Confidence in Job Search:
Closing the Gender Gap in Reapplications

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Abstract. We explore reapplication gaps to leadership positions and to research assistantships caused by applicants' gender and confidence, respectively. Providing applicants with information that helps them update their beliefs of the likelihood of receiving an offer closes both gaps, suggesting that confidence-boosting messages not only make underconfident but also female applicants more willing to reapply. A mediation analysis corroborates the role of confidence: when (truthfully) informed that they were among the top 20% of applicants and possessed characteristics desired by the employer, beliefs about relative performance and relative fit mediated the treatment's impact on expected likelihood of success and willingness to reapply. Our findings are compatible with a simple model of Bayesian updating, with one exception: in the field experiment, men's likelihood of reapplying decreased when informed of their high relative standing. The paper discusses the importance of employer feedback boosting employee confidence towards closing gender gaps in the labor market.

Keywords: Gender Gap; Confidence; Beliefs; Field Experiment; Online Experiment.

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INTRODUCTION

Most organizations strive to hire and promote the best talent--but not all talented applicants are equally likely to apply. Notably, women and less confident applicants have been found to be less likely to apply or engage in job search, including for top management roles (Fernandez-Mateo & Fernandez 2016; Fernandez-Mateo et al. 2023; Coffman et al. 2024; Tekleselassie et al. 2025). Past research has documented a link between gender and confidence: Particularly in male-typed domains, women tend to be less confident about their relative performance than their male counterparts, contributing to a multitude of job market outcomes where disparities between women and men have been found (Niederle & Vesterlund 2011; Exley & Kessler 2022; Hakimov et al. 2023; Bohnet & Chilazi 2025).

Reapplications—i.e., applications after a rejection—are a critical aspect of the labor market as repeat applicants can make up a sizable share of the talent pool. Depending on context, reapplication rates to the same firm of 7 percent up to 46 percent have been documented (Bapna et al. 2024; Dlugos & Keller 2021). Similar to the gender gap in applications, women have consistently been found to be less likely to reapply after being rejected in male-typed environments, including for leadership roles (Brands & Fernandez-Mateo 2017). Depending on baseline rejection rates, such gender gaps in reapplications may substantially reduce women's representation in the applicant pipeline (Fernandez-Mateo et al. 2023).

This paper examines whether applicants' confidence in how they rank compared to other applicants might drive the gender gap in reapplication rates. Specifically, we test in a field and in an online experiment the impact of providing applicants with feedback on their relative standing. In addition, we examine the impact of information on relative desirability, that is, the employer's interest in the applicant (holding performance constant). Employer interest could be driven, for example, by the belief that a candidate would be a good fit for a particular role, a factor that research suggests might matter in this context (Bapna et al. 2024). Both candidates' confidence in their relative standing and in their relative desirability might affect their beliefs about receiving an offer and their willingness to reapply.

One reason why candidates might find it hard to accurately assess their competitiveness may be that companies do not tend to provide helpful feedback to unsuccessful applicants. For example, research suggests that about a third of rejection letters do not offer any explanation for the rejection (Jablin and Krone 1984; Bapna et al. 2024). This ambiguity might be hurting less confident applicants, including women, more than more confident applicants, including men, as the rejection might confirm their already pessimistic beliefs, further undermining their

confidence (Bowles et al. 2005). Therefore, interventions improving the accuracy of applicants' beliefs about their relative standing or their relative desirability might lead less confident applicants, including women, to positively update their beliefs about likely success and reapply more often.

We build on an emerging literature documenting both the importance of studying reapplications and a persistent gender gap with men substantially more likely to reapply. Women have been found to be less willing to be considered by an executive search firm for a senior position after rejection (Brands & Fernandez-Mateo 2017), less likely to reapply for a similar job in information technology after being rejected on an online platform (Yang et al. 2025), and less likely to reapply for an internal job after rejection (Dlugos & Keller 2021). Our study is most closely related to Bapna et al. (2024) who also test how job applicants respond to different messages accompanying a rejection. They show for a temporary staffing firm in India that the gender gap in reapplication could be reduced when rejections were framed as a lack of fit with the job instead of a lack of applicant quality (or when no explanation was offered). They did not replicate this pattern for online gig workers arguing that in a hyper-transactional, short-term work context, the content of rejection messages might matter less.

To further home in on how information contained in rejection messages could close the reapplication gap and the role confidence plays in this process, we conduct two experiments: A field experiment focused on gender with a large public sector employer in Australia in collaboration with its Behavioural Insights Unit and a tightly controlled online experiment on Prolific where we elicit applicants' confidence levels. In both experiments, applicants who previously applied to a similar position were invited to reapply—in the field to leadership positions and on Prolific to research assistant positions.

In both experiments, we provide randomly selected groups of rejected applicants with information on their relative standing and/or their relative desirability compared to other candidates and compare the treatment groups with a control group where applicants do not receive any additional information beyond rejection. We then measure how the additional information affects applicants' willingness to reapply to senior roles based on their gender (field experiment) or to research assistant positions based on their initial confidence level (online experiment). In the online experiment, we are also able to explore whether applicants' confidence about their relative performance and their fit serve as mechanisms allowing them to update their beliefs about likely success, then leading to their decisions about reapplications.

To explore the impact of information on relative standing, a randomly assigned group of applicants was informed about their relatively high rank among all applicants. We—the researchers and the field partner—truthfully informed the top 20% of the applicants that they were among the top 20%. We refer to this as the *Relative Standing Condition*. To examine the impact of information on relative desirability, we sent additional "signals" from the employer to certain applicants to indicate the employer's particular interest in them. We refer to this as the *Relative Desirability Condition*, and the combination of the two approaches as the *Standing+Desirability Condition*.

We expect women in the field experiment to be more likely to reapply in all treatment conditions compared to the no-information control (e.g., Niederle and Vesterlund 2007; Borghans et al. 2009; Coffman 2014; Gee 2019; Exley and Kessler 2022). We expect a similar behavior from lower-confidence applicants in the online experiment. We conceptualize confidence as the difference between a participant's believed and actual performance rank among all participants. A confident applicant is someone accurately predicting that they are placed in the top 20%. An underconfident applicant is someone predicting they are among the bottom 80% of applicants when in fact they placed in the top 20%.

Our main methodological approach, which we refer to as "analogy-based," is inspired by Coffman et al. (2021) who show that gender discrimination in a laboratory experiment on hiring for a male-typed task can be accounted for by belief-based discrimination: subjects in the role of the employer preferred to hire men, and when no gender information was available, simply people who they believed to be better performers. While external validity is always a concern, including in our online experiment, we similarly try to see whether differences in confidence can account for the gender patterns observed in our field experiments. In contrast to Coffman et al. (2021), we cannot simply remove gender as own gender is always available to people. However, we do not expect gender dynamics to be prevalent in the much less gender-typed domain of a research assistantship for one of the co-authors (who works in behavioral science to which typically, people with a background in psychology, a female-typed field, or economics, a male-typed field, apply).

We find that both women and under-confident job applicants significantly increased their willingness to reapply in the *Standing+Desirability Condition* in both the field and the online experiments. A similar directional pattern can be observed in the *Relative Standing Condition* in both settings, but the increase is not significant. In the online experiment, where we include a separate *Relative Desirability Condition* that is absent in the field experiment, we also find that it

increased underconfident applicants' willingness to reapply. Male and more confident applicants' responses to the treatments were noisier and mostly not significant in both settings, with reapplications sometimes directionally increasing and sometimes decreasing. One (surprising) significant difference emerged for men in the field: in the *Relative Standing Condition*, men were less likely to reapply than in the Control Condition, but this finding was not replicated among the more confident applicants in the online experiment who were equally as likely to reapply across conditions.

Our findings align with an analogy logic based on gender differences in confidence: in both experiments, after having received potentially two confidence-boosting messages, women and underconfident applicants were more likely to reapply in the *Standing+Desirability Condition*. In contrast, men and confident applicants were equally or less likely to reapply after the messages received in the *Relative Standing* and the *Standing+Desirability* conditions. The impact of a given message likely depends on an applicant's baseline confidence. As such, finding out that an applicant was in the top 20% was likely comparatively better news for women than for men, for whom the news might have been neutral (for those already expecting to be in the top 20%) or even bad (for those hoping to be told that they were in the top 1 or 5%, for example).

To supplement the analogy approach where we infer from two variables, in our case, gender and confidence, having the same impact on behavior, in our case, reapplication rates, that confidence can account for gender dynamics, we also run a mediation analysis. Specifically, we analyze whether different conceptualizations of confidence, including beliefs about relative performance and about fit, may mediate our treatment conditions and impact applicants' post-treatment optimism about receiving an offer. We show that this is indeed the case, to a sizable degree, and that posterior optimism is the final mediator connecting the *Standing+Desirability* condition to reapplication rates. In line with our conceptual framework, these findings suggest that the treatments increased reapplication rates among underconfident applicants by shifting their confidence about their likelihood of success.

Our paper contributes to the growing literature on reapplications and gender gaps. First, we document a gender gap in reapplications for senior roles in a large public sector employer in Australia and that the employer could close the gender gap by giving accurate feedback on the relative performance of rejected applicants to the highest ranked applicants, and by signalling the employers' particular interest in members of certain groups, in this case, women. We hypothesize that these interventions boost female applicants' confidence in likely success,

which we further examine with an online experiment where we directly measure our proposed mechanism, confidence, in two different ways: by analogy and by a mediation analysis.

Confidence as analogy is our paper's second contribution: confidence is a key driver of reapplication decisions. In our online experiment underconfident applicants respond in similar ways as women did in our field experiment.

Our third contribution focuses on connecting employee confidence with employer messages to encourage reapplications. Our conceptual framework outlines two complementary pathways through which confidence in the likelihood of getting a job offer can be impacted: changes in applicants' believed rank and their believed fit with the organization. We show evidence for both messages increasing applicants' confidence, which correlates with increased reapplication rates. Complementing Bapna et al.'s (2024) findings that "fit" messages from employers are an important determinant of future reapplications, we similarly find that (costly) signals of relative desirability by the organization, especially when combined with feedback on employees' high relative standing, increase confidence and reapplication rates. Our findings suggest that these pathways mediate the impact of our interventions. In fact, applicants' updated confidence about likely success fully mediated our treatments' impact on reapplication rates.

CONCEPTUAL FRAMEWORK

Decisions to apply or reapply involve balancing significant costs against uncertain benefits. Applications to leadership positions are especially costly, typically involving multiple, intensive rounds of interviews and assessment tests. We expect applicants' perceptions of their likelihood of success to have a large effect on reapplication decisions.

Bayesian updating and the reapplication decision: Our conceptual framework is inspired by Bayesian updating where rejected applicants have certain beliefs about the likelihood of receiving an offer if they reapply to a similar position in the organization. These beliefs are the basis for our conceptualization of priors: people who underestimate their own position in the relative applicant ranking for a job are classified as underconfident, whereas people who have accurate beliefs of their ranking are confident. While theoretically, people can also be overconfident, overestimating their relative rank, in our setup where we focus on the top 20% of

applicants, overconfidence is not possible in a rational world (we will provide some behavioral nuances later).[1]

We are particularly concerned with underconfident applicants. Holding constant their actual performance, underconfident applicants—by definition—have performed better (in this case, in getting close to obtaining a previous job to which they applied) than they believe. Therefore, if an organization is interested in encouraging high-performing applicants to reapply in the future, it is key to understand what information shifts underconfident applicants' beliefs to be more accurate.

Confidence and prior experience: Prior experience matters in a Bayesian updating framework: A rejected applicant who is less confident about their rank *a priori* (i.e. whose priors are lower than someone else's) is less likely to reapply to a similar job in the future than a rejected but more confident applicant.

Applicants' priors are likely shaped by the number and type of rejections they have received in the past, including from a given employer. In addition, many other life experiences where people have experienced negative responses when they put themselves forward may affect their confidence levels (for an overview of the role of belief formation and experience, see: Malmendier et al. 2011 and Bordalo et al. 2022). The more often an applicant has made these negative experiences, the more the applicant will adjust their beliefs about their relative performance and likely success of reapplying to a similar job opening by the same employer downwards.

Context-dependent role of gender and under-confidence: Individual differences, including demographic characteristics such as gender, can influence Bayesian decision-making depending on the context, insofar as they shape an applicant's priors about their relative standing. Specifically, an applicant's priors may not only be shaped by their own experiences, but also by learning from the experiences of people like them (see Conlon et al. 2022 for a quasi-Bayesian model of social learning based on others' experiences). Collectively, given that applying (and re-applying) to jobs is an act of assertion, that leadership roles are male-typed, and that women likely have experienced demand-side induced punishments (e.g., social backlash) for role-incongruent behavior, it is plausible that women start with lower priors than men and end up being underconfident.

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[1] An alternative way to conceptualize priors is people's self-assessed chance of obtaining the job. While we also have this information available (and use this alternative specification in robustness checks), we prefer the former definition because it more clearly allows us to define under-confidence as people who objectively performed better than they believe they did. However, our results are qualitatively similar with either conceptualization.

This assumption is based on previous literature documenting that women are often less confident than men, especially in male-typed fields (Niederle & Vesterlund 2011; Exley & Kessler 2022; Coffman et al. 2024). However, we emphasize that the framework we present here is not uniquely tied to gender and will not always apply to gender (because the impact of gender depends on the context).

Rejection in the absence of employer feedback: After learning the outcome of their application, applicants update their beliefs based on their priors (which capture their *a priori* confidence) and any signals they may receive from the employer. We exclusively focus on job applications that result in rejections[2] and first analyze employers who do not provide any informative feedback to applicants.

A rejection is a negative signal. It lowers applicants' posterior beliefs about the likelihood of future success, making them less likely to reapply. If updating is identical for all, the signal does not affect the initial confidence gap between underconfident and confident applicants but just shifts the gaps in reapplication rates downwards for everyone.

> H1. An underconfident applicant/woman is less likely than a confident applicant/man to reapply to a similar job opening in the future after a rejection.

Information about relative standing: When rejecting an applicant, employers can choose to include an informative signal to affect applicants' belief updating and their willingness to reapply. We first focus on an employer signal that affects beliefs about applicants' true rank in comparison to other applicants. If it leads to belief updating, such information directly affects decisions in the Bayesian framework, i.e. willingness to reapply in the future.

If an applicant is underconfident and, for example, believed they ranked in the top 40% of applicants, but actually ranked in the top 20%, being told by the employer that they are in the top 20% would be a positive signal and their beliefs would shift upwards. In contrast, a confident applicant in the top 20% would not update their beliefs in response to an employer message that they are in the top 20% because they would (correctly) believe they are in the top 20%. Note that in a rational world, an overconfident applicant who believes they are in the top 5% but are actually

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[2] In our conceptual framework, modelling a successful application outcome is simply the mirror image of an unsuccessful outcome (rejection) because of our (simplifying) assumption that updating is symmetric in both positive and negative directions. It is plausible that updating is not symmetric in practice, and future research may wish to explore this further.

in the top 20% should not update their beliefs if the employer tells them they are in the top 20% (because the top 20% includes the top 5%).[3]

Because organizations are primarily interested in having top-performing rejected applicants reapply in the future, our study focuses exclusively on applicants who are in the top X% of all ranked applicants.[4] This informs our next set of hypotheses:[5]

> H2a. When informed of their top X% relative standing (i.e., performance rank), an underconfident applicant who ranked in the top X% shifts their beliefs upwards and increases their willingness to reapply.

> H2b. When informed of their top X% relative standing (i.e., performance rank), a confident applicant who ranked in the top X% does not change their beliefs and does not change their willingness to reapply.

Information about relative desirability: The second signal we focus on is an employer's self-declared interest in a particular applicant. Applicants may update their beliefs when receiving information from the employer that they are particularly interested in them. The applicant has more reason to update their belief when the signal is costly to the employer, as the costliness signals credibility.

An employer can send a costly signal in different ways, which can be informative to the applicant. One option is for the employer to engage in activities for the applicant that are so time- or resource-intensive that it is implausible (and commonly known to all parties) that the employer can do this for every applicant. Because the employer has limited resources, the signal is credible to the applicant and the applicant learns that the employer is genuinely interested in them: By signalling to the applicant that their relative desirability has risen, the applicant's beliefs about their fit with the organization and their chances of getting the job are increased. As a result, they are more willing to reapply in the future. For example, recent work has shown that a credible signal to women is when they find out that their company's leaders are financially incentivized to

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[3] An extension of this conceptual framework could include a "behavioral" variant: One could imagine that the most confident applicants interpret the "top 20%" message as bad news, such that they infer from the information received that they are "only" top 20% when they might have expected to be top 5% or top 1%.

[4] In our experiments, X = 20% although future studies may wish to systematically vary X.

[5] Note that our conceptual framework can account for hypotheses for low-performing underconfident, confident and overconfident applicants in an analogous way to high-performing applicants. Because the former applicants are not the focus in our study, however, we do not state the hypotheses related to them explicitly.

promote more women (Kirgios & Chang 2025), demonstrating to the applicant that their relative desirability has risen in the organization.[6]

However, a costly signal will not shift beliefs equally but depends on the applicants' prior beliefs: Receiving a costly signal has little effect on confident applicants because they already believe they are a good fit for the organization and their chances of getting the job are high. In contrast, the costly signal is effective for applicants who are underconfident. This leads to our next set of hypotheses:

> H3a. When informed about their high relative desirability, an underconfident applicant shifts their beliefs upwards and increases their willingness to reapply.

> H3b. When informed about their high relative desirability, a confident applicant does not change their beliefs or willingness to reapply.

Combining relative standing and relative desirability information: It is possible for an employer to combine multiple signals to applicants, such as providing both information about the applicant's relative standing and relative desirability. We hypothesize that receiving both signals will have an overall positive impact on an underconfident applicant's posterior beliefs about likely success and willingness to reapply compared to not receiving either information. We do not expect an effect on confident applicants, as captured in our final set of hypotheses:

> H4a. When the employer provides information about the applicant's relative standing and relative desirability, an underconfident applicant shifts their beliefs upwards and increases their willingness to reapply.

> H4b. When the employer provides information about the applicant's relative standing and relative desirability, a confident applicant does not change their beliefs or willingness to reapply.

Note that we are agnostic about whether this combined effect is greater than the sum of its parts. On the one hand, both signals might partly overlap in the information they convey (i.e., the employer sends a costly signal because the applicant's true rank was high) or how much an applicant's confidence can be shifted relative to their baseline, resulting in diminishing effects

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[6] Another example is the academic job market in economics, which officially operates a "costly signal" mechanism on the job market website. In this system, universities are able to send a small number of limited tokens to their preferred job applicants on the market. Because everyone knows that the number of tokens each university can send is limited, receiving such a token is a credible signal to the applicant that the university is interested in them.

when combined. Alternatively, the costly employer signal could enhance the salience and credibility of the relative standing information, resulting in increasing effects when combined.

Related literature

Our conceptual framework focuses on belief-based confidence. However, this is not the only way to conceptualize people's decision of whether or not to reapply for a job. Previous work has conceptualized reapplication through different lenses, which we summarize here.

Bapna et al. (2024) study reapplications through the perspective of "fit". They show that messages informing applicants that the job was not a good fit for them reduced the negative impact of a rejection. Similarly, Dlugos & Keller (2021) argue that post-rejection turnover in a company is shaped by rejected employees' beliefs about the chances of future internal advancement based on cues such as whether or not they made it to the interview stage with the hiring managers or whether or not they lost against an internal or an external candidate.

Both of these mechanisms, messages about fit and process cues about competitiveness, could easily be part of a framework based on confidence. Applicants can update their prior beliefs based on the signals received. Laboratory experiments, for example, have shown that people rely on environmental cues to update their beliefs of likely success in negotiation and competition contexts and that particularly people who have to engage in counter-stereotypical behaviors (agency instead of communality), women, benefit from ambiguity-reducing interventions (Bowles et al. 2005; Bowles et al. 2024; Niederle et al. 2013).

While most of the papers assume that women and men update their beliefs similarly, some research suggests that this is not the case (Möbius et al. 2022). For example, gender differences in reactions to negative feedback and rejection might also influence reapplication rates. Women have been found to update their beliefs about likely success more negatively than men following the identical negative feedback, especially in contexts traditionally perceived as gender-incongruent (Shastry et al. 2020).

Brands & Fernandez-Mateo (2017) provide a framework that goes beyond belief-based updating. They argue that rejection from senior roles can trigger a sense of belonging uncertainty among women, which in turn increases the salience of perceived procedural injustice. Procedural justice is typically conceptualized as a preference, not a belief. Applicants might prefer not reapplying if they think the process was unfair (Lind & Tyler 1988). In a controlled experiment with executives, they provide causal evidence that this dynamic occurs for women but not for men: rejection increased women's belonging uncertainty, which then reduced their perceptions of fairness and

willingness to reapply. To overcome belonging uncertainty, members of traditionally underrepresented groups, including women, might rely on explicit signals to assess whether they are genuinely welcomed and valued in an organization (Kuhn & Shen, 2023). Empirical evidence indicates that explicit statements of organizational commitments to diversity or targeted encouragement improve women's willingness to apply for senior roles (Flory et al., 2021; Kirgios et al. 2025). These signals might affect women's assessment both of procedural justice, making them prefer the organization to others, and as suggested earlier, of the likelihood of receiving a job offer, making them more optimistic about the organization.

FIELD EXPERIMENT

Context and sample

We conducted a field experiment in collaboration with [organization name blinded for review], a large public sector employer in Australia, between July 2018 and March 2019. The in-house Behavioural Insights Unit (BIU) conducted this research as part of the organization's publicly stated objective to increase the proportion of women in senior leadership roles.

In prior data analysis (not part of this paper), the BIU had identified a gender gap in reapplications for senior roles. It also found that this gender gap was prevalent among finalists— i.e. applicants who had made it to the final round of the recruitment stages but were not offered the job. This group of applicants was of particular interest to the organization, as they were considered highly qualified and the organization wanted to encourage them to apply in the future.

Based on anticipated number of applications to future job openings, the participant sample initially included 1,614 finalists but the final sample was reduced to 1,386 finalists because 228 finalists chose not to answer the question about their gender. Based on estimated recruitment flows, we expected to achieve 1,350 finalists within four months. Power calculations showed that a sample of 1,350 finalists would allow us to detect a 9.5-percentage point difference between a treatment condition and the control condition. However, due to lower-than-expected recruitment activities at the three participating departments, the field experiment ran for eight months, which resulted in 1,614 finalists (of which, as described above, 1,386 finalists can be included in the analysis, as they self-identified as either female or male).

Methods

We randomly assigned finalists (i.e., those who got to the final stage of recruitment but did not receive a job offer for the vacancy) to one of three conditions. We randomized the applicants into different groups as we identified them in the weekly recruitment reports. We stratified them by

gender and departments so that we would have roughly equal proportions of women and men in the treatment and control groups and roughly equal proportions of treatment and control groups in each agency. We also ensured that the weekly data and historical data combined were balanced on several variables during the randomization process (e.g. department, month in which the application was completed).

Finalists in the *Control Condition* did not receive any further communication after the original HR rejection email. This condition helps us test H1, i.e., whether there was a gender gap in reapplication rates to start with.

Finalists assigned to the *Relative Standing Condition* received an additional email 4-7 days after the original HR rejection email. This email contained an encouragement to reapply to future vacancies and information about relative ranking: applicants were informed that "[o]n average, fewer than 1 in 5 applicants gets through to the final stages of our recruitment process and most people apply for multiple jobs before they are successful, particularly at the senior levels." This information was truthful and based on the BIU's prior data analysis. The goal of this intervention is to test hypotheses H2a and H2b, i.e. whether informing finalists about their relative rank— especially female finalists who we expected to be less confident than their male counterparts— would increase their reapplication rate.

The third group of finalists was assigned to the *Standing+Desirability Condition*. In this condition, we sought to test the idea that an additional costly signal from the employer would increase underconfident applicants' willingness to apply. This costly signal was operationalized in multiple ways. First, finalists received the same email as finalists in the *Relative Standing Condition*, which was then followed by a personalized phone call from an HR representative a few days later. The HR representative provided additional "hands-on" support to the finalists: HR demonstrated the firm's commitment to wanting applicants to reapply soon by identifying potentially relevant job openings at a similar seniority level and directing finalists to them. In addition, to address the concern that female finalists might be more likely than their male counterparts to feel they were unwanted in senior roles, the HR representative mentioned only to female finalists that the organization was "committed to having more women in senior roles" and wanted to "encourage our strongest applicants to continue to apply for jobs with us."

We note two limitations with this experimental design. First, there is no separate *Relative Desirability Condition* in the field experiment due to sample size constraints. In the field experiment, we cannot test hypotheses that only relate to the costly signals (H3a and H3b). Therefore, we formally test H4a and H4b, i.e. the combination of both the email including the

ranking and the phone call encouraging (especially female) finalists to reapply. Second, the *Standing+Desirability Condition* treats male and female finalists differently during the phone call: only women are told explicitly about the (publicly known) commitment of the organization to aim to have more women in senior leadership roles. This gender-specific modification introduces a confound in the experimental design and therefore limits our ability to precisely speak to the mechanism; we are therefore cautious in drawing conclusions solely from the field experimental conditions.[7] Both limitations of the field experimental design are addressed in our follow-up online experiment. For an overview, see Table 1 which describes all conditions that are being tested across the two experiments.

Results

We focus on reapplication rates as a function of applicant gender and treatment condition as the dependent variable (because we have no data on potential mechanisms).

Figure 1 illustrates our findings and Table 2 provides the econometric analysis of our results, using a linear probability model to predict reapplication rates at six months. We first show the effects of the *Standing Condition* and the *Standing+Desirability Condition* separately for female and male applicants (Columns 1 and 2, respectively) and then pool across both genders (Columns 3 and 4). Our results are robust to variations in econometric specifications, including controlling for department and month fixed-effects (Column 4), using a logit model (Table S1), as well as using a shorter re-application timeframe of three months (Tables S2 and S3).

Women comprised 38.3% of the applicants to senior leadership positions in our study. In the *Control* condition, three months after applicants were rejected from their previous application, male applicants were 67.6% (19.2 percentage points [p.p.]) more likely to reapply to another senior role than female applicants. This effect is statistically significant ($b = 0.827$, $p < 0.001$). The results are similar at six months after the previous application: men were 45.1% (18.5 p.p.) more likely to re-apply than women. These results are consistent with H1.

As Figure 1 suggests, the results were markedly different in our two treatment conditions. Specifically, in both treatment conditions, the gender gap disappeared. In the *Relative Standing Condition*, the gender gap in reapplication rates was not present at either three or six months (gender gap at three months: 2.4 p.p.; at six months: 5.5 p.p.). These gaps are statistically

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[7] Another possible pathway of behavior change is that the HR representative's mention of the available roles could also be viewed by the applicant as a "planning prompt" (Rogers et al. 2015), thus making them more likely to follow through on this plan to reapply. To focus on the mechanisms in our conceptual framework, the online follow-up experiment does not, by design, allow for this pathway of behavior change.

indistinguishable from zero (both ps > 0.05), indicating that the reapplication rates of women and men were not different from each other when they were informed that they were among the top 20% of applicants. That said, using equivalence tests, the estimated effect size is 0.055 with a wide confidence interval [-0.1325, 0.0231].

Looking at female and male applicants separately in Table 2 in the *Relative Standing Condition*, women were directionally but not significantly more likely to reapply, from 41.0% to 45.4% (b = 0.044, p = 0.391). In contrast, and to our surprise, men reduced their reapplication rates in the *Relative Standing Condition* by about 14% (b = -0.086, p = 0.041) to 50.9%.[8]

The gender gap in reapplication rates also disappeared in the *Standing+Desirability Condition*, at both three months (0.9 p.p.) and six months (2.2 p.p.). Both these small differences are statistically indistinguishable from zero (ps > 0.05), suggesting that the reapplication rates of women and men are not different when they were informed that they were among the top 20% of the applicants and when they received additional costly signals from the employer. That said, using equivalence tests, the estimated effect size is 0.022 with a wide confidence interval [-0.1005, 0.0559].

When examining male and female applicants separately in the *Standing+Desirability Condition*, we observe results consistent with H4a and H4b: women were nearly 30% (10.9 p.p.) more likely to reapply to a senior role within six months (b = 0.109, p = 0.035), increasing the percentage of finalist women who reapplied from 40.0% in the *Control Condition* to 51.9% in the *Standing+Desirability Condition*. In contrast, men directionally but not significantly decreased their reapplication rates in the *Standing+Desirability Condition* (b = -0.054, p = 0.205).[9]

Our main analysis focuses on the likelihood of women and men reapplying for a future job opening. In addition, we explore whether women and men submit a larger number of applications in the future. As Table S4 shows, we do not find a difference as a result of our conditions. In other words, our interventions do not shift the intensive margin (how many applications applicants

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[8] We did not anticipate this negative effect of the *Relative Standing Condition* on men, and our rational, strictly Bayesian conceptual framework cannot account for it. However, as described in the conceptual framework section, a "behavioral" extension to the framework might help to rationalize this finding: Even though receiving the message that a finalist placed in the top 20% should never be perceived as "bad" news, an overconfident applicant might *interpret* the top 20% message as implying that they were *not* in the top 5% or top 1% (which, strictly, is not the case as the both groups are within the top 20%). We cannot formally test this hypothesis in the field experiment. However, in the online experiment where we directly measure confident, we can test this conjecture — but we do not find evidence for it.
[9] We note that the *Relative Standing Condition* and the *Standing+Desirability Condition* are not statistically significant from each other, neither for men nor women (p > 0.05).

submit) but the extensive margin (that the marginal woman applies more in the *Standing+Desirability Condition*).

ONLINE EXPERIMENT

Context and Sample

Following the field experiment, we set out to answer several open questions. We first sought to decompose the effects of the *Standing+Desirability Condition* by introducing a separate *Relative Desirability Condition* to identify what—if any—the role of the costly signals were. In the *Relative Desirability Condition*, we also wanted to exclude the confound—i.e., that women received a stronger signal than men in the phone call from the employer. Finally, we were interested in exploring, and directly testing, our proposed mechanism behind the effects we were seeing in the field experiment: confidence. Unlike in the field, in an online experiment we are able to incentivize participants to report beliefs about their relative performance compared to other candidates. To test how our interventions are mediated by these beliefs, we mimic the setup of the field experiment.

We recruited a sample of 3,723 UK participants to participate in a pre-registered study on Prolific.[10] After completing the consent form, participants were assigned to groups of 100 and—truthfully—informed that up to two participants from their group of 100 would be recruited for a highly paid research assistant role working with one of the paper's authors (£90 for up to 3 hours of work), and that this study would be used to recruit potential candidates. The 100 participants in each group competed asynchronously and groups were determined by the order in which participants entered the experiment. For completing the study—which took the median participant 10 minutes 45 seconds—participants received a guaranteed payment of £1.50.

Methods

Participants completed a real effort task, in which they had to correctly count the number of 1s in a series of six matrices of 1s and 0s[11]. The ranking of participants was based on two factors: accuracy and speed. Accuracy was the primary factor, with participants who answered all six rounds correctly ranking higher than those who answered fewer rounds correctly. In the event of a tie in accuracy, speed—measured as the total time spent completing all rounds—was used to

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[11] This task was inspired by papers that use similar real effort tasks (e.g., Abeler et al., 2011), and we use it for similar reasons: it imposes a measurable cost of effort, involves no prior knowledge or learning, lacks intrinsic value minimizing experimenter demand effects, and—crucially for our context—is not gendered.

rank secondary participants. The specific instructions participants saw are available in the Supplementary Materials.

After completing the task, participants were incentivized to correctly predict where they placed in terms of performance out of their group of 100. Specifically, we used the interval method to incentivize beliefs, paying a bonus of £0.50 if their guess was within +/- 5 of their actual rank. Additionally, participants reported self-perceived fit for the RA role, and belief in the likelihood of being offered a position. To elicit these subjective beliefs, we asked participants to indicate the extent to which they agree (on a scale from 1-10, where 1 is completely disagree, and 10 is completely agree) with statements about having a good chance of being successful in their application, and being a good fit for the role. Then, participants were given information about their performance in the task. Those that did not get all six questions correct were told that, based on what they had completed, they would not be selected for the RA role. In effect, they became "non-finalists."

Participants who got all six questions correct ("finalists") were randomized into one of four groups, inspired by the treatment conditions in the field experiment. In the *Control Condition*, finalists were simply informed that they did not get the job. In the *Relative Standing Condition*, finalists received an additional message acknowledging their success in reaching the final round, highlighting that only 20% of participants advanced this far.[12] The *Relative Desirability Condition* included a message stating that the employer would like to send a signal of interest, noting that only five candidates out of their group of 100 would receive this signal. Finally, in the *Standing+Desirability Condition,* both messages of the *Relative Standing* and the *Relative Desirability Conditions* were included with the rejection. After being randomly assigned signals along with their rejection messages, finalists were again incentivized to predict their rank[13], and asked to indicate their subjective beliefs about fit and likelihood of receiving an offer based on agreement with statements on a scale of 1-10.

Results

We first focus on reapplication rate as the dependent variable and examine whether it is impacted by our treatment conditions. We then turn to mechanisms, first analyzing whether our treatment

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[12] To ensure this was message was truthful, we populated each group of 100 participants with 80 previously rejected participants that did not get all six questions correct. This meant that any participant who did get all six questions correct would be guaranteed to be in the top 20 of their group of 100.

[13] To avoid incentives for risk-averse participants to hedge their beliefs about relative standing, we paid them based on the accuracy of only one of their reported beliefs, which we selected randomly. Additionally, to mitigate participants strategically reporting beliefs to influence the probability of being successful, we assured participants that their responses to belief questions would not be seen by the employer.

conditions impact posterior beliefs about likely success via finalists' confidence in their relative performance and fit. We conclude by investigating whether posterior beliefs about likely success mediate the earlier established impact of our treatment conditions on reapplication rates. All data and code for the online experiment is available on OSF: https://osf.io/wj8rc/

Reapplication Rates

To mimic our gender analysis, we divide the sample into two groups: "confident" finalists who correctly believed they ranked in the top 20%, and "underconfident" finalists who underestimated their relative performance (incorrectly believing they were below the top 20%).

Figure 2 illustrates reapplication rates for confident and underconfident finalists across each experimental condition and Table 3 presents our regression results. In the Control condition, confident finalists were notably more likely to reapply (45.4%) compared to underconfident finalists (31.1%), paralleling the gender gap observed in our field experiment[14]. This difference in reapplication rates is statistically significant ($p < 0.001$) and consistent with hypothesis H1.

Similar to the gender dynamics in the field, for underconfident finalists, the *Relative Standing Condition* only directionally increased reapplication rates by 3.4 percentage points relative to the *Control*, with the effect not being statistically significant ($p > 0.10$). The *Relative Desirability Condition* (not tested in the field) resulted in a marginally significant increase in reapplication rates of 6.7 percentage points ($p < 0.10$), aligning with hypothesis H3a, and the combined *Standing+Desirability Condition* significantly increased reapplication rates among underconfident finalists by 8.0 percentage points ($p < 0.05$), supporting hypothesis H4a.

For confident participants, the effects of all treatments on reapplication rates were statistically insignificant (*Relative Standing Condition*: 3.7 percentage points, $p > 0.10$); *Relative Desirability Condition:* -1.6 percentage points, $p > 0.10$; *Standing+Desirability Condition*: -6.5 percentage points, $p > 0.10$). These null results support our hypotheses for confident participants (H2b, H3b, H4b).

Difference to the Field: Male and Confident Applicants in the Relative Standing Condition

In accordance with our theoretical prediction (H2b) but in contrast to the field experiment, confident applicants did not reduce their reapplication rates in the *Relative Standing Condition*.

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[14] In the online experiment, women were slightly more likely to reapply to the research assistant position than men, but the difference was small and statistically insignificant (2.9 percentage points, $p = 0.46$, in the Control condition). As such, we feel that our hiring context is well-suited for isolating the role of confidence independent of gender.

To dig more deeply into this discrepancy, Figure 3 illustrates how beliefs about relative performance changed (i.e., how much participants updated their beliefs about their rank), split by participants' baseline beliefs. For example, participants categorized in the "1–5" group initially believed they ranked within the top 5 out of their group of 100, prior to receiving any feedback.

In the Control condition, we observe no significant heterogeneity: after being told they did not receive the RA role, finalists consistently shifted their beliefs about their relative performance downward by approximately 10 ranks. For instance, a finalist who initially believed they were ranked 10 out of 100 updated their belief downward to approximately rank 20. For participants who were extremely underconfident (believed they were rank 46-50), we see no significant belief updating for relative rank: given their poor evaluation of their performance, they were likely not surprised by the fact they were not selected. There was also no significant heterogeneity in the *Relative Desirability Condition*, where—in contrast to the control condition—participants did not update their beliefs about relative performance significantly.

In contrast, substantial heterogeneity emerged in the *Relative Standing* and *Standing+Desirability* conditions. Participants who initially underestimated their performance (incorrectly believing they ranked lower than the top 20 at baseline) substantially updated their beliefs upwards upon receiving feedback, while those who initially believed they ranked in the top 20 updated their beliefs directionally downwards. While it visually looks like the most confident participants in the online experiment might have responded in accordance with men in the field experiment, what looks like downward belief updating does not differ from the Control condition — thus, the treatments in the online experiment did not affect beliefs about relative performance differently for confident participants.

Mechanisms

Our conceptual framework identifies confidence as the central mechanism influencing reapplication behavior. We posit that employer interventions could shift applicants' posterior confidence in likely success through two complementary pathways: (1) changing finalists' perceptions of how they performed relative to others, and (2) enhancing their sense of fit within the organization.

We now examine whether the effects of the interventions on participants' posterior confidence in the likelihood of being offered the role are mediated by changes in perceived performance and/or perceived fit. To do this we conduct a mediation analysis using the approach of Baron and Kenny

(1986) with 1,000 bootstrapped replications and bias-corrected confidence intervals (Shrout & Bolger, 2002).

We first examine whether the effect of the *Relative Standing* treatment on posterior beliefs in the likelihood of success was mediated by participants' updated beliefs about their relative performance. The treatment increased participants' perceived rank by 8.5 percentage points and also improved beliefs about likelihood of success (b = 0.45, p = 0.004). In the mediation model, posterior beliefs about relative performance were a strong predictor of confidence in likelihood of success (b = 0.026, p < 0.001). Mediation analysis revealed a significant indirect effect (ACME = 0.23, 95% CI: [0.14, 0.32]), indicating that roughly one third (33%) of the total treatment effect on posterior beliefs in the likelihood of success was explained by changes in perceived performance. This suggests that participants were more confident in their success partly because they updated their beliefs about how well they had performed.

For the *Relative Desirability Condition*, we examined whether the effect on posterior beliefs in the likelihood of success was mediated by changes in perceived fit. The treatment significantly increased perceived fit (b = 0.84, p < 0.001), and perceived fit strongly predicted confidence in the likelihood of success (b = 0.78, p < 0.001). The total effect of the treatment on posterior confidence was 1.24 points (p < 0.001), with 53% of this effect mediated by perceived fit (ACME = 0.66, 95% CI: [0.45, 0.87]).

Finally, for the *Standing+Desirability* condition, we found evidence that both belief pathways contributed to the overall increase in posterior confidence. The treatment increased perceived relative performance by 14.8 percentage points (p < 0.001) and perceived fit by 1.45 points (p < 0.001). Mediation analyses revealed significant indirect effects through both channels. The indirect effect via relative performance accounted for 25% of the total increase in confidence (ACME = 0.41, 95% CI: [0.30, 0.53]), while the effect via fit accounted for a larger share—69% of the total effect (ACME = 1.15, 95% CI: [0.95, 1.36]).

Having established that posterior confidence in likely success was based on beliefs about relative performance and about relative fit, we now examine whether posterior confidence is related to reapplication rates.

Among underconfident participants, the *Relative Desirability Condition* marginally increased reapplication rates by 6.7 percentage points relative to the Control condition (p < 0.10). The *Relative Desirability Condition* significantly increased posterior confidence in likely success (b = 0.58, p < 0.001), and confidence was a predictor of reapplication (b = 0.041, p < 0.001). When

confidence was included as a mediator, the direct effect of the treatment on reapplication rates fell to 0.9 percentage points and was no longer statistically significant (p = 0.576). The indirect effect was statistically significant (ACME = 2.4 percentage points, 95% CI: [0.014, 0.036]). Similarly, in the *Standing+Desirability Condition*, the treatment increased reapplication rates by 8.0 percentage points (p < 0.05). Including confidence as a mediator reduced the direct effect to 1.2 percentage points (p = 0.334), while the indirect effect remained significant (ACME = 1.5 percentage points, 95% CI: [0.006, 0.024]).

In line with our conceptual framework, these findings suggest that the treatments increased reapplication rates among underconfident finalists by shifting their optimism about their likelihood of success.

DISCUSSION AND CONCLUSION

Tackling gender gaps in organizations' leadership ranks, at a minimum, requires a pipeline of qualified men and women to apply for senior roles. Consistent with past research, we found in a field experiment that women were less likely to reapply to another similar opening at a large employer in Australia after receiving a rejection. Women increased their willingness to reapply when the top rejected applicants were informed of their high relative standing and high relative desirability.

We find the same pattern in a follow-up online experiment analyzing reapplications to research positions—with the difference that we did not focus on applicants' gender but instead on their confidence. Much as it did for women, providing the top rejected applicants with the same set of information boosted underconfident applicants' confidence and increased their willingness to reapply. The information closed the gender gap in reapplication rates for leadership positions at the Australian employer and the confidence gap in reapplication rates for research assistant roles at a UK university.

That women mostly behaved like underconfident applicants in our context provides suggestive evidence that applicant behavior can be accounted for by confidence. Methodologically, we take inspiration from Coffman et al. (2021), and refer to this as the "analogy approach." To benchmark the degree of discrimination against women observed in a male-typed hiring context, they compare employer behavior in an identical setting where instead of gender, employers were informed of subjects' birth month. Employers were less likely to hire equally able subjects belonging to a group that they believed to be poorer performers independent of whether the group affiliation was based on a subject's gender or birth month. The authors also argue that the

congruence of employer behavior in the two settings suggests that employer beliefs about relative performance rather than gender-specific attitudes towards women drove behavior in this setting.

The congruence in our experiments is not as close as in Coffman et al. (2021). For example, we could not fully exclude gender as a consideration (as people are aware of their own gender). Instead, we relied on more and less gender-typed hiring contexts with leadership positions being highly male-typed and research assistant positions being more gender neutral to make gender either more or less salient. The evidence supported our conjecture: men were substantially more likely to reapply for leadership positions but there generally was no gender gap in reapplications for research assistant positions. As such, we replaced gender with confidence in the online setting, keeping everything else as similar as possible between the two experiments.

The empirical patterns observed in our two experiments are (mostly) consistent with a conceptual framework based on Bayesian updating where applicants base their decision of whether or not to reapply on their posterior beliefs about likely success, their updated confidence, given their prior beliefs and the new signals received (in our case, about their relative standing and their relative desirability). The one exception where we did not find support for our hypotheses were men in the *Relative Standing Condition* in the field experiment. In contrast to our theoretical prediction and our online evidence for confident applicants, men reduced their willingness to reapply when told that they were among the top 20% performers. While we don't know why this was the case, we speculate that a behavioral mechanism might have been at play: in a rational world, learning that one is among the top 20% performers should not lead anyone to adjust their beliefs about one's rank downwards as even someone believing that they are top 1% is part of the top 20% of performers. However, confident men might have interpreted the message as bad news, in effect suggesting that they were worse performers than they anticipated, lowering their willingness to reapply in the *Relative Standing Condition*.

To shed additional light on the role of confidence, we moved beyond the analogy approach, more common in experimental economics than in other disciplines, and ran a mediation analysis. We found further support for confidence serving as a mediator of our treatment conditions: when informed of their high relative standing and their high relative desirability, underconfident applicants adjusted their beliefs about their relative performance and their relative fit upwards and were more likely to apply. In fact, confidence about the likelihood of receiving an offer fully mediated our treatment conditions.

Finally, in the online experiment, we aimed not only at replicating the field context as closely as possible but also at correcting some of the confounds in the field. First, the employer did not run a treatment condition focused on relative desirability only but immediately merged relative desirability with relative standing. In our online experiment, we added the missing condition. Second, the relative desirability signals the employer sent in the field had many components: a personalized phone call inviting people to reapply and identifying potential open roles for them as well as a commitment to having more women in leadership, the latter message shared with female applicants only. In the online experiment, we provided only one identical desirability signal to a random set of applicants.

Our paper proposes beliefs as the relevant mechanism linking our treatments to reapplication rates. However, we cannot exclude a potential mechanism based on preferences. For example, applicants might well like an employer more that signals to them that they belong (Good et al. 2012; Brands et al. 2017). They might be more likely to reapply, not only because our interventions made them more optimistic about likely success but because they made them value the job and/or the organization more. Our conceptual framework holds the benefits of a given job constant but it may well be that messages of relative standing, and, perhaps, even more so, relative desirability reduce applicants' "belonging uncertainty" (Brands and Fernandez-Mateo 2017).

While it would be desirable to better understand the relative importance of belief-based vs. preference-based mechanisms in this domain, earlier work examining gender gaps in reapplications, or even applications more generally, does not speak to this question. For example, compensation schemes, the gender composition of the team and social network structures have all been shown to have differential effects on attracting, and placing, men and women in the workplace (Flory et al. 2015; Leibbrandt & List 2015; Yang et al. 2019). However, all of these factors could affect beliefs and preferences at the same time. Future work might be able to disentangle belief-based from preference-based mechanisms more directly. While our study offers a first insight into the relevance of belief-based mechanisms in a field and an online experiment, future researchers might want to study these questions both within real organizations and in controlled lab settings (Falk & Heckman 2009; Hauser et al. 2017).

Gender differences in reapplications might also put into question the effectiveness of some common approaches aimed at increasing the share of members of underrepresented groups, including women, in organizations. For example, Fernandez-Mateo et al. (2023) demonstrate that the popular approach of expanding talent pools, thus expanding the share of available women,

might not actually lead to greater gender diversity. If the number of positions to be filled is fixed, then more (initial) applications implies that more people will be rejected. Given that rejected men tend to be more likely to reapply than rejected women (if only provided with a rejection message), this expanded pool strategy might perversely lead to fewer women applying in the longer run. The authors, thus, suggest exploring strategies reducing the likelihood of rejection. Better match-making algorithms matching applicants based on relevant characteristics (incl., e.g., job sample tests and skills-based assessments) with jobs, again based on relevant characteristics (e.g., competencies) might serve this purpose.

Our paper offers an additional mechanism that deserves further analysis: rather than blindly encouraging all rejected applicants to reapply, we propose to focus on those most likely to receive a job offer only—the finalists. By focusing on the top performers and the most desirable applicants (based on considerations other than performance), employers not only reduce the pool of rejected applicants but also the relative strength of that pool. By providing finalists with information on their relative strength and their desirability, our data suggests, employers also correct underconfident applicants' assessments of their likely success and thus, we argue, they could close the gender gap in reapplication rates.

As such, our approach differs from earlier work examining different rejection messages (e.g., Bapna et al. 2024), which reached out to all rejected applicants and explained to them why they were rejected. As discussed, those interested in increasing gender diversity in organizations should be wary of simply increasing the talent pool. Instead, motivating the "right" talent (arguably based on the organization's potentially biased assessment) to apply might be the more promising strategy. In addition, rather than helping applicants ascribe the rejection, say, to a personal failure or an organizational mismatch, our more forward-looking messages reinforcing that someone was competitive and desirable helped finalists update their beliefs about likely success in the future rather than try to make sense of the past.

While different psychological mechanisms are at play in our respective designs, Bapna et al. (2024) also found support for the importance of fit-related messages. A message focused on lack of fit, that is, that other applicants were a better match for the job or the organization at hand, did better in motivating reapplications than a message focused on lack of quality, that is, that other applicants were superior in terms of their skills. Compatible with our confidence-based framework, the latter message might have undermined applicants' confidence in the likely success of a future application. A lack of fit message was likely perceived as less detrimental to

confidence, perhaps, because it allowed applicants to attribute "blame" externally ("the job was not made for them") rather than internally ("I was not good enough").

The success of our combined relative standing and relative desirability message has another practical implication: while it raised female (underconfident) applicants' re-application rates significantly, it did not have a negative effect on male (confident) applicants' re-application rates, suggesting that this intervention did not come at a cost to either gender. The absence of "adverse impact" might make it particularly attractive for further exploration. Finally, to what degree confidence-adjusting mechanisms as proposed in our paper are able to not only close the gender gap in re-application rates but also improve longer-term outcomes in the workforce, e.g., closing the gender gap in positions of leadership, might fruitfully be explored in future work. It will depend on supply-side and demand-side dynamics, and their interplay.

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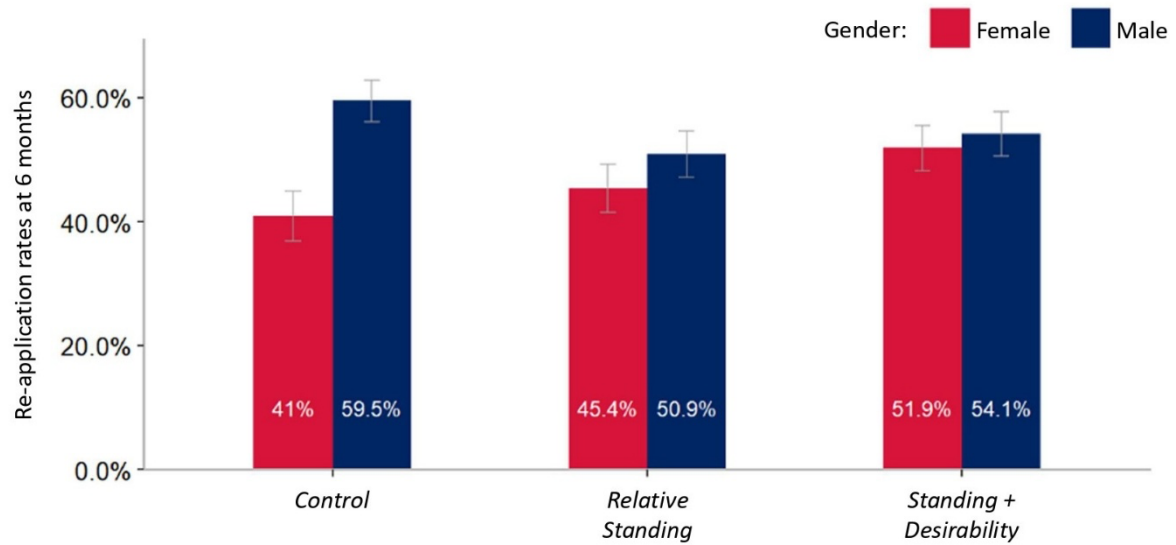
Figure 1. Re-application Rates in the Field Experiment (after 6 Months). Relative to the *Control* condition, both the *Relative Standing* condition and *Standing+ Desirability* condition closed the gender gap in re-application rates after 6 months. The closing of the gender gap was largely driven by an increase in women (red bars) re-applying more in the *Standing+Desirability* condition, whereas men (blue bars) re-applied less in the *Relative Standing* condition. Total *N*=1,386 across three conditions.
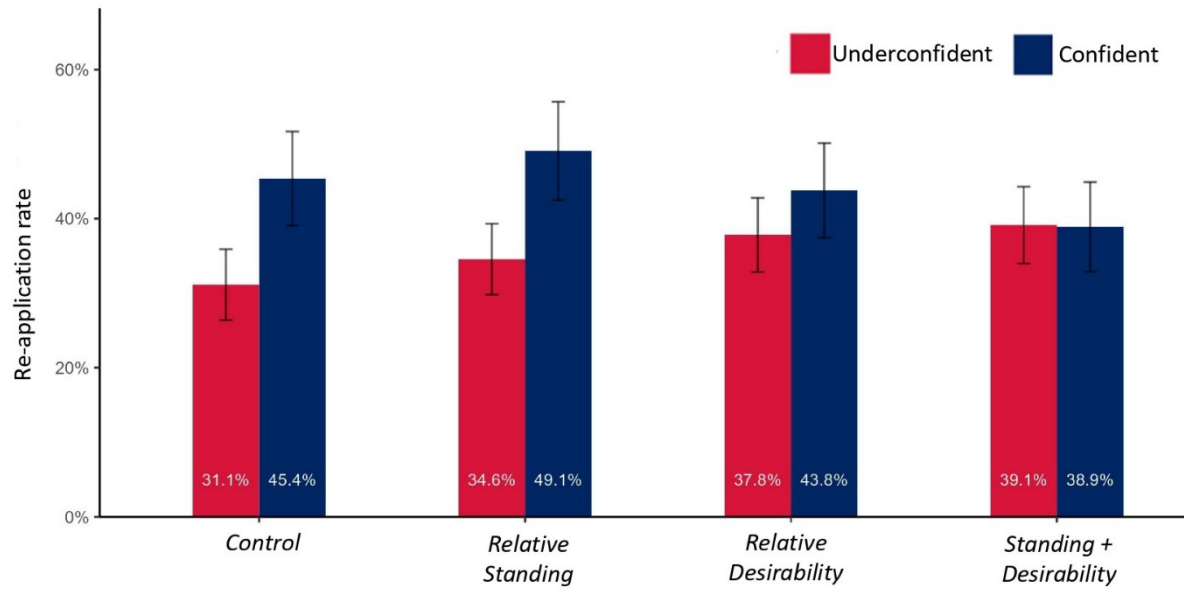
Figure 2. Re-application Rates in the Online Experiment. Relative to the *Control* condition, the *Relative Desirability* (p < 0.1) and *Standing+Desirability* (p < 0.05) conditions increased the reapplication rates for underconfident participants, while the effects for confident participants were statistically insignificant for all conditions. Here '*Underconfident*' finalists incorrectly believed they were ranked lower than the top 20, while '*Confident*' finalists correctly believed they were in the top 20 at baseline. Total *N*=2,398 across four conditions.
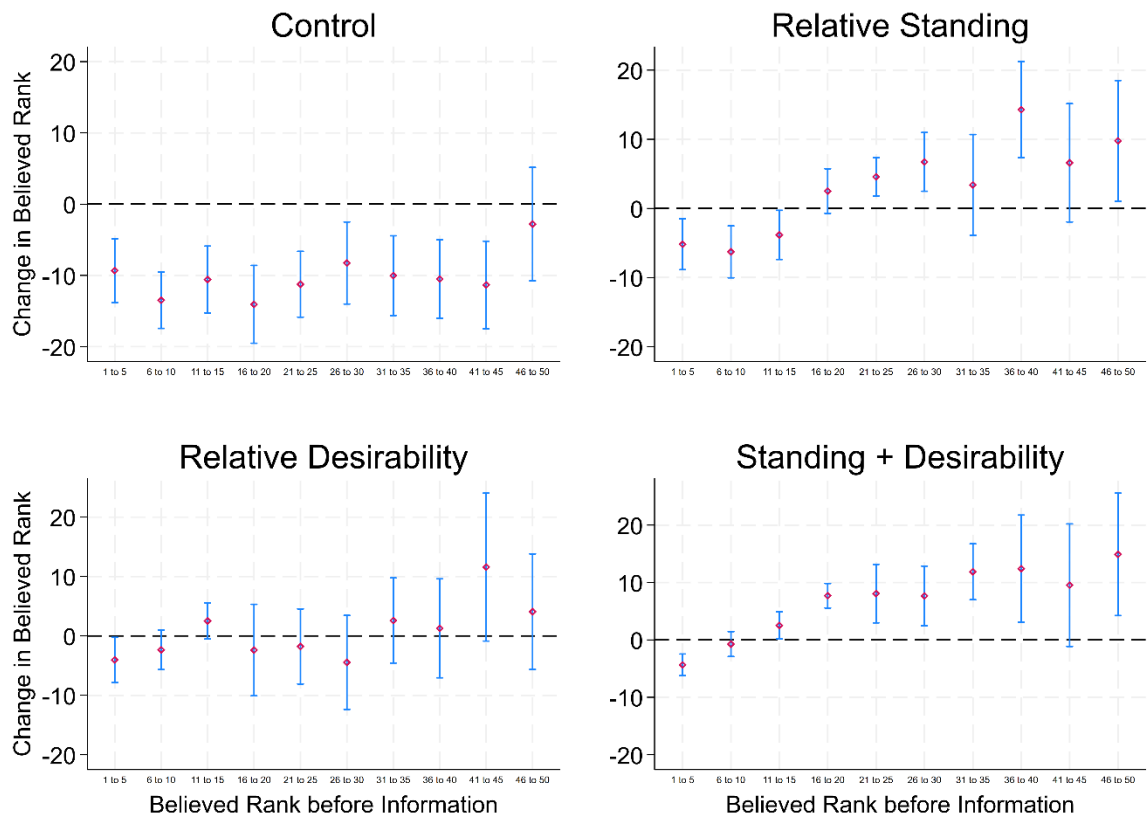
Figure 3. Beliefs about Rank (Relative Performance) in the Online Experiment. Relative to the *Control* condition, the other treatment conditions caused underconfident finalists to think they ranked better. Total *N*=2,398 across four conditions.

Table 1. Experimental Conditions in the Field and the Online Experiment

Condition	Field experiment (Gender)	Online Experiment (Confidence)
Control	Candidates received a standard rejection email from HR.	Participants were told they did not get the role.
Relative Standing	Candidates received an additional email after rejection, emphasizing they were in the top 20% of applicants and encouraging them to reapply.	Despite not getting the role, participants had their success in the task highlighted. Specifically that only 20% get all the answers in the task correct, as they did.
Relative Desirability	Not included	Participants were told that, based on their performance, the employer wished to express interest. The message stated that only 5 out of 100 candidates received this message.
Standing+Desirability	Candidates received the email as in *Relative Standing*, plus a follow-up phone call providing personalised suggestions for roles to apply to and, for women, confirmed the organization's commitment to having women in senior leadership roles.	Participants received both messages from *Relative Standing and Relative Desirability*.

Table 2. Re-application Rates in the Field Experiment (6 Months)

	(1) Women	(2) Men	(3) Women & Men	(4) Women & Men
Relative Standing Condition	0.044	-0.086*	0.044	0.045
	(0.052)	(0.042)	(0.052)	(0.052)
Standing+Desirability Condition	0.109*	-0.054	0.109*	0.109*
	(0.052)	(0.043)	(0.052)	(0.052)
Male Applicant			0.185***	0.182***
			(0.048)	(0.048)
Male * *Relative Standing Condition*			-0.130	-0.132*
			(0.067)	(0.067)
Male * *Standing+Desirability Condition*			-0.163*	-0.163*
			(0.067)	(0.067)
Constant	0.410***	0.595***	0.410***	0.332***
	(0.037)	(0.030)	(0.037)	(0.048)
Department Fixed-Effects	No	No	No	Yes
Month Fixed Effects	No	No	No	Yes
Observations	553	833	1,386	1,386
R^2	0.008	0.005	0.013	0.021
Adjusted R^2	0.004	0.003	0.010	0.015

Notes. Linear probability model predicting re-application rates to a similar senior role within six months based on randomly assigned condition (*Relative Standing Condition* or *Standing+Desirability Condition*, relative to *Control* as baseline) in Columns 1 and 2 for female and male applicants, respectively. Across both male and female applicants, Columns 3 and 4 include an indicator variable for the gender of the applicant without and with fixed effects, respectively. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3. Re-application Rates in the Online Experiment

	(1) Underconfident	(2) Confident	(3) Whole Sample	(4) Whole Sample
Relative Standing Condition	0.0343	0.0371	0.0343	0.0340
	(0.0351)	(0.0464)	(0.0356)	(0.0355)
Relative Desirability Condition	0.0668	-0.0160	0.0668	0.0627
	(0.0355)	(0.0457)	(0.0360)	(0.0359)
Standing+Desirability Condition	0.0800*	-0.0649	0.0800*	0.0764*
	(0.0360)	(0.0449)	(0.0365)	(0.0364)
Confident Applicant			0.142***	0.142***
			(0.0405)	(0.0406)
Confident * *Relative Standing*			0.00287	-0.000340
			(0.0577)	(0.0576)
Confident * *Relative Desirability*			-0.0828	-0.0758
			(0.0574)	(0.0574)
Confident * *Standing+Desirability*			-0.145*	-0.141*
			(0.0571)	(0.0569)
Constant	0.311***	0.454***	0.311***	0.406***
	(0.0251)	(0.0322)	(0.0255)	(0.0496)
Observations	1,455	943	2,398	2,398
Adjusted R^2	0.002	0.002	0.009	0.015
Controls	No	No	No	Yes

Notes. Linear probability model predicting re-application for the research assistant role based on randomly assigned condition (Relative Standing condition, Relative Desirability condition, or Standing+Desirability condition, relative to Control as baseline) in Columns 1 and 2 for underconfident (participants who believed they were in the Bottom 80% at baseline) and confident (participants who believed they were in the Top 20% at baseline) applicants, respectively. Columns 3 and 4 include an indicator variable for confident applicants without and with demographic controls, respectively. Controls: Age, Gender, Ethnicity (Binary - white = 1), Education (Binary - university = 1). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$