Article

When *He* Doesn't Mean *You:* Gender-Exclusive Language as Ostracism

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Abstract

Three studies assessed whether a common cultural practice, namely, the use of gender-exclusive language (e.g., using *he* to indicate *he or she*), is experienced as ostracism at the group level by women. Women responded to the use of gender-exclusive language (*he*) during a mock job interview with a lower sense of belonging, less motivation, and less expected identification with the job compared to others exposed to gender-inclusive (*he or she*) or gender-neutral (*one*) language (Studies 1 and 2). Moreover, the more emotionally disengaged women became over the course of a job interview upon hearing gender-exclusive language, the less motivation and job identification they subsequently reported (Study 3). Together, these studies show that subtle linguistic cues that may seem trivial at face value can signal group-based ostracism and lead members of the ostracized group to self-select out of important professional environments.

Keywords

sexism, ostracism, intergroup processes, language

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The need to belong is a fundamental social motive, and when this need is not met, individuals are likely to experience a slough of negative outcomes including depression and antisocial behavior (see Baumeister & Leary, 1995). It goes without saying that ostracism and other forms of social rejection impinge on one's ability to feel appreciated and develop a secure sense of belonging; there is no shortage of empirical evidence to support this claim (see Smart Richman & Leary, 2009, for a review). The ostracism and rejection literature has focused heavily on the negative ramifications of *individual* cases of social exclusion, such as when an adolescent is intentionally excluded by a group of her or his peers or a spouse receives "the silent treatment." However, ostracism is not always directed toward individuals. That is, cultural practices may subtly, yet systematically, fail to acknowledge *entire social groups*. Thus, even when an individual is not personally ostracized, situations that ostracize one's ingroup may feel aversive and have detrimental effects on the person's sense of belonging, motivation, and behavior. The current research sought to extend past research on ostracism beyond interpersonal exclusion to examine exclusion directed at one's ingroup.

Our work sits at the intersection of three research literatures: ostracism, social identity threat, and linguistic communication. It overlaps with the growing literature on social identity threat that finds that cues in the social environment may activate negative ingroup stereotypes, which in turn signals that one's ingroup does not belong in that particular environment (for a review, see Steele, Spencer, & Aronson, 2002). Importantly, extant research focuses on identity threat that is triggered by situations in which one's ingroup is *already* negatively stereotyped and individuals are aware of the ingroup stereotype (e.g., the stereotype that women lack ability in math and science; Spencer, Steele & Quinn, 1999). In contrast, our research extends past work by proposing that alienation and social identity threat may be triggered even in situations that are not strongly associated with preexisting stereotypes. That is, individuals may find themselves in new social or professional contexts about which they have no a priori knowledge; in these contexts, they are likely to use available situational cues to determine whether their social group is welcomed. In the current work, we tested whether the use of gender-exclusive language, a practice that systematically ignores one gender in favor of another, is one such important situational cue that signals to women that their group does not belong in a given situation even though the situation was entirely novel when they first approached it.

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Interpersonal Ostracism and Its Consequences

Over the past decade there has been increasing interest in understanding the aversive nature of ostracism and other forms of social exclusion (Williams, 2007; Williams, Forgas, & von Hippel, 2005). Ostracism refers to being ignored or excluded by others, which has been manipulated in the lab using a variety of paradigms including being left out during a ball-tossing game among a pair of confederates (Williams & Sommer, 1997), being excluded during an Internet-based ball-tossing game (Williams, Cheung, & Choi, 2000, Study 1), and being ignored by a group of individuals during computer-mediated communication (Williams et al., 2002). According to Williams and colleagues (Williams, 2007; Williams et al., 2005), ostracism threatens one of four core social needs: the need to feel a secure sense of social belonging, the need to feel a sense of control over our lives, the need for high self-esteem, and the need for meaningful existence. Experiencing a threatened need state activates an immediate pain response as expressed by self-reported distress and anger (e.g., Williams et al., 2000) and neurophysiological activity associated with physical pain (Eisenberg, Leiberman, & Williams, 2003), followed by a coping response to remedy the threatened need state. Excluded individuals may, for example, cope with a threatened sense of belonging by redoubling motivation to seek social inclusion (e.g., increased effort to form new social bonds; Maner, DeWall, Baumeister, & Shaller, 2007) or by acting aggressively toward others in an attempt to regain control after ostracism (e.g., Warburton, Williams, & Cairns, 2006). There is now a substantial body of work providing empirical support for Williams's (2007) model of coping with ostracism.

However, to the best of our knowledge, no research has focused on ostracism directed at one's *group as a whole* as opposed to oneself as an individual. Although some recent work has examined related questions, the target of ostracism has always been the individual. For example, Goodwin, Williams, and Carter-Sowell (2010) found that African Americans, relative to Whites, are slower to recover when they attribute ostracism directed at them as individuals to prejudice against their group. Similarly, Wirth and Williams (2009) demonstrated that when an individual attributes ostracism directed at them to their permanent group membership (e.g., being a woman), they have more difficultly recovering from it than when they attribute ostracism to temporary, experimentally induced group membership (e.g., being a member of the green team). Thus, in these studies, ostracism was directed specifically at the individual participant, who later attributed that experience to her or his group membership. Other researchers have tested whether individuals react differently to being ostracized by ingroup versus outgroup members (e.g., a PC user being ostracized by a Mac user; Williams et al., 2000, Experiment 2) and found that individuals strive to feel more included after they are ostracized regardless of who is doing the ostracizing. Here again the target of ostracism was clearly the individual participant. In the present research we were interested in situations in which ostracism was, at the outset, clearly directed at one's group as a whole but not at oneself as an individual, making group membership integral to the ostracism experience. We ask: Does group-directed ostracism also evoke strong aversive experiences that have negative consequences for individual members of the group? We address this question by using exclusionary language to trigger group-based ostracism. Although this language seems trivial at face value, we predict it will trigger social identity threat, alienation, and withdrawal.

Gender-Exclusive Language as Group-Level Ostracism

Linguistic bias is evident in everyday language when people use pronouns that refer to one gender only and neglect the other, even when talking about both women and men—this is called gender-exclusive language. This mode of communication fits neatly into Williams's (2007) description of ostracism, as the gender that is being omitted is "being ignored and excluded, and it often occurs without excessive explanation or explicit negative attention" (p. 429). This type of language uses specific gendered referents (e.g., An ideal student is one who sets goals for *himself*), potentially making members of the excluded group (i.e., women) feel "ignored and excluded" in the social context. Furthermore, gender-exclusive language is subtle and unlikely to involve an explicit attack on the excluded group. That is, it occurs "without explanation" and without explicit expressions of malicious intent but may nonetheless have an aversive effect.

From the perspective of the speaker, gender-exclusive language is likely to be a passive form of exclusion, but from the perspective of the target it may be experienced as an active form of exclusion. That is, it fits Williams and Zadro's (2005) conception of role prescribed ostracism—a passive, culturally accepted, and largely unintentional form of ostracism. Yet, at a subjective level, women may experience it as an active rejection of their ingroup, which is likely to affect how they respond. According to Molden, Lucas, Gardner, Dean, and Knowles (2009), perceiving active rejection renders a desire to withdraw to avoid future rejection, whereas perceiving passive rejection activates the desire to regain a sense of connectedness. Applying this to our work, we predict that women will construe the language as active rejection (i.e., sexism) and will show a tendency to withdraw and avoid this type of situation in the future.

Although the use of gender-exclusive language on women's self concept is ripe for empirical inquiry, there is a surprising dearth of work in this area. One notable exception is a study by Bem and Bem (1973) who found that real job advertisements explicitly targeted toward one gender (e.g., *Behind every man's telephone call, there is a woman. We need*

calm, coolheaded men with clear masculine voices . . .) made members of the nontargeted gender less interested in pursuing the job. Given that this study was conducted almost 40 years ago using blatant sexist language that is frowned upon in contemporary American culture, it is not clear that this finding would replicate in today's society. Another study touching on the impact of sexist language on self-relevant cognitions (MacKay, 1980, Study 1) found that women who read a passage containing the "universal he" perceived the content of the passage as less personally relevant than when the passage contained the more gender-neutral "they." In contrast, men regarded the text as more personally relevant when it contained "he" compared to "they." However, MacKay (1980) was unable to replicate these findings in a second study. As is evident from this very brief and dated summary, empirical research testing the ways in which gender-exclusive language influences individuals' self-conceptions has been surprisingly neglected.

Social Identity Threat and Its Link to Ostracism

As mentioned earlier, our focus on group-based ostracism overlaps with a growing body of research on social identity threat, which shows that cues in specific social environments may trigger feelings of threat among members of negatively stereotyped groups (Steele et al., 2002). These situational cues activate negative ingroup stereotypes in the mind of group members and remind them of their ingroup's devalued status in the given situation (e.g., women in math and science). This reminder, in turn, leads to reduced performance, motivation, and a lower sense of belonging in stereotypic environments. Recently, Walton and Cohen (2007) proposed a belonging uncertainty hypothesis suggesting that individuals who belong to devalued social groups use environmental cues to gauge the extent to which their ingroup belongs in stereotypic contexts. In their work, when Black students were reminded of their group's underrepresentation in computer science, these individuals experienced a lower sense of belonging in the field and reported lower perceived academic potential relative to Black students who were not reminded of their underrepresentation. Similarly, Cheryan, Plaut, Davies, and Steele (2009) found that women's sense of belonging in computer science was dramatically reduced by the presence of stereotypically masculine cues in the academic environment (e.g., Star Trek posters, junk food), suggesting that masculine cues activated a gender stereotype and signaled that the environment was identity threatening for women. So, too, Murphy, Steele, and Gross (2007) found that women were less interested in attending a science and engineering conference after seeing an advertisement in which women were a numeric minority versus at parity. Other work indicates that situational cues that remind women of negative gender stereotypes decrease their identification with math (Pronin, Steele, & Ross, 2004) and inhibit their performance and interest in quantitative domains (Davies, Spencer, Quinn, & Gerhardstein, 2002). Taken together, these studies show that environmental cues can remind individuals of negative stereotypes attached to their group, which in turn makes them want to withdraw from those stereotypic environments. The current work complements the social identity threat literature by proposing that some situational cues may evoke feelings of threat, ostracism, and a reduced sense of belonging even in situations that were previously devoid of stereotypes. In other words, hearing gender-exclusive language can, in an instant, make previously neutral environments stereotypic.

Overview of the Current Research

To examine the theorized link between linguistic bias and group-based ostracism, we conducted three studies assessing women's and men's responses to the use of gendered language in a professional context. Participants learned about a new job that was described using masculine gender-exclusive terms (e.g., using *he* in the generic form to refer to both men and women), gender-inclusive terms (e.g., *him or her* in place of *he*), or gender-neutral terms (e.g., *one* in place of *he*). The job description was conveyed in writing (Study 1) or in person during an interaction (Studies 2 and 3). We examined the effect of the linguistic cue on participants' self-perceptions in the job. We predicted that women and men alike would perceive gender-exclusive language as more sexist than nonexclusive language but only women would be personally affected by it. Specifically, gender-exclusive language would deflate women's sense of belonging, lower their motivation to pursue the job, produce disidentification with the job, and lead them to experience negative affect while listening to the language.

Study 1

Undergraduate participants were asked to imagine that they were in the job market after graduation and had come across a job opening at a mid-sized professional organization. They were asked to read a description of the work environment and the job to which they might apply. We manipulated the way in which a work environment was described, such that the description contained either gender-exclusive or gender-inclusive language, and measured (a) the extent to which participants perceived the job description as sexist, (b) their feelings of exclusion versus inclusion in that work environment, (c) motivation to pursue the job, and (d) identification with the job.

Method

Participants. One hundred and sixty-nine participants (96 women and 73 men) volunteered in exchange for extra

course credit. Four women and one man guessed the purpose of the study and were excluded from analyses, leaving a final sample of $N = 164$ (92 women and 72 men).

Manipulations and Measures

Manipulation of gendered pronouns in the job description. Two versions of a job overview and work environment description were created. The primary elements of the job included an emphasis on creativity and individual expression, a fast-paced work environment, fair distribution of employees' workload, cognizance of competing organizations, and a reward system for superior work performance. One version (gender-exclusive condition) used nine masculine referents (e.g., *he, him, guys*) to describe current and prospective employees in the organization. The second version (gender-inclusive condition) was identical except that nine gender-inclusive referents (e.g., *he or she, his or her, employees*) were used in place of masculine referents. The following are examples of passages containing gender-exclusive language (italicized) and gender-inclusive language (bracketed) in the job description: "We usually know a good employee when we see *him* [him or her]" and "We think that when we come across an outstanding employee, rewarding *him* [him or her] will, in the end, boost the company's overall productivity." The job itself was left ambiguous so that the description was likely to appeal to a broad array of participants. Moreover, because the type of job was not specified, the job description was fairly gender neutral. See the appendix for both versions of the description.

Ostracism measure. Two items, adapted from Williams et al. (2000), measured feelings of ostracism expected in the work environment ($r = .73$). These items used 7-point response scales ranging from 1 = *not at all t*o 7 = *very much so*: "To what extent do you feel that you would be ignored or excluded by your colleagues?" and "To what extent do you feel that you would be noticed or included by your colleagues?" (reverse coded).

Motivation. We created a four-item measure to assess participants' job-based motivation. Example items include "How motivated do you think that you would be in this work environment?" (1 = *not at all motivated* to 7 = *very motivated*) and "How likely would you be to think about your work outside of work hours because you want to, not because you are expected to?" (1 = *not at all likely* to 7 = *very likely*). This scale obtained an α of .77.

Identification. We created another four-item scale to assess the degree to which participants expected to personally identify with the job. Example items include "How important would this job be to your self-concept?" (1 = *not at all important* to 7 = *very important*) and "How much personal satisfaction would you get out of your work if you were working in this environment?" (1 = *no satisfaction* to 7 = *a great deal of satisfaction*). This scale obtained an α of .83.

Perceived sexism. Three items assessed whether the job description was perceived to be gender biased using a 7-point response scales (α = .80) ranging from 1 = *favored women* to 7 = *favored men*. An example item is "Do you think that the writing style in the job description favored one gender over the other?"

Procedure

When participants arrived at the lab they were randomly assigned to one of two language conditions (gender exclusive or gender inclusive). They were informed that the purpose of the study was to understand the types of jobs that appeal to college students. Participants were asked to imagine that they were applying for work after graduating from college while they read the job description. They were asked to think about how they would feel about applying for this particular job. Following these instructions, participants completed measures assessing their motivation to pursue this job, identification with the job, feelings of ostracism, and perceived sexism in the job description. Participants were then probed for suspicion and debriefed.

Results and Discussion

Perceptions of sexism. A 2 (participant gender) × 2 (language condition: exclusive vs. inclusive) ANOVA on perceived sexism of the job description revealed a significant main effect for language condition, $F(1, 137) = 29.39$, $p < .001$, $\eta_p^2 = .17$, such that participants in the gender-exclusive condition perceived the description to be more sexist ($M = 4.74$, $SD = 1.51$) than did participants in the gender-inclusive condition ($M = 3.61$, $SD = .83$). The main effect of participant gender was not significant, $p > .10$, $\eta_p^2 = .02$. The interaction of Participant Gender × Language Condition was also not significant, $p > .10$, $\eta_p^2 = .01$, indicating that women and men both evaluated gender-exclusive language to be more sexist than gender-inclusive language.

Expected ostracism. We next assessed the effect of gendered language on participants' expected sense of ostracism in the work environment. A 2 (participant gender) × 2 (language condition) ANOVA revealed a significant interaction, $F(1, 160) = 3.90$, $p = .05$, $\eta_p^2 = .03$ (see Figure 1). In deconstructing this interaction we found that, as predicted, women expected to feel more ostracized in the work environment in the gender-exclusive condition ($M = 3.87$, $SD = .1.36$) than in the gender-inclusive condition ($M = 3.22$, $SD = 1.16$), $t(90) = 2.49$, $p < .05$, $d = .52$. Men, however, did not differ in their feelings of ostracism as a function of gendered language (gender exclusive: $M = 3.48$, $SD = 1.04$; gender inclusive: $M = 3.59$, $SD = 1.32$) $t < 1$, $d = .09$.

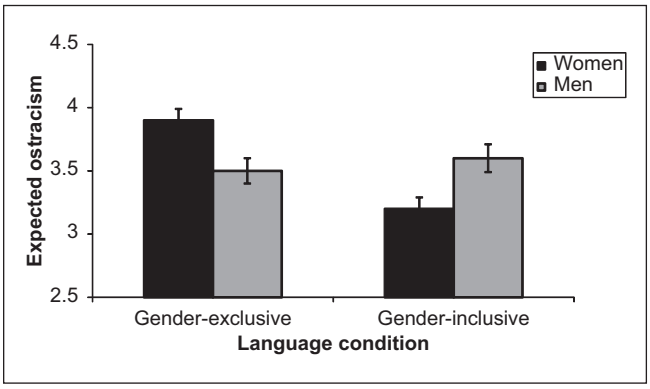

Figure 1. Study 1: Effect of Participant Gender × Language Condition on expected ostracism in the work environment

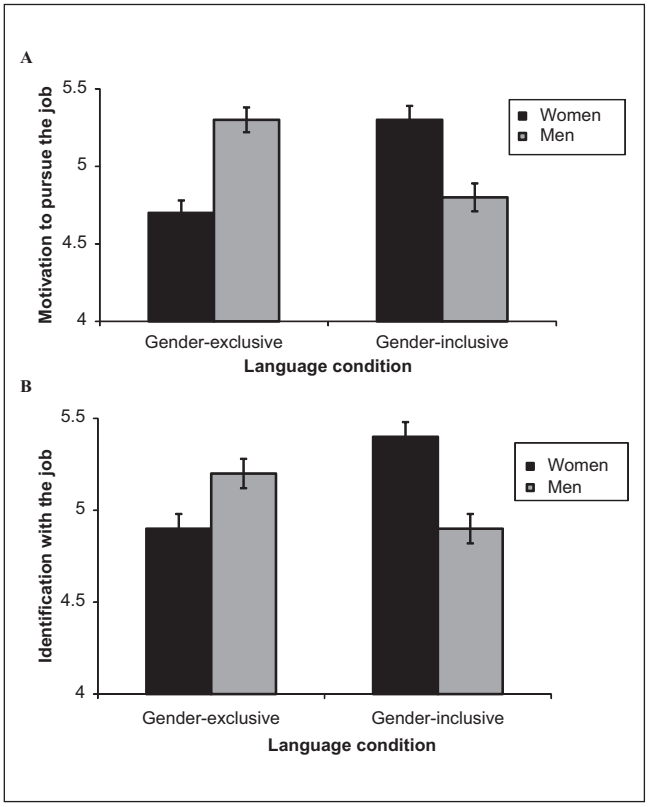

Figure 2. Study 1: Effect of Participant Gender × Language Condition on motivation to pursue the job (Panel A) and identification with the job (Panel B)

Motivation to pursue the job. Another 2 × 2 ANOVA on participants' motivation to pursue the job revealed a significant two-way interaction between language condition and participant gender, $F(1, 160) = 10.00$, $p < .01$, $\eta_p^2 = .06$ (see Figure 2, Panel A). As hypothesized, women in the gender-exclusion condition reported significantly less motivation to pursue the job after reading gender-exclusive language ($M = 4.79$, $SD = 1.18$) than gender-inclusive language ($M = 5.31$, $SD = .93$), $t(90) = -2.38$, $p < .05$, $d = .50$. Interestingly, men reported being more motivated after reading gender-exclusive language ($M = 5.29$, $SD = .83$) than gender-inclusive language ($M = 4.78$, $SD = 1.13$), $t(70) = 2.16$, $p < .05$, $d = .52$.

Identification with the job. A 2 × 2 ANOVA using job identification as the dependent variable also yielded a two-way interaction, $F(1, 160) = 5.13$, $p = .03$, $\eta_p^2 = .03$ (see Figure 2, Panel B). Women reported less identification with the job after reading gender-exclusive language ($M = 4.90$, $SD = 1.22$) than gender-inclusive language ($M = 5.38$, $SD = 1.00$), $t(90) = -2.09$, $p = .04$, $d = .43$, whereas men's identification with the job did not differ as a function of gendered language (gender exclusive: $M = 5.16$, $SD = .88$; gender inclusive: $M = 4.86$, $SD = 1.24$), $t(70) = 1.17$, $p = .25$, $d = .28$.

Study 1 provided promising initial support for the hypothesis that although both women and men perceive the use of gender-exclusive language as sexist, women feel more ostracized, less motivated, and less identified with a job when it is described using gender-exclusive versus gender-inclusive language. However, two important questions remain unanswered. First, it is not clear whether gender-exclusive language induced feelings of *exclusion* among women, whether gender-inclusive language induced feelings of *inclusion*, or both. Because Study 1 did not have a nongendered language condition as a control, the independent contribution of the two language conditions could not be examined separately. Study 2 addressed this issue by including a control condition to which the gender-exclusive and gender–inclusive language could be compared. Second, whereas Study 1 manipulated linguistic bias in written language, Study 2 manipulated spoken language. Because spoken language is processed "on-line" as it occurs in real time, listeners have less time to encode and interpret linguistic bias embedded in spoken language compared to written language. As such, it is not entirely self-evident whether the findings obtained in Study 1 would generalize from written to spoken language. Thus, Study 2 sought to assess whether the effects observed in Study 1 would replicate when participants experienced a face-to-face interaction with a job interviewer who spoke using gender-exclusive, gender–inclusive, or gender-neutral language.

Study 2

Participants were put in a mock job interview situation wherein a male interviewer used one of the three types of language in describing the job and work environment: (a) gender-exclusive language, (b) gender-inclusive language, or (c) gender-neutral language (e.g., *employee, one*). We predicted that, first, women would respond to gender-exclusive language with a lower sense of belonging, less motivation to pursue the job, and lower identification with the job compared to the gender-inclusive and gender-neutral conditions.

We did not expect to find a difference in women's response in the latter two conditions. Second, we explored whether the unexpected finding in Study 1 that men were particularly motivated by masculine gender-exclusive language would replicate in Study 2. We hoped that the inclusion of a gender-neutral condition in our study design would clarify how men respond to gendered language.

Method

Participants. A total of 250 undergraduate students (151 women, 99 men) participated for extra credit. Two women guessed the purpose of the study and were excluded from analyses, resulting in $N = 248$ participants (149 women, 99 men).

Manipulations and Measures

Language manipulation. The content of the language in the gender-exclusive and gender-inclusive conditions were very similar to the written descriptions used in Study 1 (see Procedure for details). The new condition was the gender-neutral description where the language was modified as follows: "We usually know a good employee when we see *one*" and "We think that when we come across an outstanding employee, rewarding *that employee* will, in the end, boost the company's overall productivity."

Sense of belonging in the workplace. Two items assessed participants' expected feelings of ostracism in the workplace (these were identical to Study 1). In addition, participants completed four more items adapted from Williams et al. (2000) that capture feelings of belonging. These items were prefaced with the instructions "Think about the work environment that the interviewer described to you. Indicate the way that you would feel in that work environment based on the interviewer's description." Participants rated the following statements using a 7-point response scales ranging from 1 = *not at all* to 7 = *very much so*: "I would feel connected," "I would feel accepted," "I would feel liked," and "I would feel welcomed." A factor analysis using varimax rotation indicated that the two ostracism items and four belonging items loaded on a single factor (all factor loadings ≥ .59), which accounted for 69% of the variance in participants' responses (eigen value = 4.13). No other factor yielded an eigen value > 1. Thus, all six items were combined into a composite index capturing women's sense of belonging in the workplace ($\alpha = .90$).

Motivation to pursue the job, identification with the job, and perceived sexism. These measures were identical to those of Study 1.

Procedure

Upon entering the lab, participants met a female experimenter who informed them that the study was in collaboration with a career development program at the university. The mission of this alleged program was to prepare students to enter the workforce by offering practice job interviews. The current study was purportedly designed to assess which, among a variety of interviewing formats, was most helpful for students. After being told this cover story, participants were then taken to a small interview room for their mock job interview. Two male confederates had been trained to be interviewers.[1] Interviewers were dressed in business casual attire and maintained a friendly yet professional demeanor throughout the interview. They were trained to memorize and recite description of the work environment used in Study 1 verbatim in a way that sounded natural. After introducing himself, the interviewer informed the participant that the interview would be in two parts. During the first part, the participant would receive general information about the job for which he or she was applying. During the second part, which would take place in a separate room, the participant would fill out some questionnaires relevant to the interview. If participants requested details of the job, interviewers were trained to deflect questions by saying, "You will have a chance to ask questions in the next portion of the interview."

Next, the interviewer described the work environment using gender-exclusive, gender-inclusive, or gender-neutral language, depending on the experimental condition to which participants had been randomly assigned. When the interviewer finished reciting the description he escorted the participant to a separate lab for the alleged second portion of the interview. Here, participants completed the dependent measures, were probed for suspicion, and debriefed.

Results and Discussion

As in the previous study we predicted that women and men alike would rate gender-exclusive language to be more sexist than the other two types of language; however, only women would be personally affected by gender-exclusive language. Specifically, gender-exclusive language would be significantly more detrimental to women's sense of belonging, motivation, and identification with the job than gender-inclusive and gender-neutral language. Men's sense of belonging and self-conceptions regarding the job were predicted to remain immune across the three language conditions. To test our hypotheses, we ran Participant Gender × Language Condition ANOVAs for all dependent variables.

Perceived sexism. A two-way ANOVA revealed a significant main effect of language condition, $F(2, 242) = 69.86$, $p < .001$, $\eta_p^2 = .37$. Follow-up tests revealed that all participants rated the use of gender-exclusive language ($M = 5.05$, $SD = 1.34$) to be significantly more sexist compared to the use of gender-inclusive language ($M = 3.45$, $SD = .71$), $t(166) = 9.24$, $p < .001$, $d = 1.43$, and compared to the use of gender-neutral language ($M = 3.40$, $SD = .70$), $t(173) = 9.87$, $p < .001$, $d = 1.50$. Interestingly, we also found a significant

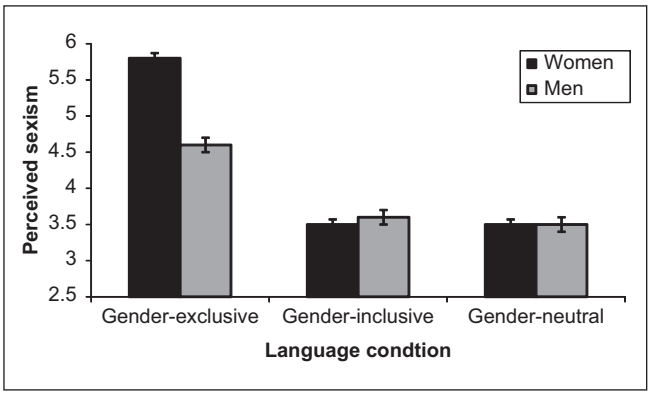

Figure 3. Study 2: Effect of Participant Gender × Language Condition on perceptions of sexism

Participant Gender × Language Condition interaction, $F(2, 242) = 6.55$, $p < .01$, $\eta_p^2 = .05$. This interaction effect indicated that although both women and men judged gender-exclusive language to be sexist compared to the other conditions, women found it significantly more sexist than men ($M = 5.37$, $SD = 1.39$ and $M = 4.57$, $SD = 1.10$, respectively), $t(94) = -3.01$, $p < .01$, $d = .62$. However, women and men agreed that the gender-neutral language was nonsexist ($M = 3.38$, $SD = .75$ and $M = 3.53$, $SD = .64$, respectively, $p > .30$) and the gender-inclusive language was nonsexist ($M = 3.43$, $SD = .76$ and $M = 3.44$, $SD = .88$, respectively, $p > .90$; see Figure 3).

Expected sense of belonging. Recall that we combined items assessing feelings of belonging and perceived ostracism (reverse-coded) into a single index because they loaded onto a single factor. A two-way ANOVA revealed a significant main effect of language condition, $F(2, 242) = 3.93$, $p < .05$, $\eta_p^2 = .02$, such that all participants expected to feel a lower sense of belonging in the work environment when it was described using gender-exclusive language ($M = 5.05$, $SD = 1.23$) compared to gender-inclusive language ($M = 5.57$, $SD = .86$), $t(166) = -3.11$, $p < .01$, $d = .48$, and compared to gender-neutral language ($M = 5.42$, $SD = 1.22$), $t(173) = -2.20$, $p < .05$, $d = .33$. Importantly, as predicted, we found a significant two-way interaction between language condition and participant gender, $F(2, 242) = 3.53$, $p < .05$, $\eta_p^2 = .03$. Upon deconstructing this interaction by participant gender, we found a significant effect of language condition for women, $F(2, 146) = 8.10$, $p < .001$, $\eta_p^2 = .10$, such that they expressed a lower expected sense of belonging when exposed to gender-exclusive language ($M = 4.78$, $SD = 1.30$) compared to gender-inclusive language ($M = 5.60$, $SD = .89$), $t(98) = -3.55$, $p < .01$, $d = .72$, and gender-neutral language ($M = 5.46$, $SD = 1.04$), $t(104) = -2.92$, $p < .01$, $d = .57$. For men, however, there was no significant effect of language condition, $F(2, 96) = .21$, $p = .81$, $\eta_p^2 = .004$ (see Figure 4, Panel A).

Motivation to pursue the job. We also found a significant two-way interaction for participants' motivation to pursue the job, $F(2, 242) = 5.52$, $p < .01$, $\eta_p^2 = .04$. Deconstructing this interaction by participant gender rendered a significant effect of language condition for women, $F(2, 146) = 7.06$, $p < .01$, $\eta_p^2 = .09$, such that women were less motivated when the interviewer used gender-exclusive language ($M = 5.05$, $SD = 1.32$) compared to gender-inclusive language ($M = 5.75$, $SD = .99$), $t(98) = -2.92$, $p < .01$, $d = .62$, and gender-neutral language ($M = 5.76$, $SD = 1.00$), $t(104) = -3.16$, $p < .01$, $d = .33$. However, for men, there was no effect of language condition, $F(2, 96) = .95$, $p = .39$, $\eta_p^2 = .02$. (see Figure 4, Panel B).

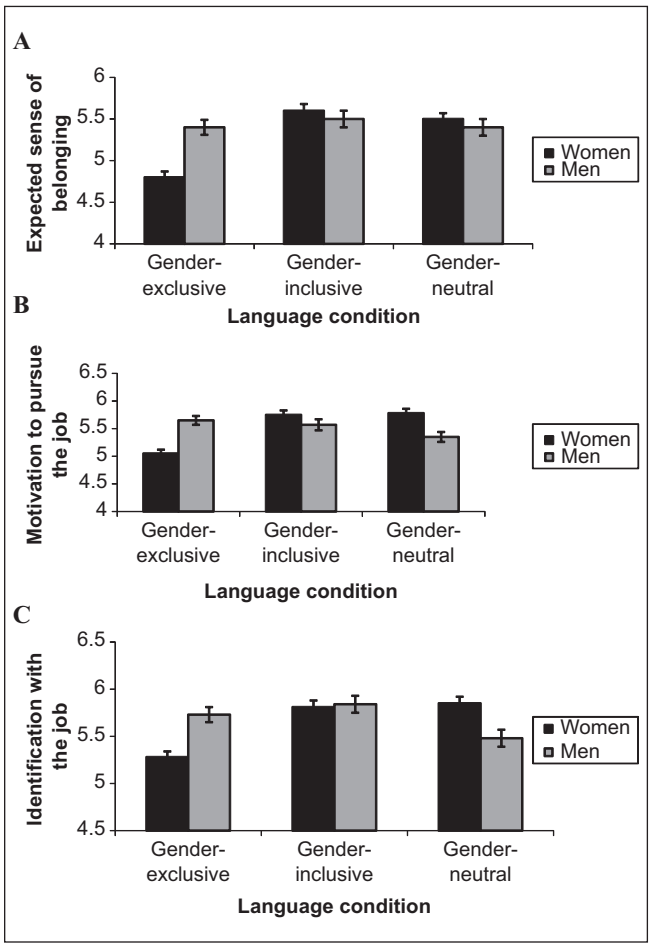

Figure 4. Study 2: Effect of Participant Gender × Language Condition on expected sense of belonging in the work environment (Panel A), motivation to pursue the job (Panel B), and identification with the job (Panel C)

Identification with the job. Finally, we found a significant two-way interaction for participants' identification with the job, $F(2, 242) = 3.71$, $p < .01$, $\eta_p^2 = .03$, such that women showed a significant effect of language condition, $F(2, 146) = 4.94$, $p < .01$, $\eta_p^2 = .06$, but men did not, $F(2, 96) = 1.50$, $p = .23$, $\eta_p^2 = .03$. As expected, women were less identified with the job when it was described using gender-exclusive language

(M = 5.28, SD = 1.21) compared to gender-inclusive language (M = 5.81, SD = .88), $t(98) = -2.47$, $p < .05$, $d = .50$, and gender-neutral language ($M = 5.85$, $SD = .98$), $t(104) = -2.64$, $p < .05$, $d = .52$ (see Figure 4, Panel C).

In sum, Study 2 replicated and extended Study 1 in two important ways. First, by measuring women's reactions to gender-neutral language, Study 2 was able to confirm that women were most affected by gender-exclusive language. Hearing such language had a deleterious effect on women's sense of belonging in the workplace and dampened their motivation and identification with the job. Interestingly, however, gender-inclusive language did not provide a psychological boost to women; it was experienced in the same way as hearing gender-neutral language. Second, Study 2 extended these findings to spoken language by showing that the negative psychological impact of linguistic bias is experienced similarly when it is heard during a real interpersonal interaction versus when it is read in written text. The results were identical across both mediums of communication.

Study 3

Missing from the previous studies is a dynamic assessment of the emotional reactions women felt in the moment they were interacting with the interviewer using gender-exclusive language. To assess women's emotional reactions we covertly recorded their nonverbal behavior during the mock job interview to assess their spontaneous nonverbal emotional expressions and to determine how these reactions changed over the course of the interview as linguistic bias unfolded. Later, research assistants blind to study hypotheses coded participants' emotional valence over the course of the interview. We also asked women to report their sense of belonging during the interview (note that in the previous studies we had only measured their expected sense of belonging in a future work environment). We predicted that, relative to women who heard gender-inclusive and gender-neutral language, those who heard gender-exclusive language would express more negative emotions nonverbally as the interview progressed. Furthermore, among the women who experienced gender-exclusive language, those who showed particularly negative emotional reactions over the course of the interview would be least motivated to pursue the job and least identified with the job.

Method

Participants. Only women ($N = 98$) were recruited for this study. Five women were aware of the language manipulation and another five participants' video recordings were unusable because of equipment error. These participants' data were not used during data analysis, rendering a final $N = 88$.

Measures

Nonverbal emotional reactions. Two coders were trained to evaluate women's nonverbal behavior at the beginning and end of the interviews. The videos were silent so that coders remained blind to language conditions. To gauge changes in women's reaction to the three types of language over the course of the interviewer's speech, we asked coders to assess women's nonverbal positivity and interest in the interaction twice: once at the beginning and again at the end of the interview. Each coder watched each video and provided ratings for the following statements (interrater agreement in parentheses): "How *positive* was the participant's nonverbal behavior *at the beginning* of the interview?" using a scale ranging from 1 = *negative* to 7= *positive* ($r = .61$, $p < .001$) and "How *interested* did the participant seem *at the beginning* of the interview" using a scale ranging from 1 = *uninterested* to 7 = *very interested* ($r = .56$, $p < .001$). The two items rated by the same coder were averaged together. Then, after watching the entire video, both coders were asked to provide a second rating of positivity ($r = .48$, $p < .001$) and interest ($r = .49$, $p < .001$) for the same participant's behavior at the end of the interview. The two items rated by the same coder were also averaged together. We then created a composite score by combining both coders' ratings of participants' nonverbal emotional engagement at the beginning of the interview ($r = .87$, $p < .001$) and at the end of the interview ($r = .88$, $p < .001$).

Sense of belonging during the interview. The six belongingness items used in Study 2 were modified for Study 3 such that participants were instructed to think about their sense of belonging during the interview ($\alpha = .90$).

Perceived sexism, motivation, and identification with the job. The remaining dependent measures were identical to the previous studies.

Procedure

The procedure used in Study 3 was identical to that of Study 2 with the exception that participants were unobtrusively recorded during the mock job interview. The room in which the interview took place had a one-way mirror. Participants were recorded by a camera placed behind the one-way mirror; none of the participants expressed suspicion about being videotaped. After the interview, participants were taken to a separate lab to complete the dependent variables. Participants were then probed for suspicion, debriefed, informed that their behavior had been covertly recorded, and given the opportunity to withdraw their recording from data analysis if they wished. All participants agreed to have their recordings analyzed.

Results and Discussion

Perceived sexism. A one-way ANOVA on the effect of language type on women's perceptions of sexism was significant,

$F(2, 85) = 41.35$, $p < .001$, $\eta_p^2 = .49$. As expected, women rated the interviewer's language as significantly more sexist in the gender-exclusive condition ($M = 5.82$, $SD = 1.22$) compared to the gender-inclusive condition ($M = 3.62$, $SD = .79$), $t(55) = 7.89$, $p < .001$, $d = 2.11$, and the gender-neutral condition ($M = 3.81$, $SD = 1.01$), $t(59) = 7.02$, $p < .001$, $d = 1.83$.

Nonverbal emotional reactions. We created an index of women's nonverbal emotional reactions over the course of the interview by subtracting the emotion scores coders gave them at the beginning of the interview from those given at the end of the interview. A difference score was obtained in which positive values indicated that participants' emotional reactions became more positive by the end of the interview whereas negative values indicated their reactions became more negative by the end of the interview.

A one-way ANOVA revealed that women's emotional reactions differed as a function of language type, $F(2, 85) = 3.17$, $p < .05$, $\eta_p^2 = .07$. Specifically, nonverbal emotions became significantly more negative over the course of the interview in the gender-exclusive condition ($M = –.39$, $SD = .60$) compared to the gender-inclusive condition ($M = –.06$, $SD = .57$), $t(55) = –2.18$, $p < .05$, $d = .59$, and compared to the gender-neutral condition ($M = –.12$, $SD = .44$), $t(59) = –1.98$, $p = .053$, $d = .52$.

Sense of belonging during the interview. Women's sense of belonging during the interview also differed as a function of the language they encountered, $F(2, 85) = 4.30$, $p < .05$, $\eta_p^2 = .09$. Specifically, women felt a lower sense of belonging during the interview when exposed to gender-exclusive language ($M = 4.32$, $SD = 1.24$) compared to gender-inclusive language ($M = 4.95$, $SD = 1.22$), $t(55) = –2.18$, $p < .05$, $d = .59$, and compared to gender-neutral language ($M = 5.13$, $SD = .95$), $t(59) = –1.98$, $p = .05$, $d = .52$.

Motivation to pursue the job. Women's motivation to pursue the job also differed as a function of the language they were exposed to, $F(2, 85) = 5.75$, $p < .01$, $\eta_p^2 = .12$. As in the previous studies, women were less motivated to pursue the described job in the gender-exclusive condition ($M = 4.73$, $SD = 1.55$) compared to the gender-inclusive condition ($M = 5.49$, $SD = .96$), $t(55) = –2.21$, $p < .05$, $d = .60$, and the gender-neutral condition ($M = 5.68$, $SD = .81$), $t(59) = –3.03$, $p < .01$, $d = .79$.

Identification with the job. Gendered language also influenced women's identification with the job, $F(2, 85) = 2.99$, $p = .056$, $\eta_p^2 = .07$. Specifically, women expected to be less identified with the job when it was described using gender-exclusive language ($M = 5.18$, $SD = 1.33$) compared to gender-inclusive language ($M = 5.78$, $SD = .82$), $t(55) = –2.02$, $p < .05$, $d = .54$, and compared to gender-neutral language ($M = 5.59$, $SD = 1.05$), $t(59) = –2.02$, $p < .05$, $d = .53$.

Nonverbal emotional reactions predict women's motivation and identification. We expected that increasingly negative emotional reactions over the course of the interview would predict decreased motivation to pursue the job and greater disidentification from the job in the gender-exclusive condition but not in the gender-inclusive or gender-neutral condition. To test this, first, motivation (the dependent variable) was regressed on change in emotional reactions (emotion ratings given at the end of interview minus ratings at the beginning), language condition (two dummy-coded variables computed separately for the gender-inclusive and gender-neutral conditions using gender-exclusive condition as the reference group), and their interaction terms. The overall model was statistically significant, $R^2 = .21$, $F(5, 79) = 4.11$, $p < .01$. As predicted, we found two significant Language Condition × Emotional Reaction interactions: one when gender-exclusive versus gender-inclusive conditions were contrasted, $B = –1.30$, $SE = .52$, $p < .05$, and a second when gender-exclusive versus gender-neutral conditions were contrasted, $B = –1.37$, $SE = .59$, $p < .05$. There was no difference in the effect of emotional reactions on motivation when comparing the gender-inclusive versus gender-neutral conditions, $B = –.06$, $SE = .62$, $p = .92$ (see Figure 5, Panel A). To follow up the two-way interaction effects described above, simple slope analyses revealed that in the gender-exclusive condition, more negative emotional responses predicted less motivation, $B = –1.02$, $SE = .35$, $p < .01$. However, as expected, emotional reactions were not related to women's motivation in the gender-inclusive condition, $B = –.28$, $SE = .39$, $p = .47$, or the gender-neutral condition, $B = –.34$, $SE = .48$, $p = .47$.

We ran the same regression model outlined above for the job identification dependent variable and obtained an identical pattern of results, $R^2 = .13$, $F(5, 79) = 2.36$, $p < .05$. The Language Condition × Emotional Reaction interaction was significant when gender-exclusive versus gender-inclusive conditions were contrasted, $B = –.91$, $SE = .47$, $p = .057$, and marginal when gender-exclusive versus gender-neutral conditions were contrasted, $B = –.92$, $SE = .54$, $p = .09$. There was no difference between the gender-inclusive versus gender-neutral conditions, $B = –.01$, $SE = .56$, $p = .98$ (see Figure 5, Panel B). Simple slope analyses showed that more negative emotional responses predicted reduced identification with the job in the gender-exclusive condition, $B = .74$, $SE = .31$, $p < .05$. However, the relation between emotional reactions and job identification was nonsignificant in the gender-inclusive condition, $B = –.17$, $SE = .35$, $p = .63$, and in the gender-neutral condition, $B = –.18$, $SE = .44$, $p = .68$.

In sum, the results from Study 3 extended the findings from our earlier studies in two important ways. First, we found that hearing gender-exclusive language in a professional setting elicited spontaneous nonverbal negative reactions and a lower sense of belonging in the moment among women compared to hearing gender-inclusive or gender-neutral language. Second, women who expressed the most pronounced negative emotional reactions while hearing gender-exclusive (but not inclusive or neutral) language indicated a particularly strong desire to distance themselves from the advertised job.

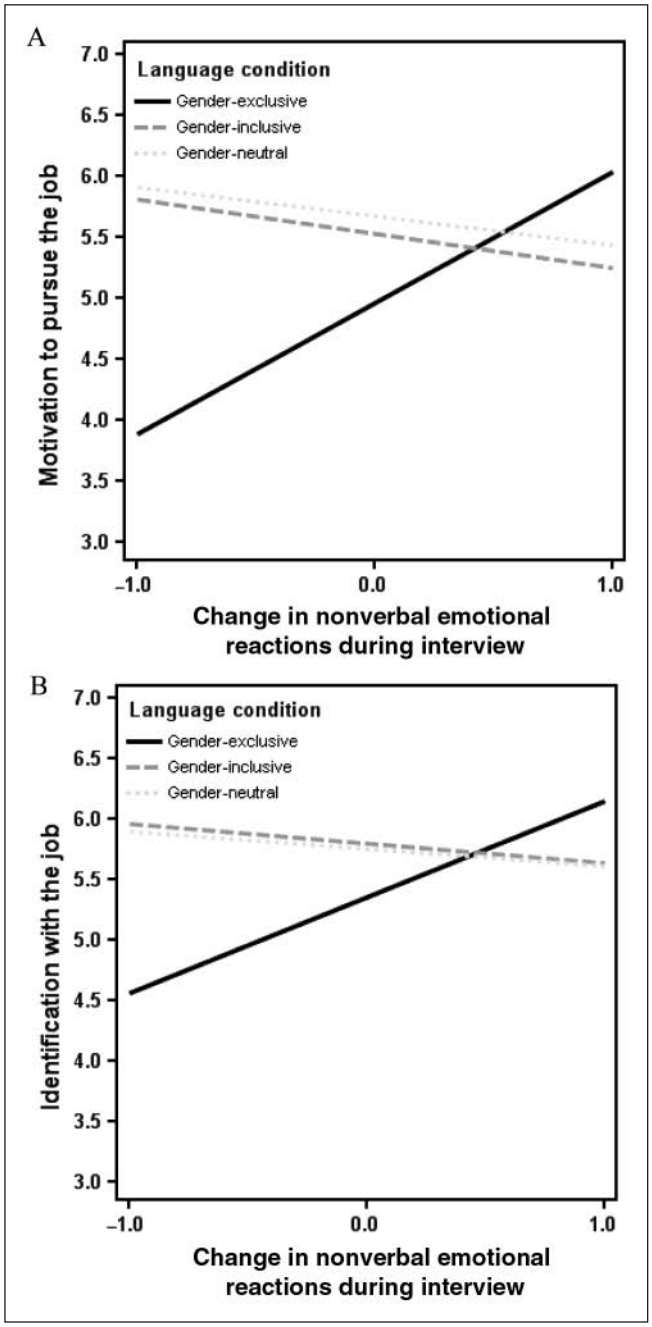

Figure 5. Study 3: Women's emotional reaction after hearing gender-exclusive language predicts their motivation to pursue the job (Panel A) and identification with the job (Panel B)
Note: Negative difference scores indicate that emotions became more negative toward the end of the interview compared to the beginning. Positive difference scores indicate that emotions became more positive toward the end of the interview compared to the beginning.

General Discussion

The goal of the current research was to investigate whether a common linguistic practice that some deem trivial, namely, the use of masculine gender-exclusive language, is an aversive experience for women. We suggested that this linguistic practice is experienced as ostracism directed at one's entire social group. To test this prediction we used extant theoretical and empirical work on ostracism (Williams, 2007; Williams et al., 2005) to explain women's reactions to subtle linguistic bias. We found that hearing gender-exclusive language in a professional context was an aversive experience for women as indicated by more negative nonverbal emotional responses than hearing nongendered language. Furthermore, exposure to gender-exclusive compared to nongendered language induced a lower sense of belonging, reduced motivation, and prompted disidentification in the professional context associated with the language. Together, findings from these three studies support Williams's (2007) theoretical model of ostracism, which proposes that ostracizing situations arouse negative emotions, threaten people's need to belong to a community, and motivate them to distance the self from the setting.[2]

Importantly, these findings extend ostracism research, which has been usually conceptualized as an individual-level phenomenon, to ostracism of an entire social group. Gender-exclusive language may be described as a passive, culturally accepted type of ostracism that Williams and Zadro (2005) call role-prescribed ostracism. Although the language objectively seems passive and unintentional, our work suggests that it is experienced by women as rejection. Women wished to avoid the context associated with gender-exclusive language, which is an action tendency more closely linked to feeling actively rejected than passively ignored (see Molden et al., 2009).

The current research also complements the social identity threat literature (see Steele et al., 2002) by showing that linguistic cues can subtly inform women that their group does not belong in the given situation. Consistent with prior work indicating that situational cues can reduce group members' sense of belonging and motivation to engage in a given environment (see Cheryan et al., 2009; Murphy et al., 2007), we found that both written and verbal exposure to gender-exclusive language describing a work environment reduced women's sense of belonging in that workplace and decreased their interest in pursuing that job. Importantly, whereas prior work on social identity threat has focused exclusively on cues that influence individuals' belonging in domains in which their group is already negatively stereotyped and they are aware of these stereotypes (e.g., women in math and science), our work shows that the power of gender-exclusive language is that it can reduce one's sense of belonging in a previously gender-neutral context. Thus, linguistic ostracism is an alienating experience that cuts across situations; feeling alienated because of one's group membership need not be reserved for situations to which a group-based stereotype is already attached.

The current work is not without limitations. First, most of our measures asked participants to speculate about their motivation and self-conceptions in a prospective work environment, which leaves open the possibility that these prospective assessments may not be experienced in the exact

same manner in reality. Second, we studied women's perceptions of gendered language only in the context of a job interview. Future work should broaden the focus to a variety of other settings to determine the generalizability of these findings to other contexts. Moreover, the type of job that women are applying for might modulate their responses to gender-exclusive language in the interview (e.g., women might be less inclined to avoid a job described using gender-exclusive language if it is one that is stereotypically associated with women, such as a preschool teaching or nursing). Third, the interviewers in our studies were always male, which begs the question: Would gender-exclusive language have the same pernicious impact on women's self-conceptions if they hear such language from female speakers instead?

Some other explanations for the current findings are important to note. First, rather than feeling ostracized and, as a result, uninterested in the work environment, women may have taken the language to literally mean that primarily men work in the described environment. In this way, gender exclusive might have served an informative purpose rather a subtle means of gender-based exclusion. Alternatively, women may have construed the language as indicative of work that is stereotypically more interesting to men than women. We view both of these explanations as supportive of our argument that gender-exclusive language unintentionally conveys the message that women do not belong in a situation, which elicits avoidance.

Another issue for future research concerns whether feeling ostracized based on gender-exclusive language generalizes to men as well. That is, does *feminine* gender-exclusive language (i.e., *she*) dampen men's sense of belonging and threaten their self-concept? Would the men in our studies have responded aversively to a female interviewer who used gender-exclusive *she*? Indeed, the use of gender-exclusive *she* fits Williams's (2007) definition of ostracism. However, the use of gender-exclusive *she* differs from gender-exclusive *he* in an important way. Whereas gender-exclusive *he* has been historically used to refer to both men and women, gender-exclusive *she* does not have the same history. The latter has historically been used to make specific reference to women, but not men (Madson, & Hessling, 1999; Spencer, 1978) and is interpreted as making a political statement (Madson & Shoda, 2006). Thus, it is likely to elicit different types of responses from the listener (e.g., confusion, anger, apathy, approval) based on their individual differences. Therefore, we expect that men's responses to gender-exclusive *she* is likely to be more idiosyncratic and varied relative to women's more uniform, aversive response to gender-exclusive *she*, as revealed in the current work. In the end this is an open empirical question that can be easily addressed using the current experimental paradigm.

In conclusion, although overt forms of sexism (e.g., harassment, sexist jokes) are frowned on in modern society, subtle forms of sexism persist, some of which are conveyed by antiquated linguistic practices. The current research provides empirical support for the argument made by feminist scholars that subtly sexist language is more than "just talk" (Irigaray, 1993; Lakoff, 1973, 1975; Miller & Swift, 1991). The inadvertent creation of subtly ostracizing environments may be one reason why women avoid some types of professional environments even when they are highly talented in the actual content of the work.

Appendix

Language manipulation: Gender-exclusive language is italicized and gender-inclusive language is bracketed.

In our organization, our employee-base is continually growing and thriving. Those who are typically hired are enthusiastic and bright college graduates; we usually know a good employee when we see *him* [him or her]. We are continually working to maintain a work environment that emphasizes individual expression. We want our *guys* [employees] to feel as though they have the ability to maneuver in terms of communicating their ideas. When it comes to approaching a difficult task at work, we realize the benefits of taking a more indirect and non-conventional approach.

Our organization is continually growing. What that means for an employee here is that *he* [he or she] needs to be able to work in a fast-paced and energetic work environment. We certainly don't want an employee's workload to catch *him* [them] unprepared. However, if an employee's workload is more strenuous than that of other employees, we will call a planning meeting with the team-leader at which point *he* [he or she] will make every effort to more equally distribute that employee's duties.

We expect full employee support in fulfilling our goal of becoming a leading organization in our field. Therefore, on a particularly busy day, an employee may be asked to stay after work hours. Naturally, *he* [he or she] will be compensated for any extra time that *he* [he or she] puts in; the *guys* [people] in payroll are very good at what they do.

Finally, we expect our employees to work so that competing organizations are less likely to prosper. We believe in rewarding employees who assume leadership and responsibility in our organization. We think that when we come across an outstanding employee, rewarding *him* [him or her] will, in the end, boost the company's overall productivity. Some examples in the reward system that we have are extended paid-vacation and monetary bonuses. Employees are currently very pleased with our reward system; the harder *those guys* [they] work the more money they make!

If this work environment sounds like a good fit for you, we encourage you to apply!

Authors' Notes

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Notes

1. In Study 1 the vast majority of participants (83%) in the gender-exclusive condition thought that the person describing the work environment was a man. Because we were interested in replicating the basic effects from Study 1, we opted to use men in the interviewer role and not to introduce interviewer gender as a third independent variable.
2. It is plausible that perceptions of sexism and belongingness serve as underlying processes that reduce women's motivation and identification with a job described using gender-exclusive versus nonexclusive language. Indeed, perceptions of sexism (in Studies 1 and 3) and belongingness (in all three studies) mediated the effect of gendered language on motivation and identification for women. However, both of these potential mediators were assessed *after* the aforementioned dependent measures; thus, we are unable to make a clear mediational argument in the current work. Future work should assess perceptions of sexism and belonging *before* outcome variables to more stringently test these hypotheses.

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