Empirical Research Paper

Gendered White Lies: Women Are Given Inflated Performance Feedback Compared With Men

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Abstract
Are underperforming women given less truthful, but kinder performance feedback (“white lies”) compared with equally underperforming men? We test this hypothesis by using a “benchmark” of truthful (objective) evaluation of performance and then either manipulating (Study 1) or measuring (Study 2) the extent to which the feedback given to women is upwardly distorted. In Study 1, participants were asked to guess the gender of an underperforming employee who had been given more or less truthful feedback. Participants overwhelmingly assumed that employees who had been told “white lies” were more likely to be women. In Study 2, in a naturalistic feedback paradigm, participants gave both quantitative and qualitative feedback to a male and a female writer directly. Participants upwardly distorted their original, gender-blind, quantitative evaluations of women’s work and gave more positive comments to women. The findings suggest that women may not receive the same quality of feedback as men.

Keywords
gender bias, feedback, lying, equality, white lies, interpersonal decision making, gender, stereotypes, bias

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Introduction
Most of us have likely told a spouse that their cooking tastes great, when in fact it doesn’t, or told a friend we like their new partner, when in fact we don’t. White lies are often told because we strive to maintain social bonds (Baumeister & Leary, 1995) and are driven by various interpersonal goals, such as the desire to avoid a negative reaction (Fisher, 1979; Turner et al., 1975), to help the recipient in some way (Erat & Gneezy, 2012; Gino et al., 2013), to avoid harming the relationship or the other person (DePaulo & Bell, 1996; Lupoli et al., 2017), or to present one’s self in a positive light to others (Carver et al., 1978) or themselves (Camden et al., 1984).

Although they may reflect benign intentions, white lies can be problematic when giving performance feedback. In professional contexts, the communication of performance information, even if it is negative, is important for improving future performance (Belschak & Den Hartog, 2009; Hillman et al., 1990). But communicating negative information is difficult (Cox et al., 2011; McKee & Ptacek, 2001). Despite intentions to be honest, upwardly distorted feedback (white lies) is fairly common in the workplace.

The present work focused on the question, “Is there a greater propensity to tell women, as compared with men, white lies during performance feedback?” A lack of accurate developmental feedback could lead to continued poor performance (Dardenne et al., 2007; Dumont et al., 2010). In addition, positive but inaccurate feedback, if detected, could exacerbate anxiety about one’s standing in the organization or faith in management, which can undermine effective performance (Ashford & Cummings, 1983; Dweck & Gilliard, 1975; Lamarche et al., 2020). Clear and accurate performance feedback is likely especially important for members of marginalized groups who are already subject to an unfair playing field at work (Correll & Simard, 2016). Thus, knowing whether women are less likely to receive accurate information about their performance has wide-ranging implications.

Although there is no empirical study that has directly examined the hypothesis that people tell more white lies to women during feedback, several findings provide indirect support. First, some studies show that personal or group-based characteristics of interaction partners affect the nature of communication. For example, Harber (1998) found that, after reading the same poorly written essay, White participants gave

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more positive feedback to Black (vs. White) students. Also relevant, people are likely to accentuate positive information and omit negative information when publicly describing people who are viewed ambivalently (e.g., high on warmth but low on competence) or of historically marginalized ethnicities (Bergsieker et al., 2012).

Importantly, a robust literature has shown gender differences in performance evaluations (Guillemin et al., 1979; Madera et al., 2009; Schmader et al., 2007). For example, women are described as less agentic than men in academic recommendation letters (Madera et al., 2009), praised for their work while being allocated fewer resources (Biernat & Vescio, 2002; Vescio et al., 2005), and described more warmly and with more positive words in narrative, written (i.e., not person-to-person) performance reviews, despite being evaluated more negatively on quantitative measures of competence (Biernat et al., 2012). Further hinting at the possibility that women may not be receiving accurate feedback, women report receiving less negative feedback from managers (King et al., 2012).

Although these prior findings suggest that women may be given less accurate feedback, as far as we know, no study has directly examined whether the accuracy of direct, person-to-person feedback depends on recipient gender. For example, although a discrepancy between quantitative and qualitative feedback in performance reviews (e.g., Biernat et al., 2012) could plausibly reflect white lies, it is also possible that this discrepancy reflects using one set of criteria when making quantitative evaluations and a different set of criteria when making qualitative evaluations. Similarly, although work using self-reports suggests that women may receive less critical feedback (e.g., King et al., 2012), self-reports may not reflect what actually transpired nor do they capture distortion or inaccuracy.

In the present work, our primary aim was to provide empirical evidence that there is a greater propensity to positively distort information, or tell white lies, to women during person-to-person feedback. To do so, each of our studies included a “benchmark” of truthful evaluation of performance, and then either manipulated (Study 1) or measured (Study 2) the extent to which the feedback given to women is upwardly distorted relative to this original evaluation. In addition, past work suggests that gender differences in evaluations and communication may reflect gender stereotypes (Bergsieker et al., 2012; Biernat & Danaher, 2012). Thus, to explore possible mechanisms for a white lie bias toward women, in both studies, we explored the trait perceptions of those who are told white lies.9

**Study 1**

As an initial empirical test of a gender bias in the telling of white lies, in Study 1, we sought to examine people’s beliefs about the prevalence of white lies during feedback to women in a professional context. We asked participants to read about a (hypothetical) manager’s assessment of an employee’s poor performance and subsequent feedback to the employee. We manipulated the accuracy of the feedback from harsh but truthful at one extreme to kind but less truthful at the other extreme. We thus operationalized a “white lie” as the positive distortion of the manager’s original, objective evaluation to the feedback provided directly to the employee. Participants’ task was simply to guess the gender of the underperforming employee as a function of this distortion. Because people are typically good at picking up on systemic or socially ingrained biases (e.g., Plant et al., 2000), we reasoned that when the feedback was kinder but less truthful, participants would assume the employee was a woman. After guessing the employee’s gender, participants were asked to indicate what they believed the manager had thought of the employee on the traits of warmth, sincerity, competence, and confidence. These measures were used to explore how assumptions of the manager’s perceptions of the employee varied as a function of employee gender and feedback.

**Method**

Both studies were approved by the university’s institutional review board and all participants provided informed consent. We have reported all manipulations and measures in the main text or in the Supplemental Materials and Online Appendix.

**Participants and design.** One hundred eighty-five participants were recruited in exchange for course credit. Three participants were excluded because they failed to answer the gender assumption or the trait perception measure. Thus, the final sample size consisted of 182 individuals (113 female). Data were collected in two separate samples. Because conclusions for both samples were the same (see Supplemental Materials), for the sake of brevity, we report results from the pooled analysis.

The experimental design consisted of a single factor (feedback accuracy) with six between-subject levels (ranging from extreme truth to extreme lie). The ns for each of the six feedback conditions were $n_1 = 30, n_2 = 28, n_3 = 30, n_4 = 34, n_5 = 33$, and $n_6 = 27$. Assuming a medium effect size (equivalent to an $r$ of .3), $\alpha = .05$, and a two-tailed test, the statistical power to test our main hypothesis regarding the relationship between performance feedback and gender assumption, using a chi-square test with five degrees of freedom, is .90.

**Procedures and measures**

**Overview.** Participants read a hypothetical scenario in which a manager of a company assessed an (unnamed) employee as clearly underperforming and to whom they must now give feedback. Participants then read that the
manager had chosen the feedback, to be given directly to the employee, from six different qualitative feedback options (see Online Appendix for the wording of the scenario and six feedback options). The six options varied from Option 1, the most truthful statement, which was also the harshest, to Option 6, the least truthful statement, which was also the nicest. The most truthful statement (Option 1) most closely matched the manager’s actual evaluation of the employee’s poor performance, nearly word-for-word (i.e., “The quality of your work is much worse than the other employees and we expect you to do much better and work much harder.”). To ensure that participants considered the manager’s feedback on a truth versus lie dimension, participants saw all six feedback options. But crucially, participants were randomly assigned to an experimental condition wherein only one of the six statements was clearly marked with a large check mark next to it, indicating that it was what the manager had chosen to say to the employee.

Assumption of employee-gender measure. Based on the feedback that the manager had chosen to give, participants were asked to guess the gender (male or female) of the employee.

Assumption of the manager’s perception of the employee’s traits measure. Next, for exploratory purposes, participants were asked to indicate what they believed the manager had thought of the employee on the traits of warmth (i.e., “warm,” “sincere”) and competence (i.e., “confident,” “competent”), and the perceived likelihood that the manager would assign an important task to the employee in the future (“future task”). Participants indicated their responses by marking an x on a continuous 12” line measure. Judgments of warm and sincere were strongly, but imperfectly, correlated (r = .55, p < .001), and judgments of confident and competent were even less correlated (r = .17, p = .02). In all our analyses, we examined each trait separately in our analyses.

Demographic survey. At the end of the study, participants provided their gender, age, and political orientation, and completed the Benevolent Sexism Inventory (Glick & Fiske, 1996). None of these variables interacted with the main effect of feedback accuracy on assumptions of employee gender. Finally, participants were debriefed.

Data analytic method. We tested our focal hypothesis (i.e., participants would assume that the employee who was lied to was a woman) using a chi-square test of linear association, as well as a logistic regression, with gender assumption (woman = 1) as the outcome variable and feedback accuracy (1–6) as an ordinal predictor. To explore the role of the manager’s presumed trait perceptions, we examined each trait separately, using linear regressions with gender assumption, feedback inaccuracy, and the interaction between the two entered simultaneously as predictors. In all models, the interaction between gender assumption and feedback inaccuracy was not statistically significant (p > .195) and was therefore dropped from the model. To account for performing multiple (five tests) comparisons, we applied a Bonferroni correction to all results (p < .01).

Results

Assumptions of gender differences and white lies. As predicted, people assumed that an underperforming employee who was given less accurate but kinder feedback (white lie) was a woman, χ²(5, 181) = 45.33, p < .001. As shown in Figure 1, as the manager’s feedback went from more truthful but harsher (Option 1) to less honest but kinder (Option 6), participants were nearly twice as likely to assume that the underperforming employee was a woman, B = .62, SE = .11, p < .001; Exp(B) = 1.86, 95% confidence interval (CI) = [1.5, 2.3], R² = .26. Participant gender did not significantly moderate any of the results reported here (ns).

Assumptions of manager’s perceptions of employee’s traits. We also explored people’s assumptions of the trait inferences made of the employee. Linear regressions with perceived employee gender and feedback entered simultaneously as predictors showed two independent effects of employee gender and feedback on trait perception. First, participants inferred that the employee was a woman (vs. a man) also assumed that the manager perceived her to be less confident, B = −.94, SE = .31, t = −3.03, p = .003, 95% CI = [−1.55, −.33], partial R² = .05. They also assumed that the manager perceived her as warmer, although this trend did not reach statistical significance, B = .41, SE = .21, t = 1.92, p = .056, 95% CI = [−.004, .82], partial R² = .02. There was no statistically significant effect of gender on competence, B = −.34, SE = .25, t = −1.36, p = .176, 95% CI = [−.83, .15], partial R² = .01. Second, as feedback inaccuracy increased, participants inferred that the manager perceived the employee as significantly warmer, B = .54, SE = .13, t = 4.27, p <
.001, 95% CI = [.28, .80], partial $R^2 = .09$. The other trait judgments did not vary significantly as a function of gender assumption or feedback inaccuracy (Table S1).^4

**Discussion**

Study 1 examined whether assumptions about an underperforming employee’s gender could be predicted by the accuracy of feedback the employee had received. Participants overwhelmingly guessed that an underperforming employee who had been told a white lie was a woman. The findings provide initial empirical evidence documenting the presence of a gender bias in the telling of white lies in direct (person-to-person) performance feedback contexts.

In addition, our analyses of the inferences about the manager’s perceptions of the employee’s traits, although exploratory, were informative. Specifically, participants who assumed that the employee was a woman (vs. a man) also inferred that the manager perceived her as less confident. There were no other statistically significant differences as a function of gender on trait perceptions, including warmth and competence, which have in the past been implicated in gender biases in communication (Bergsieker et al., 2012; Biernat et al., 2012; Kray et al., 2014). Moreover, as feedback veered toward a white lie, participants inferred that the manager perceived the employee as warmer, which is consistent with past work showing that those who elicit compassion are more likely to be told white lies (Lupoli et al., 2017). We continue to explore the relationship between the white lies gender bias and the trait perceptions of those who are told white lies in Study 2.

Despite providing initial empirical evidence of the existence of a white lie bias to women, Study 1 is based on people’s perceptions of another person’s actions. But would people actually be more likely to tell white lies to an underperforming woman (compared with a man) in a real person-to-person feedback situation? This question was examined in Study 2.

**Study 2**

In Study 2, we examined whether, in an educational context, people are more likely to tell a white lie to an underperforming woman (vs. man) when giving direct person-to-person performance feedback. We asked participants to grade two essays that had been deemed by a separate, independent sample of judges to be of poor quality. Initially, the only information provided about the writers was their initials. Because the writers’ gender was not known, the participants were told that they would be providing feedback to each writer. At this point, the first name of the two writers was revealed, thereby disclosing the writers’ (presumed) gender: one was a man and one was a woman.

When giving feedback to each writer, participants provided quantitative evaluations (on the same scales as their initial evaluation) and qualitative comments.

Thus, we operationalized a “white lie” as the positive distortion of people’s quantitative assessments from their initial objective evaluations (i.e., before the writers’ gender was known) to their quantitative feedback provided directly to the writer (i.e., after the writers’ gender was revealed). Our critical test was whether people would be more likely to tell white lies when the writer of the poorly written essay was a woman than a man. If so, this would provide further empirical support for the presence of a white lie gender bias. We also examined whether people would be aware of a gender bias in their feedback or whether, like many other biases in domains where being unbiased or fair is important, participants would exhibit a “bias blind spot” (Pronin et al., 2004). Finally, we continued to explore the relationship between the white lies gender bias and trait perceptions of recipients of white lies.

**Method**

**Participants and design.** We recruited a sample of 68 university undergraduate students, using procedures similar to Study 1. Two participants were excluded from the analysis because one was a former research assistant in the lab and the second person’s data were lost during a computer crash during the experiment. Thus, the final sample consisted of 66 participants (39 identified as female, 26 as male, and one as “other”).

The main study design was a $2 \times 2$ structure, with the gender of the writer (man vs. woman) and time (1 vs. 2) as within-subject factors. With an effect size of $\eta^2_p = .06$ ($f = .25$), a measure of association between repeated measures equivalent to an $r$ of $.5$, $\alpha = .05$, and a two-tailed test, the statistical power to test our main hypothesis regarding an interaction between time and gender, using a repeated measures analysis of variance (ANOVA) with $62 df$, is .98.

**Procedures and measures**

**Overview.** Participants were told that their task was to read and evaluate two short essays (see Supplemental Materials) on the topic of graduate school admission written by other students in a “real-time” writing test. As one of the key elements of performance feedback is its socially stressful nature, and as we wanted the task to seem real, participants were told that the other students (the writers) would be participating remotely. In reality, all communications were preprogrammed, using a chat prototype produced for the Qualtrics platform (North & Fiske, 2013). Seventy-five percent of the participants reported not being aware that the writers were actually not real people but rather programmed, suggesting high psychological realism (see Supplementary Materials). Participants were told that the other two students (the writers) had 4 min in which to write their essays. During
this time, participants were asked to read through a set of criteria to familiarize themselves with good writing (see Online Appendix). Throughout the chat, all communication (including essays) from these fake writers were identified only by the initials “S.B.” and “A.M.” Two essays were used and counterbalanced across (later disclosed) gender conditions.

Gender manipulation and essay evaluation measures (Times 1 and 2). For their first evaluations (Time 1), participants were asked to evaluate the quality of two essays (presented in randomized order) using 0% to 100% scales. These essays had been judged by a separate independent sample as below-average (see Supplemental Materials). At Time 1, participants had no information about the writer’s gender and made these evaluations privately (only to the researcher). After submitting their Time 1 evaluations, participants learned about the gender of the writers through their names (“Sarah” instead of “S.B.” or “Andrew” instead of “A.M.”; Pittinsky et al., 2006). At this point, they were asked to provide their evaluations again (Time 2) to each writer as direct feedback using the same 0% to 100% scales. This design was intended to measure the change in participant’s quantitative evaluations, as a function of gender, and thus capture the white lie in action. It also allowed for the assessment of a qualitative measure to capture tone and content of the feedback. To motivate participants to give truthful and helpful feedback to the writers, they were told that the writers had an opportunity to revise the essay for submission in a competition and win a prize (motivation to be helpful was also assessed during debriefing).

At both times, participants evaluated the essays on the following dimensions modified from a writing assessment and evaluation rubrics guide (Glencoe/McGraw-Hill, 2005): essay quality, writing criteria (focus, organization, logic, support, and mechanics of the writing), and willingness to recommend the essay as exemplary (see Online Appendix). All dimensions were evaluated on a scale of 0 (not at all) to 100 (completely), except for quality, which was evaluated on a scale from 0 (not good at all) to 100 (excellent). All quantitative measures were correlated strongly with each other (alphas: Time 1 = .94, Time 2 = .92). Thus, for each time point, we averaged the indices to create one composite measure (Quality), which we report here as the dependent measure (Table S2).

After their quantitative feedback at Time 2, participants were additionally asked to provide a few sentences of qualitative feedback to each essay writer. Three independent, trained coders, blind to the experimental condition and the hypothesis, rated the qualitative feedback statements on several measures (7-point scales; α = .75), (see Supplementary Materials). The items were averaged into two composites: positivity (Cronbach’s α = .93) and constructiveness (α = .71). The positivity composite was used to examine whether the qualitative results echoed the positive change in the quantitative results, and the constructiveness composite was to examine the extent to which participants offered helpful criticism. We also examined whether there was more positivity but less constructiveness (a wider gap) for the female writer than for the male writer. As an additional measure, the coders were also asked what grade they thought the evaluator gave the essay writer, based on their feedback statement to the writer (0%–100%). This was to highlight another potential consequence: that people could make inferences about quality of work based on feedback.

Trait perception measures (Times 1 and 2). Participants were asked to evaluate the writer of each essay on a set of traits after their Time 1 evaluation of the essays and again after their Time 2 feedback provided directly to the letter writers. The items included traits that reflect the dimensions of warmth (i.e., warm, agreeable) and competence (i.e., competent, confident, intelligent, dominant; Fiske et al., 2002). We also included two additional measures of perceived future ability (“optimism about the writer’s future” and “recommendability of work”). Participants provided evaluations of both writers on each of the items, using a scale of 0 (not at all) to 100 (extremely). We analyzed each trait separately but also, for the sake of brevity, identified potential underlying factors for the trait judgments in our study. Factor analyses revealed that judgments of individual traits reflected two factors: confidence/dominance (Factor 1: r = .71) and what we refer to as “general likability” (i.e., warmth, agreeableness, optimism, intelligence, competence, and recommendability; Factor 2: α = .93). The factor coefficients are reported in the “Results” section (see Table S5 for individual means and analyses).

Feedback accuracy motivation. At the end of the study, participants were asked whether they had been motivated to be accurate when communicating their feedback to the writers (yes, sort of; no). Seventy-nine percent of the participants indicated they were motivated to be accurate (yes), whereas 13.4% were slightly motivated (sort of) and 7.5% were not motivated to be accurate (no). Motivation did not moderate the main results.

White lie awareness measures. To examine whether participants were aware of any tendency to lie to essay writers, they were asked, “Did you give inaccurate feedback during phase two?” with “Yes,” “Maybe,” or “No” as response options. In addition, participants were asked, “What percentage of the truth do you believe you told Sarah/Andrew?” to see whether participants were aware of a possible gender bias in their feedback.

Demographic measures. Participants answered a series of demographic questions, with the addition of ethnicity, religiosity, and political ideology.

Hypothesis awareness check. We included a question asking participants to guess the hypothesis of the study, which none of them did.
lies to the female writer, as reflected by a Time × Gender interaction, $F(1, 191) = 5.49, p = .02, \omega_p^2 = .06, \eta_p^2 = .08$ ($M_{df} = 9.07, SE = 3.19, 95\% CI = [2.77, 15.36]$). Follow-up tests revealed that participants gave “Sarah” more favorable evaluations at Time 2 compared with their earlier, private evaluations of her work at Time 1 ($\Delta M_{female} = 9.07, SE_{female} = 3.19), p = .005, 95\% CI = [2.77, 15.36], d_{rm} = .44$, the equivalent to nearly a full letter grade difference (approximately 9% grade inflation). In contrast, participants provided “Andrew” with feedback at Time 2 that was statistically indistinguishable from their Time 1 evaluations ($\Delta M_{male} = –1.50, SE_{male} = 3.19), p = .64$ (Figure 2).

Are women given more positive qualitative feedback? Three independent coders who were blind to the gender of the writers and the hypothesis evaluated the qualitative feedback provided by participants. Complementing the quantitative findings, coders judged the feedback given to “Sarah” as more positive ($M = 4.49, SD = 1.35$) than the feedback given to “Andrew” ($M = 4.07, SD = 1.22$), $t(63) = –2.32, p = .02, 95\% CI = [–.79, -.06], d_{rm} = -.33$. The constructiveness of the feedback did not differ significantly between “Sarah” ($M = 3.88, SD = 1.34$) and “Andrew” ($M = 4.12, SD = 1.27$), $t(63) = 1.56, p = .12, 95\% CI = [–.07, .53]$. However, there was a statistically significant interaction between writer gender and type of feedback (positive vs. constructive), indicating a larger discrepancy in people’s feedback to “Sarah” than to “Andrew,” $F(1, 63) = 6.29, p = .02, d_{rm} = .29$. Finally, the coders guessed, based solely on the qualitative feedback, that “Sarah” must have performed better, estimating that she had received a higher grade ($M = 61.49, SD = 10.84$) than “Andrew” ($M = 58.10, SD = 8.18$), $t(63) = –2.12, p = .03, 95\% CI = [–6.50, –.27], d_{rm} = -.35$. Are participants aware of a white lie bias toward the female writer? At the end of the study, the majority (65%) of participants reported that they had changed their initial evaluation when they had to provide direct feedback to the writers, reflecting an awareness of having lied. Importantly, however, people seemed unaware that their feedback differed as a function of the gender of the writer. When asked what percentage of their feedback was truthful, participants reported providing equally truthful feedback to “Sarah” ($M = 78.0\%$) and “Andrew” ($M = 75.9\%$), $t(54) = .70, ns, d = .09$. Moreover, actual lying (i.e., increases in evaluations from T1 to T2) was not related to reports of truthfulness in feedback (“Sarah”; $r = .007, ns; “Andrew”; $r = –.19, p = .169$) or with verbal indications of awareness of lying, $ns$ (Table S4). Thus, although people realized that they had upwardly distorted their feedback to some extent, they did not think they did so more to Sarah than to Andrew.

Trait perceptions of the writer. We explored trait perceptions of the recipients of white lies. Specifically, we measured how
perceptions of the writers’ confidence/dominance and general likability changed after learning about the writer’s gender and giving direct feedback (T2), compared with having evaluated the work in the absence of the writers’ gender information (T1). Given our design, any change in trait judgments could be driven not only by stereotypes activated by learning about the writer’s gender, but also as a function of telling white lies. Accordingly, we used LMM with the change in trait judgments as the dependent variable and the essay writers’ gender, the magnitude of the white lie (Time 2–Time 1 evaluations), and the interaction between the two as our main predictors. For consistency, we continued to include participant gender and essay version as covariates.

Learning the writers’ gender did produce a change in perceptions of the writer’s traits. Participants lowered their perceptions of “Sarah’s” confidence ($\Delta M_{\text{female}} = -6.46, SE_{\text{female}} = 1.95$), but not “Andrew’s” confidence ($\Delta M_{\text{male}} = -1.11, SE_{\text{male}} = 2.05$), as reflected by a statistically significant essay writers’ gender and time interaction, $F(1, 124) = 8.40, p < .001$, $b = 8.40, 95\%CI = [2.66, 14.14], d = .33$. There was no significant effect of gender on changes in the composite of general likability, $F(1, 124) = 1.88, p = .17, b = 3.09, 95\%CI = [-1.37, 7.54], d_{\text{es}} = .18$, including the traits of warmth and competence (see Supplemental Materials).

Interestingly, the telling of white lies also produced a change in perceptions of the writer’s traits. The more that participants had positively distorted their feedback, the more they upwardly shifted their judgments of all the writer’s traits. This was the case for general likability, $F(1, 124) = 119.31, p < .001, B = .60, SE = .08, 95\%CI = [.45, .75]$, as well as confidence/dominance, $F(1, 124) = 12.87, p < .001, B = .31, SE = .10, 95\%CI = [.12, .50]$ (Figure S2). The effect of white lies on changes in trait judgments did not differ as a function of writer gender ($\text{Gender} \times \text{Evaluation change interactions were ns}$).

**Discussion**

Study 2 bolstered the empirical support for our focal hypothesis that there is a gender disparity in the telling of white lies during performance feedback. In a realistic, real-time performance feedback setting, individuals who provided improvement feedback to struggling writers showed an upward, positive distortion to female writers, but no such distortions to male writers. These distortions were reflected in both quantitative and qualitative feedback. Importantly, by measuring the change from people’s original evaluations to the feedback they gave, the present study demonstrates that women were given distorted feedback, or told “white lies.”

In addition, we explored how perceptions of the writers changed after learning of the writer’s gender and the telling of white lies. When the writer was a woman, participants shifted their perceptions of the woman’s confidence and dominance downward, and this was not the case when the writer was a man. Interestingly, there was no statistically significant gender difference in general likability, including warmth and competence. It is also noteworthy that the telling of a white lie led to viewing the writers more favorably on all traits, irrespective of the writer’s gender. We discuss the implications of these exploratory results, assessing trait perceptions for understanding the white lie gender bias in the “General Discussion” section.

**General Discussion**

Across two different contexts (work and educational) and using distinct methods (simulation and dyadic interaction), we documented evidence for a previously untested gender bias in the telling of white lies during performance feedback. In Study 1, we found that when people had witnessed a manager tell a white lie during workplace feedback to an employee, they overwhelmingly assumed that the employee was a woman. In Study 2, we designed a realistic situation in which students gave peer-to-peer educational feedback. Evaluators rated the two essays as equally poor when they had no information about the gender of the writers. But after learning the writers’ gender, evaluators provided more positive, less accurate feedback to the woman, but not the man. Collectively, these results suggest that in situations where a woman is underperforming and where feedback is needed, she is less likely to be given accurate feedback about her performance, compared with a man.

The present work contributes to the substantial literature on gender differences in how women are evaluated and given feedback. Importantly, whereas past work has focused on differences in feedback to women using self-report or comparative measures (e.g., the difference between qualitative and quantitative feedback, or how qualitative feedback differs from men’s), we measured the accuracy of feedback compared with an objective standard of “truth”; in Study 1, the manager’s true evaluation of the employee’s work was clearly disclosed to participants, and in Study 2, participants reported their evaluation of the work prior to learning information about the gender of the writer and giving him or her improvement feedback. By using a true evaluation as a standard, we provide compelling evidence that people upwardly distort feedback to women, or tell “white lies.”

**What Accounts for Gender Differences of White Lies?**

Although the primary aim of the present work was to demonstrate the presence of a gender bias in the telling of white lies, here we consider several theoretical accounts for why this effect occurs.

One reasonable explanation is that the telling of white lies reflects gender stereotypes—beliefs about members of a group that are activated automatically and often implicitly (Devine, 1989; Schneider, 2005; Stroessner et al., 2010).
Although there are many gender stereotypes, according to the stereotype content model (SCM; Fiske et al., 2002), women as a social group are viewed as warm, but low on competence, reflecting paternalistic stereotypes (Eckes, 2002; Fiske et al., 2002). Such gender stereotypical judgments have been shown to contribute gender differences observed in the communication of performance evaluations (e.g., Bergsieker et al., 2012; Biernat et al., 2012).

Thus, from a SCM perspective, the gender bias in the telling of white lies might reflect gender stereotypes, such that underperforming women are more likely to be told white lies because they are generally viewed as warm, and more likely to elicit benign, paternalistic responses. Although exploratory, the trait perception results were not fully consistent with this stereotyping hypothesis. Most relevant, in our studies, women were not necessarily judged as higher in warmth than men. Moreover, in neither study were women judged as less competent than men. Thus, overall, the trait perception data are not entirely consistent with an SCM account.

But gender stereotypes are more nuanced than the superordinate dimensions of warmth and competence. Research shows that stereotypes about women’s agentic characteristics are particularly complex (Hentschel et al., 2019). Women may be perceived equally as competent as men, but less assertive (Hentschel et al., 2019), less likely to be leaders, and as more gullible (Kray et al., 2014). Importantly, women are perceived as having lower confidence in performance contexts (Heilman et al., 1990; Lenney, 1977; Stankov & Lee, 2008). It is revealing then that, across both studies, underperforming women were perceived as having lower confidence than men. Although speculative, this suggests that stereotypes about women’s confidence played a role in prompting the telling of white lies. If people view underperforming women as having low confidence, they may infer that the reason women perform poorly is not because women lack the skills or the motivation to perform well, but because they lack the self-confidence to realize their abilities. Given that negative feedback may be seen as undermining self-confidence (Brockner & Elkind, 1985; Cohen et al., 1999; Ilgen & Davis, 2000; Kluger & DeNisi, 1996), feedback providers may not want to further undermine women’s confidence and exacerbate the situation. Such inferences may lead them to provide support and encouragement, even if it means distorting information.

Although the trait perception data hint at the possibility that gender stereotypes about women’s (lower) confidence may prompt the telling of white lies, it is worth noting that the white lie bias may occur in the absence of activating any gender stereotypes (Amodio & Devine, 2006; Crandall et al., 2011; Park & Judd, 2005). People can enact patterns of behavior that reflect years of being imbued with norms that dictate appropriate behaviors based on gender roles (Eagly & Wood, 2012). Some behaviors, like holding the door for women, can occur without necessarily being reliant on the activation of target-specific stereotypes, but instead by establishing gender roles in interpersonal contexts (e.g., Renne & Allen, 1976). In situations where feedback and helping is required and the target happens to be women, people may simply be kinder to women because being kind to women is a social norm. Still, from a social roles theory perspective, men and women often enact different gender roles (e.g., men are more likely to hold the door for women than are to hold the door for men or for each other). But, contrary to this expectation, in Study 2, both male and female participants were equally likely to tell white lies toward women.

Another explanation for a gender bias in white lies may lie in self-presentation concerns. In past work, researchers have found that people were more likely to omit negative information when describing low-powered individuals to others, especially when the act was in a more public versus personal setting (Bergsieker et al., 2012). Such omissions are motivated by the desire to not want to appear to demigrate individuals from low-powered groups. Most pertinent to our work is research on performance feedback to marginalized racial groups, where researchers found that White participants provided more positive feedback to Black (vs. White) students because they did not want to appear biased in their evaluation (Harber, 1998; Harber et al., 2010).

On the surface, our research showing a positive distortion in feedback given to women appears similar to past work showing a positivity bias in communication. Still, an analyses of our study and results are not completely consistent with a desire to appear less sexist or more egalitarian. In the work on feedback to Black students (Harber, 1998; Harber et al., 2010), the positivity bias is assumed to arise in part because White people are uncomfortable during interracial interactions (Mendes et al., 2002; Richeson & Shelton, 2007; Stephan & Stephan, 1985). However, interactions between members of different genders is more common (and therefore less salient) than interactions between members of different ethnic or racial groups (Rudman & Goodman, 2004). Indeed, in Study 2, wherein feedback took place in a college setting, women make up about half of the student body, so interactions with women in educational settings are quite frequent. In addition, many of our participants were women, and they also were more likely to tell white lies to women (ingroup) than to men (outgroup). For these reasons, it seems unlikely that a positivity bias, prompted by outgroup discomfort, explains the gender bias in white lies.

One could still argue, however, that even in the absence of outgroup discomfort, people may still be concerned about the way others may perceive their actions toward a woman. If there is a social expectation of being nice to women (FeldmanHall et al., 2016; Viki et al., 2003), people may upwardly distort feedback to appear “nice,” “chivalrous,” or “egalitarian.” But, again, according to social roles theory, this would be more likely a concern for men (Rosell & Hartman, 2001), and in Study 2, both women and men showed a gender bias in the telling of white lies. Although it
appears unlikely, our analysis does not rule out a self-presentation explanation and future research should test self-presentation concerns more specifically.

Finally, we consider whether a gender bias in white lies during performance feedback might be explained by a “shifting standards” account whereby women are judged against stereotypes about their social group (Biernat & Kobrynovicz, 1997; Biernat & Manis, 1994). According to this account, once participants learned that an essay was written by a woman they shifted their original judgments upward because poor writing is okay “for a woman.” In other words, the gender discovery shifted the standard used to make the judgment and therefore there was no distortion or white lie, just a changed evaluation.

For a few reasons, we believe that a shifting standards account is unlikely. First, in Study 2, if people were shifting their evaluations due to a perception that the essay was not bad “for a woman,” we might have also expected to see a subsequent upward shift in competence and perhaps dominance and confidence for women (compared with men). But that was not the case. Second, in the domain of writing and verbal competency, which was the focal context of Study 2, women are viewed as more competent than men (Biernat & Manis, 1994; Hyde & Linn, 1988; Swim et al., 1989). In this domain, a poorly written essay by a woman should shift perceptions of her competence downward and elicit harsher feedback. This was in fact what we found in the pretest results for Study 2 (see Supplemental Materials): When the authors knew the writer’s gender before evaluating the poorly written essay, women writers were evaluated more negatively than men writers, suggesting that women were judged against a higher standard than men. Thus, overall, a shifting standards account does not appear to account for the data from both studies.

**Constraints on Generality**

The exploratory trait perception data offer some preliminary evidence that gender stereotypes about confidence may play a role in the telling of lies to women. Still, because trait perceptions in our paradigms were assessed after both giving the feedback and learning of gender information, it is not possible to disentangle the effect of gender from the effect of telling a white lie on trait perceptions. Thus, the present work demonstrating a gender bias in white lies sets the stage for several directions of future inquiry. One avenue is to clearly ascertain where in the act of telling white lies, gender and trait perceptions come into play. Interestingly, in Study 2, telling a white lie was associated with positively distorted assumptions of all traits, regardless of gender. It is possible that because of our design, where we inquired about trait perceptions after people had already lied (and most were aware of that), that the elevated trait evaluations reflect a justification or cognitive dissonance resolution for having lied—people don’t like to tell lies, even white lies (Erat & Gneezy, 2012), and having done a favor for someone leads to more positive feelings about them (Regan, 1971). Future work might focus on disentangling these effects.

In addition, future research is needed to understand the measurable impact of white lies in the work place on women. Does receiving kinder, but less accurate feedback lead to continued poor performance in the future? To the extent that feedback is necessary for improvement, those who are given less clear and less accurate feedback would be expected to fare worse compared with those who are given clear, accurate feedback (Correll & Simard, 2016). Moreover, there may be unintended consequences. For example, if a woman perceives that performance feedback is inaccurate or patronizing, the unwarranted positive evaluation may ironically be demotivating due to resentment (Vescio et al., 2005), or if not recognized, result in a more traumatic emotional impact when criticism or decisions (e.g., firing) are made seemingly without warning (Larson, 1989). It is also possible that upwardly distorted feedback may be beneficial if, for example, women interpret feedback more negatively than men (Biernat & Danaher, 2012) and are motivated by positive feedback. Regardless, feedback decisions that are based on demographic group membership are likely to lead to unequal treatment at the expense of individual needs. Further research should establish possible psychological and organizational consequences in either direction.

It is also important to note that the current findings may not generalize to all contexts. The present work focused on two important performance domains: organizational and educational contexts. It remains to be seen whether this effect would be found in other domains, like medical or even relationship contexts. Study 2 was also specific to just one competency—writing (a domain where women might be perceived as competent). It is unclear whether in a male-dominated domain, like engineering or finance, the effect would be amplified or reduced. Further studies are needed to establish the generalizability of the phenomenon to other domains.

Finally, “women” is a broad category, one that is often (and likely in this context) taken by participants to represent the dominant group—White, cisgender women. We did not examine the more intersectional and diverse breakdowns of gender in these studies and do not know whether this same effect would apply if we distinguished, say, women of color or trans women, from White, cisgender women. Because non-White women are stereotypically perceived as less warm and with more contempt, it is possible that instead of white lies about performance we might expect harsher feedback. On the contrary, as Harber and colleagues (2010) have shown, we might see a positive distortion effect but with a different explanatory mechanism, such as not wanting to appear racist. In short, further studies that take an intersectional lens are needed before claiming any effect on women, broadly speaking. More work is needed to understand why women may be told more white lies during feedback, how
they apply outside this experimental context, and for people with intersecting, marginalized identities.

Our studies reveal a potential important obstacle for equality. Given that developmental performance feedback is a ubiquitous and important process in most workplaces and of many people’s working lives, access to fair and accurate feedback should be available to anyone needing improvement, regardless of his or her social group. Here we have exposed one factor that may, to a certain degree, impede this access—being a woman.

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Supplemental Material
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Notes
1. At the time of these studies, we referred to gender (not sex) in a binary fashion (male/female), though we recognize that gender is not binary.
2. Feedback inaccuracy and gender assumption were correlated ($r = .45, p < .001$), which simply reflects our main finding that inaccurate feedback predicts assuming a female gender. The variance inflation factors (VIFs) were acceptable (<10). Still, because observations across level of gender were not evenly distributed across level of feedback accuracy (e.g., employees who were given inaccurate feedback were assumed to be women), the statistical power for testing the interaction is low. Moreover, it is difficult to disentangle the effect of feedback inaccuracy and a female gender assumption on assumed trait judgments.
3. To confirm that our conclusions are not dependent on the analytic approach reported here, we performed an ANOVA and a chi-square test. The conclusions remained the same (see Supplemental Materials).
4. Feedback inaccuracy also affected judgments of the manager’s view of the employee’s confidence, but in a nonlinear fashion (test of quadratic effect: $B = .45, SE = .11, t = 4.14, p < .001$, 95% CI = [.23, .67], partial $R^2 = .08$): Participants assumed that the manager viewed the employee as most confident at either the harshest truth or the nicest, most blatant lie (Figure S1).
5. Women gave higher overall evaluations than men, $F(1, 63) = 5.27, p = .023$, consistent with past work showing that those who are concerned about social ties and are more agreeable, both characteristics of women (Weisberg et al., 2011), are more likely to provide lenient ratings (Bernardin et al., 2009; Cheng et al., 2017). However, participant gender did not significantly interact with time, $ns$, nor did it moderate the essay writer Gender × Time interaction, $ns$. Similarly, the essay version also had an effect on the quality of evaluations. Participants evaluated the two essays (A and B) as below-average (Essay A: $M = 44.06, SD = 21.29$; Essay B: $M = 50.47, SD = 25.75$), $F(1, 191) = 7.21, p = .008$, similar to the pretest results. But, importantly, the essay version did not significantly moderate the Time × Gender interaction, $ns$.
6. We report the raw means in the text and figure and parameter estimates from the linear mixed model.
7. This question was not mandatory, so not all participants completed it, hence the lower df.
8. We repeated the analyses including all possible interactions among the predictors. Our conclusions remained unchanged.
9. All data, syntax, and materials are available at: https://osf.io/593f6/.

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