# Gender Diversity in the Workplace: Pronouns, Gender-Stereotyped Job Listings, and Perceptions of Hireability

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#### **Abstract**

Past research has investigated the impact of gender and gender biases on hiring decisions for cisgender individuals. However, there is a lack of research on how perceptions of gender diverse individuals impact hiring decisions. The current work explores how a job applicant's gender pronouns may impact the likelihood of the applicant getting hired. We also investigated whether this likelihood varied depending on the job description—specifically whether it included content related to gender stereotypes (e.g., "nurturing" versus "leadership capabilities" as a desired trait in job applicants). Ninety-six participants were randomly assigned to view an application package including she/her, he/him, or they/them pronouns, then rated the hireability of the applicant for two gender-stereotyped job listings (masculine, feminine) and one no-trait job listing (referenced as job trait: masculine, feminine, unspecified). We predicted that applicant pronouns would bias judgements of hireability, with nonbinary being rated least hireable, and further that this effect may be moderated by gendered job characteristics. Results indicated that there was no main effect of gender on hireability, nor an interaction between job applicant gender and job trait. Our study furthers the discussion on conceptualizations of nonbinary people and how others ascribe gendered traits to them.

**Keywords:** hireability, pronouns, gender minorities, hiring discrimination, nonbinary

#### 1 INTRODUCTION

Gender identification outside the binary (i.e., a gender identity that is not exclusively man or woman<sup>1</sup>; see Appendix A) is becoming increasingly common, as nonbinary people made up 11.1% of the United States (US) adult LGBTQ+ population as of 2021<sup>2</sup>, an increase from 2-10% in data from 2016-2018<sup>3</sup>. Despite increasing representation in the population, gender diverse people (i.e., people with a non-normative gender identity—normative being cisgender men and women<sup>4</sup>) continue to face high levels of discrimination <sup>5;6</sup>. Gender diverse individuals report barriers in educational environments, healthcare settings, and the workplace <sup>7;8;9</sup>. Of particular interest is the workplace, as the average American spends a significant amount of time—40.5 hours a week—at their place of employment 10, and workplace outcomes can have a significant impact on mental and physical health <sup>11;12</sup>. 27% of employed trans and nonbinary people reported some form of workplace

discrimination, including having limited access to bathrooms, being misgendered, experiencing verbal and physical abuse, being socially excluded, being fired, and being denied promotion <sup>7;8</sup>. Trans and nonbinary people also report taking measures to avoid mistreatment, such as quitting their jobs or discontinuing or delaying gender-affirming care—access to which can decrease negative health outcomes such as depression and suicidality and increase life satisfaction <sup>13</sup>. Such chronic experiences of discrimination are linked with poorer health and well-being 14. Indeed, gender-nonconforming individuals are particularly at risk for negative health outcomes (e.g., depression, suicidality, and chronic stress); 39% of transgender (trans; i.e., people whose gender identity differs from the sex assigned to them at birth and/or conceptualizations of gender within their culture 15) and nonbinary Americans reported serious psychological distress compared to 5% of the general U.S. population<sup>7;16;17</sup>.

The adversity described above is only encountered if

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gender diverse people can gain access to employment, as the gender discrimination present in the workplace poses additional barriers in the hiring process. At 15%, the unemployment rate for trans and nonbinary individuals was three times higher than in the general U.S. population (at 5%) as of 2016. Unemployment can result in negative mental health outcomes for gender diverse people (i.e., anxiety, mood disorders, and suicidality 18) and can affect long-term finances (i.e., lifetime earnings, homeownership, etc. 11). Employment can also provide benefits like health insurance, which eases the financial burden of potentially life-saving health care for nonbinary individuals (i..e, gender-affirming care, treatment for HIV, and mental health resources 15). Hence, understanding barriers to employment and equitable treatment in workplace contexts are critical for determining the mental and physical health outcomes as well as the long-term financial outcomes of gender diverse individuals. The current work aims to extend experimental research on the biased and discriminatory treatment of gender diverse individuals in hiring contexts. Specifically, we focus on nonbinary individuals, a relatively understudied and underserved population with respect to hiring equity.

# 1.1 Binary Gender, Hireability, and Workplace Perceptions

Past literature has demonstrated the prominent role that the gender of an applicant plays on perceptions of judgements of whether a candidate is fit for hiring (referred to as hireability hereafter), fit for a position, and professional competence, which are theorized to influence hiring decisions. For example, in a study by Francesco and Hakel<sup>19</sup>, men were perceived as most hireable compared to women in an experimental context, and in another by González and colleagues <sup>20</sup>, men were perceived as more hireable than their equally qualified women counterparts. These results are consistent with historic and current gaps in the employment of women compared to men — as of 2023, 57.1% of U.S. women participate in the labor force compared to 62.6% of men<sup>21</sup>. Further, once hired, male-stereotypic traits are often viewed as those most desirable in the workplace 20, and men are most readily assumed to fit these stereotypes. Women are perceived to be a poor fit for male-dominated positions, as they are assumed not to possess the typically masculine traits that are considered necessary for success <sup>22</sup>. As a result, women are subject to more negative performance expectations in their job than men.

Despite consistent evidence that there is bias for hiring cisgender (i.e., those whose gender identity aligns with the sex assigned to them at birth) men relative to those of other gender identities, past research demonstrates that the effect of gender on hireability is context-

dependent. Certain jobs are gendered (e.g., dominated by men or women or associated with gender's stereotyped traits) <sup>19</sup>. Puwar's Bodies Out of Place theory states that based on gender stereotypes, we bring to mind an individual who would be the "natural" choice for a certain job, and those who have a congruent gender presentation to this "perfect fit" will be perceived as most hireable <sup>23</sup>. Those who have a mismatch between their gender identity and a position's gendered traits may be perceived as less hireable than applicants whose gender aligns with the stereotypes of the position <sup>24;25</sup>.

In the U.S., men make up significantly more of the workforce in masculine-dominated fields, such as microfinance, and are deemed more competent in their roles than their female counterparts <sup>26</sup>. In the study previously mentioned by Heilman et al., women were ranked lower than men on performance expectations due to perceived incongruity between female stereotypes and masculine role expectations <sup>22</sup>. On the other hand, women are more likely to be hired for and make more of the workforce for feminine stereotyped positions, such as caregiving and nursing, due to perceptions that they fit the required traits such as warmth <sup>27</sup>.

The literature reviewed above is almost exclusively limited to perceptions of men and women. Since nonbinary individuals may not be perceived to fit jobs stereotyped as either masculine or feminine or dominated by men or women, it is unclear the positions for which they are seen as most suitable or those in which they will experience the most discrimination. Because we predict that perceptions of nonbinary people may be informed by associations between nonbinary individuals and binary identities, it is critical that we draw from past workplace bias to understand how it may impact gender diverse people in their careers.

# 1.2 Theoretical Framework on Nonbinary Perceptions

There are several theoretical frameworks regarding beliefs about gender—belief in gender as a binary concept, androcentrism, and general gendered assumptions—that can provide an explanation for perceptions of nonbinary individuals and how this may impact their employment opportunities. The belief that gender and sex are fundamentally binary and determined by biological features may contribute to prejudice towards non-binary individuals <sup>28,29</sup>, as nonbinary identities contrast with the ideology that gender is innate and is rooted in sex. This belief could lead to negative perceptions of gender diverse individuals regardless of context <sup>30</sup> or job traits.

Similarly, androcentrism might also impact gender discrimination. Androcentrism refers to the idea that men and their needs and values are prioritized as the center of society <sup>31</sup>, meaning that men are the default

in society. Neutral terms such as "human" and "person" are perceived as masculine, as such men may be inferred when gender-neutral language is used <sup>32</sup>. Due to this tendency to assume gender-ambiguous language is referring to men, this effect may extend to the use of they/them pronouns. When using ambiguous pronouns (i.e., they/them) for an unknown person (e.g., "someone left their phone here"), the individual in question may be assumed to be a man and therefore more likely to possess stereotypically masculine traits and fit a masculine job <sup>33</sup>.

Another possibility is that gendered perceptions of nonbinary people could be formed on the basis of assumptions regarding gender and sex. Often, nonbinary individuals may be assumed to be assigned female at birth (AFAB; see Appendix A) because relative to masculinity, femininity is viewed as more flexible <sup>34</sup>. Further, in male-dominated contexts, an individual AFAB may even be more positively perceived when they transgress feminine stereotypes and display masculine appearances and behaviors 35. Because masculinity is valued in broad culture and more specifically within the workplace<sup>22</sup>, transgressing the stereotypes associated with being assigned male at birth (AMAB) is viewed as more threatening and less justified by displaying the traits associated with a higher social status<sup>36</sup>. From this theoretical framework, we predict that gendered assumptions about nonbinary people (i.e., associating nonbinary individuals with masculine or feminine traits) could lead to perceptions of their hireability following associations between nonbinary individuals and binary identities.

# 1.3 Nonbinary People in the Workplace

Previous workplace discrimination research narrowly defines gender and is usually restricted to comparisons between cisgender men and women, underscoring the need to expand research on gender diverse individuals. However, emerging evidence suggests that gender diverse people may also be affected by biased hiring decisions. For example, Francesco and Hakel included an androgynous job applicant in their design, which was rated lower for hireability than the male applicant <sup>19</sup>. Prentice and Carranza provide a possible explanation for these hiring biases: those who display traits that don't fit prescriptive gender stereotypes are perceived negatively compared to those who do<sup>37</sup>. Because gendered traits are typically conceptualized within a man/woman dichotomy<sup>38</sup>, those who show incongruence with binary traits may be perceived more negatively as compared to those who fall within the binary. This is particularly apparent in the workplace, where gender stereotypes may be applied to those seen as the best fit for certain positions. As binary people don't fit into gendered categories as explicitly as a cis man or woman might, the extent to which gendered job stereotypes will influence perceptions of nonbinary individuals' fit for certain positions. We want to explore if the effect of gender pronouns on hireability is moderated by gendered job traits.

### 1.4 Overview of the Present Study

The current work aims to address the gaps in research on nonbinary people in the workplace by evaluating the impact of gender pronouns on perceptions of hireability. More specifically, we are interested in the differences in perceived hireability of binary gender pronouns (he/him, she/her) and nonbinary pronouns (they/them). Further, we want to investigate the effects of pronoun manipulation on hireability interaction with gendered job traits. For example, we will explore whether individuals using he/him pronouns are seen as hireable depending on if the job description fits masculine stereotypes. Of particular interest is whether people using they/them pronouns are seen as more suitable for positions characterized by masculine or feminine traits or neither. Thereby, this work aims to inform literature on gender-based inequities in hiring and stereotype application (e.g., leadership as a masculine trait and warmth as a feminine trait) with a more inclusive operationalization of gender.

To test these questions, participants were randomly assigned to an application package using one of three pronouns (he/him, she/her, or they/them) and gendered experiences (e.g., girls mentorship, boys mentorship, and LGBTQ+ youth mentorship). Participants then rated the applicant's fit for three job listings that provided desired gender-stereotypic traits (masculine or feminine) and a no trait condition.

Given past findings on impact of gender on perceptions in the workplace<sup>22;36</sup>, we predicted that the applicant that uses they/them pronouns would be perceived as less hireable across job posting conditions compared to applicants with binary pronouns (she/her and he/him), and the applicant with he/him pronouns would be rated most hireable overall. We predicted that applicant pronouns and gender-stereotypic job listings would interact such that hireability ratings would be highest when the applicant's gender was perceived as congruent with the gender-stereotyped job listing traits, and the lowest ratings would result from a perceived incongruence<sup>37</sup>. Specifically, the participants viewing the application package featuring he/him pronouns would rate the applicant as most hireable for the masculine job trait condition, followed by the no trait control condition, and least hireable for the feminine trait condition. Whereas, the participants viewing the application package using she/her pronouns would rate the applicant most hireable for the feminine trait condition, followed by the no trait control condition, and least hireable for the masculine trait condition.

Within this interaction, our question of interest is centered around the simple effect observed in the they/them condition, under which we hypothesized three possible patterns based on varied theoretical perspectives.

- 1. Androcentrism. Based on the concept of androcentrism (e.g., the idea that masculinity is the default in Western language and culture), nonbinary people who use they/them pronouns may be perceived as more masculine<sup>33</sup>. The applicant with they/them pronouns may resemble the pattern of results from the applicant with he/him pronouns, so the applicant would be rated most hireable for the masculine job trait condition, followed by the no trait control condition, and least hireable for the feminine trait condition.
- 2. Flexibility of Femininity. As femininity is viewed as more flexible than masculinity, people may be more likely to assume that someone who identifies as nonbinary was AFAB<sup>35</sup>. The ratings of the applicant with they/them pronouns may resemble the pattern of results from the applicant with she/her pronouns, so the applicant would be rated most hireable for the feminine trait condition, followed by the no trait control condition, and least hireable for the masculine trait condition.
- 3. Overall Discrimination. As nonbinary people are subject to both interpersonal and societal discriminations, applicants that use they/them pronouns may be considered less hireable regardless of job traits. The applicant with they/them pronouns may be rated significantly lower across all job listing conditions relative to the applicants with he/him and she/her pronouns.

#### 2 METHOD

All methods were pre-registered on AsPredicted. View the preregistration here: Aspredicted.org/yt3x6.pdf.

## 2.1 Participants

The present study's sample size was limited by funding constraints. We recruited as many participants as possible within the study budget. A total of 110 participants were recruited via the CloudResearch platform and paid \$1.25 as compensation. Participants were excluded from analyses if they failed an attention check question or self-reported that their data was of poor quality (indicated by a response to the question "how carefully did you complete this study?" of less than four on a five-item Likert Scale from 1 (not at all) to

5 (very)), resulting in a sample size of 96 participants included in analyses. Ages ranged from 22 to 72 (M = 38.16, SD = 9.86). One participant was excluded from the calculation of age descriptive statistics because they entered an invalid age. Mean annual household income was \$60,588 (SD = \$33,984). Table 1 provides data on participant gender, sex assigned at birth, race/ethnicity, sexual orientation, educational attainment, and political ideology. A sensitivity power analysis conducted in G\*Power<sup>39</sup> indicated this sample size (N = 96) could detect a medium effect of  $\eta_p^2 = .08$  or greater at 95% power using the average correlation among repeated measures.

Variable Name	N	%
Current Gender ( <i>n</i> =96)		
Men	58	38.5
Women	37	38.5
Prefer Not to Say	1	1.0
Ethnicity ( <i>n</i> =96)		
White/European American	75	78.1
Black/African American	8	8.3
East Asian	7	7.3
Hispanic/Latin American	3	3.1
South Asian	1	1.0
Prefer Not to Say	1	1.0
Other	1	1.0
Sexual Orientation ( <i>n</i> =96)		
Heterosexual	88	91.7
Bisexual	6	6.3
Lesbian/Gay	1	1.0
Other	1	1.0
Level of Educational Attainment ( <i>n</i> =96)		
High School Equivalent	16	16.7
Some College, No Degree	16	16.7
2-Year College Degree	10	10.4
4-Year College Degree	36	37.5
Graduate or Professional Training	18	18.8
Political Ideology ( <i>n</i> =96)		
Strongly Liberal	18	18.8
Liberal	21	21.9
Somewhat Liberal	14	14.6
Both Liberal and Conservative	15	15.6
Somewhat Conservative	10	10.4
Conservative	13	13.5
Strongly Conservative	5	5.2

Table 1 Demographic Data for Participants

# 2.2 Materials

Application Package Vignette

Participants were randomly assigned to read one of three application packages. Application packages were identical except for applicant pronouns and gendered

 $<sup>^{1}</sup>$ This study was conducted as part of a class project. The class was allocated \$500 and three small group studies were conducted. Thus \$166 was allocated to this study.

activities (more below). Each package included a summary of the applicant with age (22), education level (bachelor's degree), and type of position the applicant is applying for (full-time position). The package also included a resume with the following information: college-level education with majors and minors occluded and GPA (3.65); professional experience of a summer internship (with the company name occluded); and two gendered campus engagement activities (more below). The final component of the application package was a two-sentence endorsement from a previous manager using the applicant's pronouns.

Across the three conditions, the gender varied. In the he/him condition, parenthetical pronouns read (he/him), the two campus engagement activities were titled men's club soccer and boys leadership, and the endorsement included he/him pronouns. In the she/her condition, parenthetical pronouns read (she/her), the two campus engagement activities were titled women's club soccer and girls leadership, and the endorsement included she/her pronouns. In the they/them condition, parenthetical pronouns read (they/them), the two campus engagement activities were titled all-gender club soccer and LGBTQ+ leadership, and the endorsement included they/them pronouns. See Appendix B to view the full application packages.

# Job Listing Vignette

Participants viewed three hypothetical job listings in a randomly determined order. The job listings were all titled "entry level post," posted by ABC Corporation, describing a full-time, salaried position in Denver, Colorado, requiring a college degree in a related field. The listings varied only by preferred traits listed. The masculine-stereotyped job listing included "solid business sense, takes initiative, and decisive." The feminine-stereotyped job listing included "interpersonal skills, creativity, and skilled communicator." The control job listing stated "no traits listed." Stereotyped traits included were based on a study by Born and Taris assessing gendered perceptions of traits included in job listings. See Appendix C to view the full job listings.

# Hireability Scale

We adapted the Hireability Scale used by Madera and colleagues <sup>41</sup>. The modified scale included five items used to evaluate the perceived hireability, fit, and belonging of the applicant for each of the three job listings on a nine-point Likert scale from 1 (not at all) to 9 (very much). Example items included "How likely would you be to hire the candidate for this job?" and "How likely is it that the candidate will make an effective employee at this job?" One original item was removed ("Is it likely that this candidate will make an effective employee at [company]?") and replaced with "To what degree do you feel that the candidate would belong at this job?" to

better assess perceptions of belonging. One additional item was added to assess perceptions of fit: "How good of a fit is the candidate for this position?" The five items were averaged to create a composite variable for hireability (M= 6.88, SD =1.47). Consistent with the original scale ( $\alpha$ =.99) <sup>41</sup>, the modified scale had high reliability in the present study ( $\alpha$ =.97).

# Interpersonal Comfort

To assess participants' feelings regarding interacting with nonbinary people as an individual difference measure, we used the Interpersonal Comfort (IC) subscale of the Nonbinary Attitudes and Beliefs Scale (NABS; modified from Transgender Attitudes and Beliefs Scale (TABS))<sup>42</sup>. The original scale (TABS) was modified into NABS to replace the word 'transgender' with 'nonbinary' in each item (e.g., "I would be uncomfortable if my boss was transgender" was changed to "I would be uncomfortable if my boss was nonbinary"). The Interpersonal Comfort subscale is a 14-item scale with eight reverse-scored items. Participants responded on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). The 14 items were averaged to create an Interpersonal Comfort composite score (*M*= 5.49, SD=1.64). Consistent with past use  $(\alpha=.93)^{42}$ , in the present study, the Interpersonal Comfort subscale had high internal reliability ( $\alpha$ =.97).

# 2.3 Procedure

Researchers posted the surveys to a paid survey website, CloudResearch. Participants were told that they were tasked as a job recruiter who must read an application package that includes a brief introduction to the prospective employee, a snippet from their resume, and part of a letter of recommendation from a previous employer. They were then randomly assigned to one of three pronoun conditions (i.e., he/him, she/her, or they/them) which they were asked to read carefully. Participants then completed the modified Hireability Scale<sup>41</sup> three times—one time for each job listing (i.e., masculine, feminine, and no traits). The order of job trait presentation was randomly determined for each participant. After answering questions about hireability, participants completed the Interpersonal Comfort factor of the Nonbinary Attitudes and Beliefs Scale (NABS; modified from Transgender Attitudes and Beliefs Scale  $(TABS)^{42}$ ) with the order of items randomized. The survey ended with a demographics questionnaire, an attention check, and a debrief on the goals of the study.

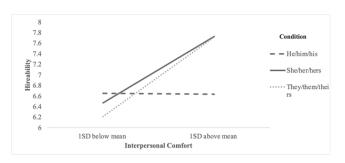
### **3 RESULTS**

This study investigated how pronouns used in a resume package and job traits (feminine versus masculine) impacted perception of applicant hireability. We predicted a main effect of pronouns on hireability (i.e., participants assigned to the nonbinary condition would evaluate the candidate more negatively than those assigned to the binary conditions), with he/him pronouns rated higher than she/her pronouns. We also predicted that there would be an interaction between pronoun condition and job trait condition. Applicants using binary gender pronouns (i.e., she/her and he/him) may be rated as most hireable for the job listing if the pronoun matches the gendered job listing. That is to say, the she/her applicant would be rated most positively for the feminine job listing, followed by the no traits job listing, and least positively for the masculine job listing. We also had multiple predictions for the simple effect of the nonbinary pronoun condition (i.e., Androcentrism, Flexibility of Femininity, and Overall Discrimination).

To test whether pronoun, job traits, or the interaction between the two impacts hireability, we used a 3 (pronoun: he/him, she/her, they/them) x 3 (job traits: masculine job traits, feminine job traits, no traits control) mixed model ANOVA on hireability. A composite hireability variable was created for each gender-stereotyped job listing condition to create three variables: hireability for masculine job listing, hireability for feminine job listing, and hireability for no traits condition. We observed no significant main effect of pronoun condition on hireability, F(2,93) = 8.48, p = .432,  $n^2 = .02$ . Descriptively, the they/them condition (M = 7.11, SE =0.26) was evaluated as most hireable, followed by the she/her condition (M = 6.92, SE = 0.25), and followed by the he/him condition (M = 6.64, SE = 0.25). There was no significant main effect of job trait on hireability, F(1.93) = 0.92, p = .341,  $\eta_p^2 = .01$ . Descriptively, the feminine job trait condition (M = 7.08, SE = 0.16) resulted in the highest hireability evaluations, followed by the no trait condition (M = 6.87, SE = 0.19), followed by the masculine job trait condition (M = 6.71, SE = 0.16). Finally, there was no significant interaction between pronouns and job traits, F(4,186) = 0.57, p = .686,  $\eta_v^2 =$ .01. These results indicated that neither pronouns nor gendered job listing had a significant effect on perceptions of hireability. Further, these two variables did not interact to inform perceptions of candidate hireability.

Next, we aimed to examine whether scores on interpersonal comfort with nonbinary individuals moderated pronoun condition effects on hireability. This measure was added to determine if participants who rated nonbinary applicants as less hireable did so due to their lack of interpersonal comfort or because of the applicant's perceived lack of fit. A moderation analysis was conducted via PROCESS MACRO<sup>43</sup> in which hireability was regressed onto pronoun condition (more below on multicategorical treatment), interpersonal comfort with nonbinary people (mean centered), and interaction terms. Pronoun condition includes three levels; thus, multicategorical analyses were warranted. We em-

ployed sequential contrast coding (pronoun condition X1: he/him = 0, she/her = 1, they/them = 1; pronoun condition X2: he/him = 0, she/her = 0; they/them = 1) where the first condition coding compared dominant (he/him) versus low status (she/her and they/them) groups, and the second compared binary (he/him and she/her) versus nonbinary (they/them) conditions. The model included interaction terms between interpersonal comfort and both condition contrasts. The overall model was significant, F(5, 90) = 4.11, p = .002. Main effects and interactions from this analysis are depicted in Table 2. Notably, there was a marginal interaction between pronoun condition and IC on hireability, F(2,90) = 2.65, p = .076. This interaction is depicted in Figure 1. Based on contrast coding, this interaction was best characterized by a comparison between he/him versus she/her and they/them, t(5, 96) = 1.92, p = .058. To this point, IC was positively correlated with hireability ratings for those assigned to the they/them (r = .54, p =.002) and she/her (r = .49, p = .005) conditions, but not to those assigned to the he/him condition (r = -.01, p = .977). In sum, interpersonal comfort seems associated with responses to low status groups (i.e., those who use they/them and she/her pronouns) but not dominant groups (i.e., those who use he/him pronouns) in judgments of hireability.



**Figure 1.** Differences in interpersonal comfort scores do not affect perceptions of hireability for those in the he/him condition. However, for those in the she/her condition and they/them condition, perceptions of hireability are significantly affected by interpersonal comfort, with higher interpersonal comfort resulting in higher perceptions of hireability across all job listings.

Test	Coefficient	df	t	95% CI	p
Main effect of X1	b = 0.48	(5,96)	1.41	[-0.19, 1.15]	.162
Main effect of X2	b= -0.13	(5,96)	-0.37	[-0.81, 0.86]	.712
Main effect of IC	b= -0.01	(5,96)	-0.03	[-0.33, 0.32]	.975
Interaction Using X1	b = 0.39	(5,96)	1.92	[-0.01, 0.81]	.058
Interaction Using X2	b = 0.08	(5,96)	0.38	[-0.32, 0.47]	.706

**Table 2** Main Effects and Interactions of Second Analysis on Hireability. Pronoun condition X1: he/him = 0, she/her = 1, they/them = 1. Pronoun condition X2: he/him = 0, she/her = 0; they/them = 1. IC = interpersonal comfort with nonbinary individuals.

#### **4 DISCUSSION**

The present study aimed to measure the effects of job applicant gender identity and job characteristics (i.e., whether the job required gender-stereotypic skills) on hireability. Contrary to our predictions, we observed no main effects of pronoun condition on hireability and job listing on hireability, nor an interaction between pronouns and the job listing on hireability. That said, exploratory analyses indicated a marginal interaction between interpersonal comfort (IC) with nonbinary individuals and pronoun condition on hireability. Results showed that differences in IC scores were not associated with perceptions of hireability for those in the he/him condition, while perceptions of hireability for she/her and they/them pronouns were significantly predicted by IC. Thus, IC may be an important measure when investigating perceptions of people holding marginalized gender identities in the future.

# 4.1 Implications

Though our primary hypotheses were not supported, this work opens the door for new research examining how nonbinary individuals are perceived in the workplace. Past research 44;20;22;37 on gender expression in the workplace has been largely limited to binary identities, focusing on binary gendered stereotypes and how they influence the hiring and workplace experience of men and women; yet, these studies lack individuals with diverse gender expression and identity. The present study included a nonbinary pronoun condition, opening up a discussion about how individuals with nonbinary identities are perceived in different contexts.

While our main analyses examining the impact of gender pronouns and stereotyped job contexts on hireability did not yield significant results, our auxiliary analysis offered novel insights into how the association between pronouns on perceptions of hireability may be dependent on one's interpersonal comfort with nonbinary people. Comparing the dominant group (he/him) versus the lower status groups (she/her and they/them), we found that participants who had high IC with nonbinary people were more likely to rate the she/her and they/them conditions as more hireable

than those with low IC were. However, the IC levels did not influence the hireability of the he/him condition. We theorize that IC in our study could characterize a broader phenomenon where individuals who have more positive feelings towards both nonbinary individuals may also feel positively towards low status groups generally (i.e., women, trans individuals, etc.).

These results suggest the potential positive effect of increasing comfort for decreasing prejudice towards unfamiliar groups. This phenomenon could occur with increased exposure to minoritized groups such as nonbinary people. This could be executed via intergroup contact, as Allport's contact hypothesis suggests that regular contact between groups can reduce intergroup prejudice<sup>45</sup>. There is evidence that intergroup contact is an effective intervention in reducing prejudice towards other minority groups, as Crystal and colleagues 46 found that children who had more contact with other-race individuals reported that exclusion of other races was wrong. Because intergroup contact is an effective intervention in this case, one could infer that it could be an effective intervention for gender bias. We theorize positive contact interventions could enhance IC and thereby prosocial treatment of nonbinary individuals.

# 4.2 Limitations and Future Directions

While our study explored an understudied area regarding hireability perceptions of nonbinary people, it was underpowered. The sensitivity power analysis indicated that our study could detect an effect size of  $\eta_p^2$  = .08 or greater, and the greatest effect size in our main analysis was below this threshold,  $\eta_p^2$  = .02. Thus, the findings should be interpreted with caution.

Regarding our manipulation of job listing traits, the vignettes we used were simplistic, vague, and lacking realism. This limited information is not entirely representative of real job listings, and therefore our results may not accurately reflect hiring contexts. Further, our within-subjects manipulation of job characteristics (a design decision reflective of budget constraints and power concerns) may have also undermined realism, as job recruiters are not likely to compare the hireability of one applicant for multiple job listings. Because of the lack

of ecological validity discussed, participants possibly disengaged from seriously evaluating the applicants as a job recruiter would, perhaps causing them to respond in a way they would not in an actual recruitment decision. Additionally, our pool of participants were not required to have a background in hiring, therefore, their assumptions are not based on real-world experience. These design choices were made in service of internal validity, as we aimed to control for potential confounds.

We must also acknowledge that we used they/them pronouns as a proxy for nonbinary individuals; however, gender pronouns are only one aspect of gender presentation. While gender pronouns have certain implications, they do not fully encapsulate one's gender identity. Information on an individual's gender identity manifests in many forms, and many of them are not visible in a limited social context<sup>4</sup>.

Morgenroth and Ryan describe several facets of gender identity unacknowledged by only pronouns, including the costume (appearance and presentation of the body) and the script (gendered behaviors) that an individual embodies<sup>4</sup>. Simply reading pronouns on an application does not provide these facets of information about the applicant's gender, which further affect perceptions of them.

Another limitation regarding pronouns is the use of only they/them pronouns to represent a nonbinary applicant. While they/them pronouns are the most common pronouns used by nonbinary people<sup>47</sup>, there are many other possibilities for pronouns that individuals may use. Other pronouns also likely activate different evaluations of an individual when encountered <sup>48</sup>.

Neopronouns (e.g., xe/xim) are less commonly used and multiple pronouns (e.g., she/they) are infrequently studied in research than they/them pronouns, and people are likely even more unfamiliar with them now than they are with they/them pronouns. Research shows that unfamiliarity can heavily impact levels of comfort <sup>49</sup>, which we theorize likely contributes to discrimination towards gender nonconforming individuals. The subliminal mere exposure effect refers to the idea that people generally feel more positive towards and/or more comfortable with familiar stimuli compared to unfamiliar stimuli <sup>50</sup>. Further, future studies could investigate how increased exposure to unfamiliar pronouns (i.e., neopronouns) could increase positive feelings towards those pronouns and by extension individuals who use those pronouns.

Expanding the pronouns used could both help make future studies more inclusive as well as delve deeper into how nonbinary people experience the world. Future studies could apply our framework to these additional pronouns, and we hypothesize that neopronouns and use of multiple pronouns would be perceived as less hireable than those using they/them pronouns due

to unfamiliarity.

While we focused on one social identity (gender), intersectionality theory argues the importance of considering multiple social identities (e.g., race and gender) on access to opportunities and discriminatory treatment<sup>51;52;53</sup>. Research provided support for this theory—suggesting unique and exacerbated experiences of discrimination among those holding multiple stigmatized identities. For example, a study conducted by Edelman et al.<sup>54</sup> found transgender people of color were 19% less likely to be hired than their white, transgender counterparts. Similarly, Suárez found that transgender women were more likely to be the subject of discrimination in the workplace if they possessed any of the following identities: being a person of color (POC), having a lower socioeconomic status, or being of lower social class<sup>8</sup>. Future research should follow the lead of Suárez and examine multiple stigmatized identities or incorporate considerations of multiple identities that target job discrimination, as each individual's experience will be uniquely influenced by the various facets of their identity.

#### 4.3 Conclusion

This investigation sought to find how pronouns and gendered job descriptions might interact to predict how hireable a job candidate might appear. Though we didn't find any significant effects in our primary investigation, we found noteworthy effects related to the Interpersonal Comfort Scale, which could be a basis for future investigations on how nonbinary people might be perceived in the workplace or other domains. Thus, low status groups may depend on the comfort levels of others to improve their perceptions as more positive, and in this case, as more hireable. Further, from previous findings, one can deduce that increased contact with individuals from low status groups (i.e., nonbinary people) may increase IC. We aim to argue that this work is important in inspiring the inclusion of gender diversity in examination of gender bias and lays the groundwork for future studies that can improve upon the limitations of the current work. As a future direction, we suggest analyzing more pronouns such as neopronouns and studying whether a person with neopronouns or multiple pronouns is rated as less hireable than a person with they/them pronouns. The findings from our present study illuminate the importance of IC and the impact it may have on how nonbinary individuals are perceived. This work highlights the need for further research concerning this issue, with a focus on taking an intervention approach to reducing bias towards this community via increased contact. These discoveries indicate potential areas for intervention to reduce prejudice in the hiring process and ultimately create a more inclusive society.

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# **6 EDITOR'S NOTES**

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# Appendix A

# **Extra Considerations Regarding Gender**

# **Evolving Gender Terminology**

As topics surrounding gender identity become increasingly discussed due to gender diverse people feeling better represented in American culture than in past years, the language associated with gender diverse populations continues to evolve<sup>1</sup>. The terminology we use may be outdated, enforce a binary framework where there need not be one, or convey a sense of homogeneity that is inaccurate to a community whose members' individual experiences are paramount. The terms used in this paper are based on the authors' current understandings of up-to-date terms, and we aim to contribute to the knowledge of gender diversity while hoping that it continues to evolve.

# Transgender as an Umbrella Term

Many of our cited studies and statistics are based on transgender populations or group nonbinary people under the umbrella term 'transgender.' This label is not one that all nonbinary individuals feel captures their identity, and while some nonbinary people identify as trans, others do not <sup>55</sup>. However, the experiences that follow disruption of the concept of an innate binary are lived by both binary trans people and nonbinary people. With this commonality in mind, we use literature on trans people to support our claims and develop hypotheses on nonbinary people. We relate these groups with caution due to the limited literature that specifically reports on nonbinary experiences.

# Assigned Sex at Birth

The use of the terms AMAB and AFAB can be inauthentic to the experiences of nonbinary people and enforces a binary approach to sex that is inaccurate <sup>56</sup>. Arguments against using this terminology include the way that these terms force nonbinary people into boxes of gender/sex and imply that their biological sex (also not innately binary <sup>56</sup>) informs their current gender. Because our study involves social *perception*, and perception research provides ample evidence that perceivers are motivated to classify sex and gender using binary labels and perceive sex and gender as largely overlapping constructs <sup>56</sup>—our language will include these terms to describe the role *inferred* biological sex may play in social judgments.

#### **Gender-Neutral Pronouns**

There are many different pronouns that nonbinary people use, including some combination of he/him, she/her, and they/them pronouns (e.g., he/they), as well as neopronouns (e.g., ze/zir), and they/them is only one possibility. For simplicity in this exploratory study, we used what is currently the most common set of gender-neutral pronouns, they/them <sup>47</sup>, in our nonbinary condition. As we expand upon in our discussion, using only one set of gender-neutral pronouns limits the extent to which we can generalize our results to the experiences of all nonbinary people.

# Appendix B

# **Application Package Vignettes**

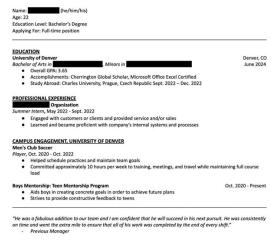


Figure 2. The He/Him Condition

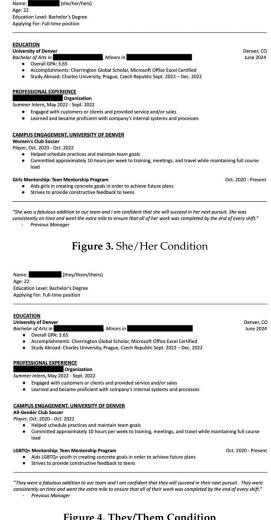


Figure 4. They/Them Condition

# Appendix C

# Job Listing Vignettes

# **Entry-Level Post**

```
ABC Corporation • Denver, CO (On-site) • 3 days ago
Job type: full-time, salaried
Education Requirements: College degree in related field
Preferred Traits: solid business sense; takes initiative; decisive
```

Figure 5. Masculine-Stereotyped Traits

# **Entry-Level Post** ABC Corporation - Denver, CO (On-site) - 3 days ago Job type: full-time, salaried Education Requirements: College degree in related field

Preferred Traits: interpersonal skills; creativity; skilled communicator

Figure 6. Feminine-Stereotyped Traits

# **Entry-Level Post**

ABC Corporation • Denver, CO (On-site) • 3 days ago Job type: full-time, salaried College degree in related field Preferred Traits: No traits listed

Figure 7. No Traits (Control)