considered more hirable than feminine male profiles. However, masculine female profiles were only slightly preferred over feminine female profiles. Moreover, with the negligible difference in hirability scores between masculine and feminine female profiles and lack of significant on hiring decisions, it is not clear that masculine females were truly preferred over feminine females. Thus, *Hypothesis 3b* was partially supported.

Hypothesis 4a stated that female applicant gender typicality would be negatively related to perceived hirability, job ability, and expected performance in a stereotypical male job role. As such, we expected for masculine females to have higher average hiring scores than feminine females within the male dominant job condition. We tested this hypothesis by analyzing the simple main effect of gender typicality for females within the male dominant job condition. The main effect was significant, $F(1,57) = 10.070$, $p = .002$, $\eta^2_p = .15$. This finding supports our assertion: masculine female profiles ($M = 3.70$, $SE = .096$) were rated as more hirable than feminine female profiles ($M = 3.25$, $SE = .113$). Thus, *Hypothesis 4a* was supported.

In regard to *Hypothesis 4b*, the hiring decision will correspond to the effect in *H4a*, we expected masculine female profiles to be chosen significantly more often than feminine female profiles. We found that when asked to make the hiring decision within the male dominant job condition, 20.34% of participants chose the masculine female profile, yet only 18.64% of participants chose the feminine female profile. A Wilcoxon Signed-Ranks Test indicated no significant difference between these ratios, $Z = -.209$, $p = .835$. Thus, although masculine female

profiles were rated higher than feminine female profiles, this was not reflected in the hiring decision. This negligible difference is perhaps best explained by the fact that 44.07% of participants chose to hire the masculine male profile, so there was a clear preference for the position other than the two female profiles. *Hypothesis 4b* was not supported.

Discussion

The findings from this study provide a lens for understanding how gender bias manifests within personnel selection. We found that masculine male profiles were, on average, rated as more hirable than feminine male profiles in the male dominant job condition (i.e., general branch manager). This finding aligns well with previous literature regarding the "what is beautiful is good heuristic" (Dion, Berscheid, & Walster, 1972) as well as the relationship between attractiveness and gender typicality fueling judgements of representativeness via role congruity theory (Eagly & Karau, 2002). It is apparent that when determining the leadership capabilities of an applicant under times of uncertainty, raters will utilize perceptions of male masculinity (i.e., attractiveness), to form biased judgments. Because there were no actual indications of differing job ability between profiles, raters were forced to rely previous conceptions of gender typicality and gender roles. When this occurred, masculine male (i.e., attractive) profiles were considered more hirable than feminine male profiles across all three job conditions.

Gender typicality and attractiveness did not influence female hirability ratings within the female dominant job condition in the manner which we anticipated. In fact, masculine female profiles were favored over their feminine counterparts, indicating a preference for masculine applicants (i.e., purportedly those lower in attractiveness). We expected a female dominant job role to elicit perceptions of feminine representativeness. However, it appears that the beauty is beastly effect (Heilman and Saruwatari, 1979) was not limited to the male dominant job role: masculinity could have fueled perceptions of competence and job ability across both gendered job conditions. This highlights the systemic bias against feminine traits when considering job

applicants, and contrary to our expectations, this bias appears to transcend specific job roles. Assuming there was successful gender saliency between job conditions, gender non-typical females either outperformed or performed as well as their attractive counterparts across all three job types, reinforcing the masculinity bias within selection proposed by the agency-communion (Powell & Butterfield, 1979) and the masculinity-femininity (Shinar, 1975) paradigms.

This masculinity bias existing between job conditions implies a much more stringent structure for femininity and female attractiveness as it relates to perceptions of hirability. Masculinity pervasively scored better than femininity, with the exception of females in the gender neutral job condition, in which we expected femininity to prevail. This brings an interesting effect to light: perhaps female beauty is good, but only when job ability must rigorously appraised (e.g., general branch managers, event planners), as it is evident the job position of a postal service worker requires much less expertise and perceived ability. This would imply that hiring managers may use heuristics such as "beauty is good" to rate females only when high impressions of job ability are required. In this way, neither masculinity nor femininity bias effect females applying for lower level positions. This is contrasted with masculinity in males consistently being preferred over femininity, even in the postal service worker condition. This finding implies a greater aversion to hire gender non-typical males than gender non-typical females, when compared to their gender typical counterparts. Thus, feminine males might be at a further disadvantage when competing against their typical, attractive male opponents. In regard to job applicants for leadership positions (i.e., stereotypical masculine), it appears that both feminine male candidates and feminine female candidates are disadvantaged for not meeting different role expectations— one for not meeting the typicality role of his gender and the other for not meeting the agentic gender role required of the job.

Limitations and Future Directions

One limitation of this study is the generalizability of the sample. One can assume that undergraduate students do not generally have experience as raters within personnel selection scenarios. Additionally, there are certainly limitations to the ecological validity of performing a selection procedure within a laboratory setting. However, these issues are mitigated by the need to enact experimental control to examine specific psychological effects of bias thought to be ubiquitous in western society. In this way, we can assume that implicit processes of assessing gender and role congruity to be present within our sample. Beyond analyzing specific psychological effects, we recognize that we are asking participants to take part in a hypothetical selection scenario—a situation with which they may be completely unfamiliar. Because of this, our findings could perhaps be bolstered by obtaining sample with selection experience. As such, future research should seek to use current employees of human resource and others with selection experience when examining the effects of bias in hiring situations. Moreover, one might be skeptical to the generalizability of a predominately female sample. However, we feel this issue is ameliorated by the fact that human resource management is a majority female-based profession (U.S. Bureau of Labor Statistics, 2016). In this way, our predominately female sample should accurately reflect the reality of the field of hiring management, albeit, with less experience.

To better investigate these findings, future research should seek to take a process tracing approach toward measuring cognitive processes associated with gender bias in selection systems. Process tracing techniques can provide much richer data for decision making tasks, as multiple points may be analyzed throughout a decision process, as opposed to the current research in which we analyzed simple outcomes alone. A highly implicit phenomenon, such as gender bias

in hiring, is ideal for process tracing research. Thus, the next steps entail using a process tracing method such as eye tracking to better elucidate the processes involved in hiring decisions. Previous research has demonstrated that several variables of eye tracking (e.g., fixations, dwell time) are indicative of judgments and choices (Franco-Watkins, Davis, & Johnson, 2016). Moreover, previous literature suggests gender typicality perceptions can be better assessed through various eye tracking mechanisms (Stockhausen et al., 2013; Bloom & Mudd, 1991). By incorporating eye tracking technology and a sample with hiring experience, we can better assess the implicit (i.e., unconscious) cognitive processes associated with gender typicality and attractiveness bias of actual decision makers within the field of personnel selection.

Conclusion

The findings from this study indicated a pervasive bias regarding gender and attractiveness in selection scenarios. Controlling for clear discrepancies of job-related content between applicants, we found that participants rely on heuristics of representativeness and beauty in determining candidate hirability. Surprisingly, we found masculine profiles to be rated higher in hirability than feminine profiles across all three job conditions, even within female dominant role (i.e., event planner). This manifested in a clear preference for male individuals with high levels of gender typicality for males across all three job types as well as a preference for gender non-typical females in both the male dominant and female dominant job conditions, coinciding with Heilman and Saruwatari's (1979) beauty is beastly effect.

Implications and practical applications from this study include the ability to design better training for hiring managers as well as selection systems that mitigate the effects job-related judgments based upon gender stereotyping. This research will also add to literature regarding the effects of implicit bias on gender typicality perceptions— an important area of development for diverse workforces. As gender and sex roles develop culturally overtime, this research will help delineate current perceptions related to applicant representativeness and job ability. Additionally, this research contributes the theoretical constructs of gender typicality and attractiveness by combing the two constructs in a single rater scenario which had not been implemented, to our knowledge, beforehand. Although these two attributes remain distinct, the findings from this research highlight the need to account for both when investigating gender bias within selection systems.

In conclusion, human reliance on biases and heuristics in selection procedures has the potential to hinder effective decision making, curtailing hiring managers from choosing optimal candidates as well as raising susceptibility to risk factors such as adverse impact and injustice perceptions. This study specifically addresses bias related to applicants who possess facial features incongruent with gender typicality and, depending upon the applicant's gender, how these factors can detriment hirability via lowering perceptions of ability and expected performance.

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Table 1
Average gender typicality and perceived attractiveness scores for Pilot Study faces

Females	Masculinity	Femininity	Attractiveness	F+A-M	M+A-F
01	1.86	4.32	3.64	6.10	
02	2.02	4.15	3.37	5.50	
03	1.64	4.37	3.83	6.57	
04	2.86	3.28	2.39	2.81*	
05	1.94	4.25	3.85	6.17	
06	2.50	3.61	2.91	4.02	
07	1.57	4.45	4.00	6.87*	
08	2.03	3.93	3.10	5.00	
09	1.62	4.38	4.00	6.76*	
10	2.76	3.51	2.65	3.40*	
11	1.83	4.28	3.77	6.22	
12	2.38	3.88	3.07	4.57	
Males					
01	4.17	1.89	2.90		5.18
02	3.87	2.06	2.73		4.54
03	4.16	1.78	2.50		4.88
04	3.84	2.09	2.38		4.13*
05	4.00	2.25	3.51		5.26
06	4.01	1.95	2.51		4.57
07	4.32	1.63	2.54		5.23
08	3.85	2.17	3.33		5.02
09	4.38	1.63	3.38		6.13*
10	3.51	2.43	2.48		3.56*
11	4.09	2.13	3.79		5.75*
12	4.07	1.97	2.42		4.53

Note. * indicates face was chosen for main study social media profile

Table 2
Correlation between average hirability by profile type and rater discrimination

	1	**2**	**3**	**4**
1. Masculine Female	-			
2. Feminine Female	.15	-		
3. Masculine Male	.19*	.31*	-	
4. Feminine Male	.13	.43*	.15*	-
5. Rater Discrimination	-.02	.20*	.06	.01

Note. *significant at $p < .05$

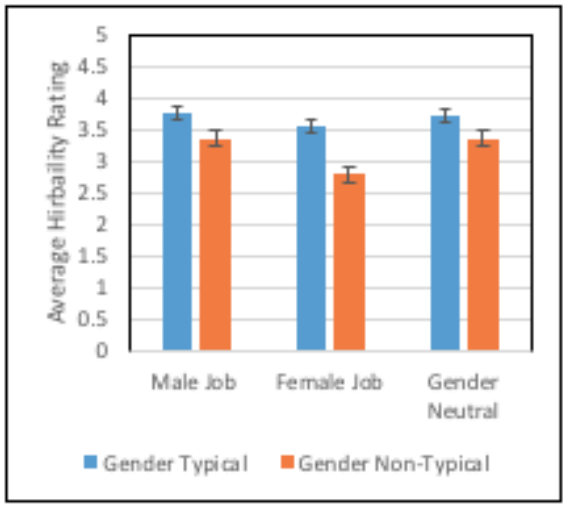

Figure 1a. Average hirability ratings for male profiles across three gender job conditions. Male profiles were gender typical (masculine) or gender non-typical (feminine).

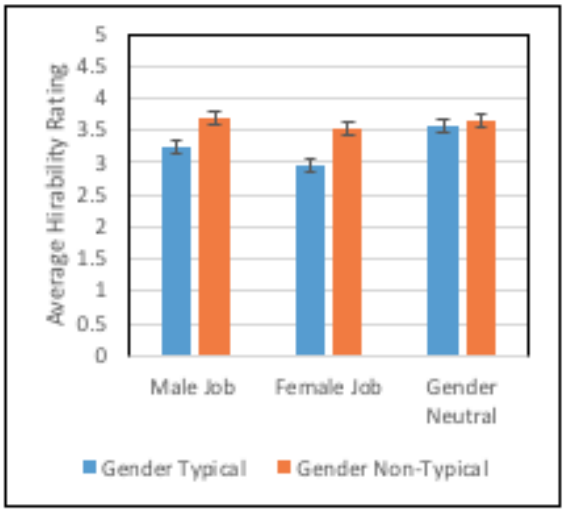

Figure1b. Average hirability ratings for female profiles across three gender job conditions. Female profiles were gender typical (feminine) or gender non-typical (masculine).

Appendix A

Examples of Faces Used in Pilot Study (Ma, Correll, & Wittenbrink, 2015)

Instructions: Please indicate to what extent you disagree or agree with each of the following statements using the response scale below.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

This person…

1. Has masculine facial features.
2. Has feminine facial features.
3. Has an attractive face.
4. Is competitive
5. Is likable.

6. Is extroverted/sociable.
7. Would be hired for a management position.
8. Is trustworthy.
9. I could see this person in a leadership role.

Appendix B

Quick Discrimination Index (Ponterotto et al., 1995)

Directions: Remember there are no right or wrong answers. Please circle the appropriate number to the right. 1 = Strongly Disagree, 2 = Disagree, 3 =Not Sure, 4 = Agree, 5 = Strongly Agree

1. I do think it is more appropriate for the mother of a newborn baby, rather than the father, to stay home with the baby (not work) during the first year.
2. It is as easy for women to succeed in business as it is for men.
3. I really think affirmative-action programs on college campuses constitute reverse discrimination.
4. I feel I could develop an intimate relationship with someone from a different race.
5. All Americans should learn to speak two languages.
6. It upsets (or angers) me that a woman has never been president of the United States.
7. Generally speaking, men work harder than women.
8. My friendship network is very racially mixed.
9. I am against affirmative-action programs in business.
10. Generally, men seem less concerned with building relationships than women.
11. I would feel OK about my son or daughter dating someone from a different race.
12. It upsets (or angers) me that a racial minority person has never been president of the United States.
13. In the past few years, too much attention has been directed toward multicultural or minority issues in education.
14. I think feminist perspectives should be an integral part of the higher education curriculum.
15. Most of my close friends are from my own racial group.
16. I feel somewhat more secure that a man rather than a woman is currently president of the United States.
17. I think that it is (or would be) important for my children to attend schools that are racially mixed.
18. In the past few years too much attention has been directed toward multicultural or minority issues in business.
19. Overall, I think racial minorities in America complain too much about racial discrimination.
20. I feel (or would feel) very comfortable having a woman as my primary physician.
21. I think the president of the United States should make a concerted effort to appoint more women and racial minorities to the country's Supreme Court.
22. I think white people's racism toward racial-minority groups still constitutes a major problem in America.
23. I think the school system, from elementary school through college, should encourage minority and immigrant children to learn and fully adopt traditional American values.
24. If I were to adopt a child, I would be happy to adopt a child of any race.

25. I think there is as much female physical violence toward men as there is male physical violence toward women.
26. I think the school system, from elementary school through college, should promote values representative of diverse cultures.
27. I believe that reading the autobiography of Malcolm X would be of value.
28. I would enjoy living in a neighborhood consisting of a racially diverse population (Asian, blacks, Latinos, whites).
29. I think it is better if people marry within their own race.
30. Women make too big a deal out of sexual harassment issues in the workplace.

Appendix C

Pilot Study Demographics Questionnaire

Instructions: Please answer the following questions as best you can.

1. What is your age?

2. What is your gender?

3. What is your major?

4. What is your current undergrad status?

    • Freshman • Sophomore • Junior • Senior

Appendix D

Gendered Job Descriptions (U.S. Bureau of Labor Statistics, 2016)

General Branch Manager (male dominant; "General Manager Job Description Sample", n.d.)

Job Responsibilities:

Obtains profit contribution by managing staff; establishing and accomplishing business objectives.

Job Duties:

- Increases management's effectiveness by recruiting, selecting, orienting, training, coaching, counseling, and disciplining
- Develops strategic plan by studying technological and financial opportunities; presenting assumptions; recommending objectives.
- Accomplishes subsidiary objectives by establishing plans, budgets, and results measurements; allocating resources; reviewing progress; making mid-course corrections.
- Coordinates efforts by establishing procurement, production, marketing, field, and technical services policies and practices; coordinating actions with corporate staff.
- Builds company image by collaborating with customers, government, community organizations, and employees; enforcing ethical business practices.

Skills and Qualifications:

Performance Management, Staffing, Management Proficiency, Coordination, Coaching, Developing Standards, Financial Planning and Strategy, Process Improvement, Decision Making, Strategic Planning, Quality Management

Event Planner (female dominant; "What Does an Event Planner Do?", n.d.)

Job Responsibilities:

Event planning, design and production within time limits; working with clients to identify their needs and ensure customer satisfaction.

Job Duties:

- Organizing facilities and details such as decor, catering, entertainment, transportation, location, invitee list, special guests, equipment, promotional material etc.
- Liaise with clients to identify their needs and to ensure customer satisfaction.
- Organize facilities and manage all event's details such as decor, catering, entertainment, transportation, location, invitee list, special guests, equipment, promotional material etc.
- Proactively handle any arising issues and troubleshoot any emerging problems on the event day.

Skills and Qualifications:

Excellent time management and communication skills; Ability to build productive business relationships; Ability to manage multiple projects independently

Postal Service Clerk (gender neutral; "Postal Service Clerks", n.d.)

Job Responsibilities:

Perform any combination of tasks in a post office, such as receive letters and parcels; sell postage and revenue stamps, postal cards, and stamped envelopes; fill out and sell money orders; place mail in pigeon holes of mail rack or in bags; and examine mail for correct postage.

Job Duties:

- Register, certify, and insure letters and parcels
- Maintain financial or account records.
- Answer questions regarding mail regulations and procedures, postage rates, and post office boxes.
- Weigh letters and parcels, compute mailing costs based on type, weight, and destination, and affix correct postage.
- Prepare documentation for contracts, transactions, or regulatory compliance.

Skills and Qualifications:

Ability to: Identify Objects, Actions, and Events; Perform for and Work Directly with the Public; Handle and Move Objects

Appendix E

Example LinkedIn Profile