Labor Market Participants' Reactions to Salary Range Disclosures

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Abstract

Due to increasing calls to reduce the gender pay gap, many U.S. cities and states have passed or are debating laws requiring salary range disclosures in job postings. We use an experiment to examine the effects of such disclosures on labor market participants' application likelihood and negotiation likelihood if offered the position. We manipulate pay range disclosure at three levels: no pay range, broad pay range, and narrow pay range. We find that female participants are more likely than male participants to apply to positions with a narrow range compared to no range or a broad range. We also find that female participants are more likely to negotiate salary when pay ranges are present than when they are absent, and that this effect is driven by narrow pay ranges. Results of our study are not only useful for policymakers but also for employers who seek to create more equitable workplaces.

Keywords: *pay transparency; pay range; disclosure; gender; pay fairness; job postings; human capital*

I. INTRODUCTION

As of the beginning of 2023, American women earn eighty-four percent of what men earn (Aragão, 2023; U.S. Bureau of Labor Statistics, 2023; U.S. Department of Labor, 2023). Labor rights activists, politicians, and academics have debated for years why this gap exists and how to reduce it (Gould et al., 2016). One proposed mechanism to reduce the pay gap, which is gaining traction, is greater pay transparency (Baker et al., 2023; Gulyas et al., 2023; Obloj and Zenger, 2022). The general intuition behind this mechanism is that informing women of the pay range for jobs before they apply for them will allow them to both be more likely to apply to firms that pay employees fairly and be more empowered in wage negotiations. Because of these two forces, the persistent pay gap will potentially close (United Nations, 2022). Inspired by this thinking, several U.S. state and city governments have now mandated that employers disclose salary range information in their job postings.

While these rules are created with the intention of reducing the gender pay gap (Shumway, 2022),[1] they are often written vaguely and poorly enforced (Damante et al., 2023; Francis and Cutter, 2022). As such, there are significant variations in how managers are implementing even mandatory pay range disclosures. Specifically, managers vary the width of the salary ranges they disclose (Liu, 2022; Nash and Stupp, 2023). While in theory, pay transparency should close the gap, in practice it is unknown what the effects of the wide variety of disclosure types currently being used will have on the labor market. In order to better understand the effects of salary range disclosure laws on labor market outcomes, we use an experiment to examine how different types of salary range disclosures affect the application and negotiation decisions of labor market participants and if those decisions vary by gender.[2]

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[1] For example, the text of Colorado's bill in 2018 includes "Women in this state earn just 86 cents for every dollar men earn" and "If the wage gap were eliminated, a working woman in Colorado would earn, on average, $7,000 more per year, which would pay for 1.9 years of community college tuition or approximately 6 months of child care costs" (Colorado Senate Bill 19-085).

[2] Note that each pay range disclosure regulation differs but the Colorado, New York, and California pay range laws refer to base salaries and performance-based pay such as bonuses can be listed in addition to the range (Weinstein and Mercurio, 2023). In practice, many job postings primarily refer to base salaries.

In the United States, pay transparency in job postings is becoming increasingly prominent as eight states have enacted different types of pay transparency laws and 15 more states are considering them (Damante et al., 2023). In the first of these laws passed on January 1, 2021, the Colorado Department of Labor and Employment requires that job postings include the range of compensation. A similar law in New York City went into effect on May 15, 2022. California and Washington followed suit with similar laws on January 1st, 2023 (CBS, 2022; Harpole and Gilewski, 2023; Rosenblatt, 2023).[3] While these disclosures are not required in every state, disclosure requirements, along with increasing demand from labor market participants, have spurred a spillover effect where many firms are voluntarily posting salary ranges. Indeed.com, a major U.S.-based online job board, reports that the number of U.S. job postings that include salary information more than doubled from 18 percent to 44 percent between February 2020 and February 2023 (Lewis, 2023).

In general, labor market participants prefer pay transparency (Goldschmitt, 2023; Mayer, 2023). They do so in part because they view compliance with pay range disclosure laws and voluntary disclosures as a signal of the employer's desire to pay their employees fairly and treat their employees well (PeopleSuite, 2023). Because women are more likely than men to be subject to pay discrimination (Parker and Funk, 2017; U.S. Bureau of Labor Statistics, 2023; U.S. Department of Labor, 2023), we posit that a signal of a firm's commitment to pay fairness, as demonstrated by an employer's commitment to pay transparency, is likely to have a stronger effect on women's desire to apply to a company. As a result, we predict that the positive effect of a manager's choice to provide a pay range disclosure of any type in a job posting on job candidates' likelihood of applying to a position is stronger for female job candidates than for male job candidates.

While the laws require firms to post "good faith" salary ranges, there is very little guidance on what this term means (Arnold et al., 2022; Francis and Cutter, 2022; Nash and Stupp, 2023).

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[3] Several Canadian provinces have also implemented or are considering implementing these types of laws (Maloney, 2022).

Because of these vague standards and the low enforcement of the laws, managers have enormous flexibility in their disclosure choices. On one end of the spectrum, some firms are posting relatively narrow salary ranges. On the other end of the spectrum, some firms are posting relatively broad ranges, sometimes three to four times the minimum compensation of the job. For example, companies with job postings for project manager positions in jurisdictions with pay transparency laws have provided broad pay ranges (e.g., "Salary: $50000 - $95000 USD per year"[4]) or narrow pay ranges (e.g., "Pay Rate: $50,000 - $70,000"[5]). We predict that when managers choose to post a narrower pay range, it signals a higher likelihood of pay fairness to potential job applicants. In particular, we believe that narrower ranges suggest to labor market participants that there is a lower chance for wage inequality and discrimination. Because women are more likely to be underpaid relative to their male peers and pay fairness is more salient for women than for men, we predict that the positive effect of narrow (vs. broad) pay range disclosure on job candidates' likelihood of applying to a job is stronger for female job candidates than for male job candidates.

In addition to application decisions, contingent on the employer making a job offer to the job candidate, labor market wage outcomes also depend on the job candidate's likelihood to negotiate their salary. Salary range disclosures are designed to enable all potential employees with a better information set with which they can leverage in wage negotiations. In regard to the gender pay gap, prior research suggests that women are often reluctant to negotiate for higher pay which may be a contributing factor in why they are paid less than men (Babcock and Laschever, 2003; Biasi and Sarsons, 2022; Dittrich et al., 2014; Exley et al., 2020). However, prior research suggests that explicitly noting that wages are negotiable mitigates gender differences in negotiation likelihood (Leibbrandt and List, 2015). While men are likely to negotiate no matter what the job posting says, women are more likely to do so when given explicit permission. As a result, we predict that salary ranges will serve as a signal that salary is negotiable, and hence, reduce the

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[4] This is from a project manager job posting at FlowerHire, active on May 31, 2023. The original job posting is available upon request.

[5] This is from a project manager job posting at Workforce Connections, active on May 31, 2023. The original job posting is available upon request.

ambiguity in the potential to negotiate salary and increase female job candidates' likelihood to engage in salary negotiations. Therefore, we predict that the positive effect of pay range disclosure on job candidates' likelihood of negotiating salary is stronger for female job candidates than for male job candidates.

We test these hypotheses using a U.S. Census targeted sample of 600 from the online labor market Connect.[6] We employ a 1 x 2 between-subjects nested experimental design and manipulate the pay range disclosures on a hypothetical project manager position as either absent (*No Pay Range* condition), or present at one of two levels: *Narrow Pay Range* ($50,000-$70,000) or *Broad Pay Range* ($30,000-$90,000). Participants are shown a hypothetical job posting for a project manager role and asked about their likelihood of applying for the job. After this, they are told they have been given a job offer and that their salary will be at the midpoint of the range ($60,000). Next, they are asked about their likelihood of negotiating salary. After this, participants answered post-experimental questions.[7]

Regarding job candidates' application likelihood, we find a significant interaction of *Narrow Pay Range* (compared to both *Broad Pay Range* and *No Pay Range*) and *Gender* on application likelihood. The simple effects tests indicate that women are more likely to apply to jobs with narrow pay range disclosures than jobs with broad pay range disclosures or no pay range disclosures. In contrast, we find no significant effect of any of the pay range disclosures on male job candidates' application likelihood. These results are consistent with our prediction that the positive effect of narrow (versus broad and no pay range) pay range disclosure on job candidates' application likelihood is stronger for female job candidates than for male job candidates. Additional analyses show that these results are driven by perceived pay fairness. We also rule out

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[6] The institutional review board of the authors' affiliated institutions granted approval for the experiment conducted in this study.

[7] We use participants' answers to PEQ questions to control for their self-assessed qualifications, risk aversion, annual income, employment status, and work experience. Our results are robust to the inclusion or exclusion of these control variables.

differences in participants' pay certainty and their perception of company culture as potential alternative explanations for our results.

Regarding job candidates' negotiation behavior, consistent with our prediction, we find a significant interactive effect of pay range disclosure and gender. Specifically, we find that women, but not men, are more likely to negotiate when salary ranges are present. Furthermore, we find that this result is driven by narrower pay ranges in that narrower pay ranges make female applicants, but not male applicants, more likely to negotiate salary.

Our study has important practical implications. Specifically, our results contribute to ongoing policy debates in the U.S. and around the world about whether pay transparency should be mandated, and if so, how should it be implemented. Following calls by Koonce et al. (2021), we use the experimental method to show the effect of different types of disclosure choices by firms on labor market participants' reactions in a controlled setting. In particular, understanding how the use of the both narrow and broad pay range disclosures actually seen in practice affect the outcomes of these laws is of interest to regulators. Our study indicates that mandating pay range disclosures in job postings is more likely to achieve a gender-diverse workforce and reduce gender pay gap when such disclosures contain narrower pay ranges than when such disclosures contain broader pay ranges.[8]

Moreover, results of our study offer useful insights to managers. Hiring managers need to create job postings. In states that do not mandate the disclosure of a pay range, managers can determine if disclosing a pay range voluntarily would help them accomplish firm goals such as closing the gender pay gap or achieving a more gender-balanced workforce. In states that do mandate the disclosure, managers have a choice of how wide of a pay range to disclose. Our study indicates that including narrower pay ranges in job posting can help firms achieve those goals but including broader pay ranges may not. Additionally, as these disclosure laws change the landscape

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[8] Anecdotally, New York City Councilman Justin Brannan, who co-sponsored the latest pay transparency legislation, indicated that he was disappointed by the wide ranges observed in job postings subsequent to the pay transparency law and that they were considering implementing rules around the size of the ranges in the future (Francis and Cutter, 2022).

of recruiting, managers may want to consider job role design and how the salary range of those jobs can affect their ability to recruit candidates for them.

In addition, our study contributes to several streams of accounting and economics literature. First, we contribute to the literature on pay transparency (e.g. Carter et al., 2023; Grasser et al., 2021; Kelly et al., 2020; Kelly and Seow, 2016; LaViers, 2019) by demonstrating the effects of a new set of laws on labor market participants' behaviors and how those behaviors vary by gender. Additionally, we show how common differences in the way firms choose to comply with these laws change the labor market outcomes. There is not yet enough research done on these laws to understand their full effects. The few studies that examine the effect of these laws use archival job posting data focus on the effects of pay transparency laws on salary levels (Arnold et al., 2022; Frimmel et al., 2023). However, these studies do not provide causal evidence on how labor market participants' behaviors changed in response to the laws and have difficulty teasing apart the different effects on both job seekers and job offers. Our experimental work has the advantage of documenting in greater detail how the laws affect specifically job seekers behaviors at each step in the job application and acceptance process and illuminating the mechanisms driving labor market participants' behaviors. Moreover, we are able to show how the disclosures affect women's behavior differently than men's.

Second, our study contributes to two streams of economics research on the effect of firm-specific pay policies on gender pay gap (Card et al., 2016). One stream of literature highlights a sorting channel through which women are less likely to be employed at higher-wage firms. Prior research has shown that there are differences in the fractions of men and women employed at different firms (Groshen, 1991; Petersen and Morgan, 1995), as well as the rates that men and women move to higher-paying jobs (Del Bono and Vuri, 2011; Hospido, 2009; Loprest, 1992). Our results suggest that pay range disclosure can lead to male and female job candidates self-selecting into different companies. Differing application choices between male and female candidates are significant because they can affect the gender diversity of the companies that male and female candidates are self-selecting into. If female candidates are consistently self-selecting

into companies that have a lower maximum pay, then pay transparency laws may not be effective for reducing sex-based wage disparities.

Another stream of literature we contribute to examines the effect of firm-specific pay policies on gender pay gap. It identifies a bargaining channel if women obtain a smaller share of the surplus associated with their job. Women are often offered or negotiate lower wages than men at a given firm. We find that providing narrow pay ranges on job postings may increase the likelihood of female candidates negotiating salary. Overall, showing that pay range disclosures can affect negotiating behavior is significant because those who choose to negotiate typically gain more than their initial offers (Babcock and Laschever, 2003). Even small differences in starting salaries can lead to substantial compensation gaps over time (Bowles et al., 2007). Therefore, pay disclosures can potentially help decrease the gender pay gap by increasing the likelihood that female applicants engage in a salary negotiations.

Lastly, we contribute to a growing accounting literature that examines the consequences of wages and labor practices on labor market participants' behavior, perceived pay fairness, and outcomes (e.g. Brown et al., 2022; Brown et al., 2015; Chen et al., 2020; Chen and Sandino, 2012). In particular, we show that narrower pay range disclosure leads to higher perceived pay fairness for women and could help level the playing field between male and female job candidates.

The remainder of the paper is organized as follows. Section II discusses the background and develops the hypotheses. Section III describes the institutional setting and experimental design. Section IV presents the results and Section V concludes.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

Pay Transparency Disclosure Laws

In the United States, a combination of longstanding cultural norms and company policies have discouraged or prevented employees from discussing how much money they make (Lewis, 2021). Pay secrecy policies are informal or formal workplace policies that discourage or prohibit employees from discussing wages or salaries (Rosenfeld, 2017). Although the National Labor

Relations Act of 1935 in the United States protects workers' rights to discuss their pay, there are limited penalties for firms who break this law and overall little enforcement, which makes it easier and more efficient for companies to ignore the law (Lewis, 2021; Rosenfeld, 2017). Typically, companies prefer pay secrecy due to fear that pay differences may undermine employee morale (Card et al., 2012). Prior research has shown that employees' job satisfaction depends on both their absolute income and their income relative to others (Akerlof and Yellen, 1990; Card et al., 2012). Employees typically have an asymmetric response to information about peer salaries; workers with below-median salaries for their occupation report lower pay and job satisfaction, while workers with above-median salaries report no higher satisfaction. The asymmetric impact of pay information is one of the reasons why employers have an incentive to maintain pay secrecy policies (Card et al., 2012). Despite pay secrecy policies being illegal, over half of the workers in the United States are subject to pay secrecy (Lewis, 2021). Pay secrecy negatively affects some groups of people more than others. In particular, it affects women and members of other minority groups who tend to be paid less than white male counterparts (PayScale, 2023).

Recently, there has been more policy activity regarding pay transparency due to the widespread belief that pay secrecy serves to obscure gender biases in the allocation of wages and salaries (Rosenfeld, 2017). Because of women's more limited access to salary information, firms are likely to offer women lower wages for the same positions and women are more likely to accept them. One potential way to decrease this information asymmetry is through pay disclosures. Various countries, including Denmark and Canada, have passed laws requiring companies and/or universities to share information about the gender pay gap (Baker et al., 2023; Bennedsen et al., 2022). In the United States, pay disclosure legislation at the federal level has been limited. At the state and city level, there have been several state and city governments that have mandated that employers disclose some form of salary information in their job postings to better empower female labor market participants in their job application choices and salary negotiations (Damante et al., 2023; Francis and Cutter, 2022).

Specifically, eight different states have enacted different types of pay transparency laws and 15 more states are considering them (Damante et al., 2023). As an example of these types of laws, the Colorado Department of Labor and Employment (CDLE) requires that job postings include the rate of compensation (or range thereof) (Lewis Brisbois Bisgaard & Smith LLP, 2021). However, due to the vague language typically used in the new laws, companies with job postings for positions in jurisdictions that implement such laws respond in a variety of ways. One aspect that companies have discretion over is the width of their published salary ranges. Companies can comply by posting relatively narrow ranges or even exact salaries that clearly signal to job applicants the expected salary of the firm as the law intended. Alternatively, they may choose to publish broad ranges which provide job applicants with a less clear understanding of the salary. They may choose to do this to technically comply with the law, but not the spirit of the law, which is to provide more pay transparency (Liu, 2022). Additionally, firms can choose to not comply with the law at all and not disclose any information. Because of notably wide pay ranges being regularly published and postings with no salary information, policymakers are currently discussing additional legislation to prevent companies from publishing overly broad pay bands and stepping up enforcement of laws already on the books (Francis and Cutter, 2022). As a result of these observed behaviors and the ongoing debate, the width of pay range disclosures is a particularly relevant aspect of pay disclosures for researchers to examine.

Gender Differences in the Effects of Pay Range Disclosure on Application Likelihood

Equity theory suggests that employees compare themselves to other employees in terms of the pay they receive from the firm (Brown et al., 2022; Downes and Choi, 2014). Employees are averse to pay inequity and experience disutility when they believe they are paid less for their effort than relevant others (Loewenstein et al., 1989). Prior literature has provided ample evidence for gender-based discrimination in the workplace, which leads to differential treatment of men and women with equal preferences and abilities (Black and Strahan, 2001; Gneezy et al., 2003; Goldin and Rouse, 2000; Wenneras and Wold, 2010). Survey evidence indicates that around 42% of women say they have faced discrimination on the job because of their gender. One of the

manifestations of gender-based discrimination is pay inequity between men and women: Approximately 25% of women say they have earned less than a man who was doing the same job and female employees earn 84 percent of what male employees earn on average (Parker and Funk, 2017; U.S. Bureau of Labor Statistics, 2023; U.S. Department of Labor, 2023). These findings suggest that the potential for gender discrimination is likely a more significant concern for women than for men. Hence, women are likely to care more about the fairness of pay. To the extent that a pay range disclosure in a job posting signals the employer's commitment to pay transparency and pay fairness, we expect that pay range disclosure will increase job candidates' likelihood to apply for a job. Since men are less likely to be concerned than women about the potential for gender-based pay discrimination, we expect the positive effect of pay range disclosure on job applicants' likelihood to apply for a job to be more pronounced for women.

Furthermore, pay ranges set minimum and maximum pay levels for employees for the same job, thus providing flexibility to pay people in the same job differently (Milkovich et al., 2014). A narrower pay range disclosure in a job posting could indicate that it is more difficult for management to engage in gender-based pay discrimination for a particular position or job title, which could give female applicants even greater confidence that they will be paid fairly. On the other hand, a broader pay range could indicate that a company does not want to comply with the spirit of the law and may pay a variety of salaries for the same position. Large pay differences for the same position may cause perceptions of pay inequity or lower pay fairness (Brown et al., 2022; Pfeffer and Langton, 1993). Job applicants may infer that the overall pay practices at the company are less fair and be less likely to apply as a result. Therefore, compared to a broad pay range disclosure, a narrow pay range disclosure serves as a stronger signal of the firm's commitment to pay transparency and pay fairness. Hence, we expect a narrow pay range disclosure to increase job candidates' likelihood to apply for a job compared to a broad pay range disclosure. Since men are less likely to be concerned about the potential for gender-based pay discrimination, we predict that the positive effect of a narrow pay range disclosure (vs. a broad pay range disclosure) on job

candidates' likelihood to apply to a job will be stronger for female job candidates than for male job candidates.

Based on the above discussion, we posit the following set of hypotheses:

H1a*: The positive effect of pay range disclosure on job candidates' likelihood of applying to a job is stronger for female job candidates than for male job candidates.*

H1b*: The positive effect of narrow (vs. broad) pay range disclosure on job candidates' likelihood of applying to a job is stronger for female job candidates than for male job candidates.*

Gender Differences in the Effects of Pay Range Disclosure on Negotiation Likelihood

In addition to application decisions, contingent on the employer making a job offer to the job candidate, labor market wage outcomes also depend on the job candidate's likelihood to negotiate their salary. Both academic and practitioner literature suggest that women are less likely to negotiate for higher pay than men. Prior research has documented a gender effect in terms of both negotiation initiation and negotiation performance (Croson and Gneezy, 2009; Recalde and Vesterlund, 2020). Prior research also provides archival and experimental evidence that women avoid situations in which they have to negotiate or bargain (Babcock and Laschever, 2003; Dittrich et al., 2014; Exley et al., 2020). For example, Biasi and Sarsons (2022) find that after the passage of Wisconsin's Act 10, which allowed school districts to set teachers' pay more flexibly, women's salaries were lower compared to the salaries of men with similar credentials. The gap is partially driven by women engaging less in pay negotiations. Prior research suggests a number of negotiation characteristics that have been shown to affect gender differences in negotiation, including ambiguity, whether the negotiation activates stereotypes, whether the negotiation is on behalf of someone else, and positional role (Recalde and Vesterlund, 2020). Additionally, there are a variety of social and cultural factors that affect women's willingness to negotiate, including socialization, cultural attitudes toward assertive women, and gender differences in performance attributions (Babcock and Laschever, 2003; Bowles et al., 2007; Sweeney et al., 1982).

Due to these documented gender differences in negotiation initiation and performance, various initiatives have been introduced to reduce the effect of gender differences in negotiation. One class of such interventions aims to increase pay transparency to reduce gender differences in negotiation. These initiatives include disclosing pay information and letting individuals know if and when compensation is negotiable. Transparency allows individuals to set similar negotiation expectations, which potentially reduces gender differences in negotiation (Recalde and Vesterlund, 2020). One characteristic of negotiations that may increase gender differences is the level of ambiguity in the negotiation (Bowles et al., 2005). Higher ambiguity in a negotiation increases the likelihood for individual differences, such as gender, to influence negotiators' performance. Prior research suggests that decreasing ambiguity mitigates the effects of gender on negotiation performance (Bowles et al., 2005). In the context of salary negotiations, the limits of the employer's bargaining range are typically unknown. When a pay range is disclosed in a job posting, the applicant has more information about the range that the employer might be willing to negotiate within. Hence, pay range disclosures help reduce ambiguity, and in doing so, may help reduce gender differences in negotiation and increase female job candidates' likelihood to negotiate pay.

Another reason that pay range disclosures may reduce gender differences in negotiation is such disclosures indicate the salaries that are possible and serve as a signal that pay is negotiable (Bear et al., 2023). Prior research suggests that women are less likely than men to perceive situations as negotiable and are more reluctant to initiate negotiations compared to men (Babcock et al., 2006; Bowles et al., 2007). Leibbrandt and List (2015) examine the effect of salary negotiations on sorting into workplaces. When there is no explicit statement that wages are negotiable ("*the position pays $x*"), men are more likely to negotiate for a higher wage, while women are more likely to signal their willingness to work for a lower wage. In contrast, when the possibility of negotiation is explicitly mentioned ("*the position pays $x/negotiable*") the gender differences disappear. Bear et al. (2023) find that women rate the usefulness of aggregate, general sources of salary information (e.g., salary information websites) higher than men do. Therefore, a salary range disclosure on a job posting could be more salient to women than other sources of

salary information such as the information from professional networks and have a greater impact on salary negotiations. We predict that women will perceive the presence of a pay range disclosure as a signal of both the acceptable range for negotiation and that there is room for negotiation at all, and hence will be more likely to confidently negotiate salary when such disclosures are present than when such disclosures are absent. By contrast, prior research suggests that men are more likely than women to prefer job environments where the "rules of wage determination" are ambiguous (Leibbrandt and List, 2015). If male candidates are likely to negotiate pay regardless of what the job description states, then pay range disclosures are likely to have less impact on whether they choose to negotiate.

Furthermore, we examine whether narrow vs. broad pay range disclosure will affect negotiation likelihood differently based on gender. Prior research suggests that women are more likely than men to think about how people perceive their self-representation (Gordon and Hall, 1974). Also, women often undersell themselves relative to men (Exley and Kessler, 2022) and are reluctant to take actions that would make them seem unreasonable or greedy to others (Croson and Gneezy, 2009). Compared to a broader pay range disclosure, a narrower pay range could make women more confident about the salary they are negotiating because it provides a more precise signal of the expectations of managers. Hence, a narrow pay range not only gives women permission to negotiate, but also further reduces the ambiguity in the negotiation. If the parties in the negotiation have similar expectations of salary range, then gender differences in negotiation will potentially be reduced (Recalde and Vesterlund, 2020). In contrast, while a broad pay range provides women with the permission to negotiate, its broad nature means that there may be a greater difference in salary expectations between the two parties and hence may make the negotiation feel more risky for women.

The above discussion leads to our second set of hypotheses:

H2a: *The positive effect of pay range disclosure on job candidates' likelihood of negotiating salary is stronger for female job candidates than for male job candidates.*

H2b: *The positive effect of narrow (vs. broad) pay range disclosure on job candidates' likelihood of negotiating salary is stronger for female job candidates than for male job candidates.*

III. INSTITUTIONAL SETTING AND EXPERIMENTAL DESIGN

Participants

We recruited participants online via CloudResearch's Connect platform. Connect is an appropriate platform for our study for several reasons. First, CloudResearch's survey sampling services enabled us to find a census-representative sample of the United States, which helps increase the generalizability of our results beyond what may be possible using younger student-based samples. Second, prior research has shown that online workers are reliable participants because they pay attention to the experimental instrument and exert effort in completing the study (Coppock and McClellan, 2019; Farrell et al., 2017; Paolacci et al., 2010). Third, the theoretical development for our study does not require participants to have certain expertise or experience. Libby et al. (2002) state that experimenters should avoid using professional subjects unless it is necessary to achieve their research goals. We utilized CloudResearch's survey sampling services to find a Census-representative sample of the United States. Our data includes 600 adults from around the United States.

Experimental Design and Manipulations

We employ a 1 x 2 between-subjects nested experimental design and manipulate the pay range disclosures on a hypothetical project manager position as either absent (*No Pay Range* condition), or present at one of two levels: relatively more broad pay range disclosure (*Broad Range* condition) or more narrow pay range disclosure (*Narrow Range* Condition). The *No Pay Range* condition states "Salary is determined by a range of factors, including your skills, qualifications and experience" in the job posting. The *Broad Range* and *Narrow Range* conditions contain the same sentence as the *No Pay Range* condition followed by a sentence indicating the salary range information. The *Broad Range* condition states "The salary range for this position has been established at $30,000 - $90,000." The *Narrow Range* condition states "The salary range for

this position has been established at \$50,000 - \$70,000." For both the *Broad Range* and *Narrow Range* conditions, the midpoint of the salary range is held constant at \$60,000. We make this design choice so that, all else equal, the expected value of the two jobs is held equal between the two conditions for the average participant. To examine how disclosure type affects male and female job candidates differently, we use a measured independent variable (*Gender*), which takes on a value of 1 if the participant is female and 0 if the participant is male.

We discuss the rationale for two key design choices. First, we chose project manager as the position for the hypothetical job postings used in our experiment for two primary reasons. First, some of the common qualifications for a project manager position, such as communication skills and detail orientation, are common across many professions. Therefore, the survey participants in our study likely possess such skills in their job. Second, project manager is a relatively gender-neutral job title. CareerExplorer estimates that the actual gender mix of project managers in 2023 is approximately 57% women and 43% men.[9] Prior research has shown that when roles are female-typed (compared to male-typed), the gender gap in self-evaluation and self-reporting of skills decreases (Bordalo et al., 2019; Exley and Kessler, 2022; Murciano-Goroff, 2022). These findings suggest a female-typed role will increase female job candidates' likelihood of negotiating compared to a male-typed role. Therefore, using a more gender-neutral role will help to isolate the effect of the salary range disclosures from the gender type of the job.

Second, we chose to conduct the experiment using a between-subjects design rather than a within-subjects design to increase internal validity. A within-subjects design may affect results by making treatment effects more salient, which could signal to subjects that the experimenter wants them to respond to the manipulation (Libby et al., 2002). In our experiment, if participants viewed job postings with and without pay range disclosures at the same time, the salience of the manipulation would signal to the participants that they should pay attention to the pay range information. In practice, however, when job candidates view different job postings, they are likely

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[9] https://www.careerexplorer.com/careers/project-manager/demographics/

evaluating the job postings holistically based on the factors that are most important to them. To employ a between-subjects design, we need a larger sample, so we recruited 600 participants on Connect to ensure a representative and relatively large sample to test our hypotheses. The choice of 600 also allows for approximately 100 males and 100 females in each of the three disclosure conditions in keeping with best practices in online research techniques (Brysbaert, 2019).

Experimental Procedures

After participants accepted our task request on Connect, they were directed to a Qualtrics website on which all experimental materials were hosted. Qualtrics randomly assigned participants to one of three pay range disclosure conditions: *No Pay Range*, *Broad Range* and *Narrow Range*. In all three conditions, participants were asked to assume that they were currently looking for a project manager position. They were shown a hypothetical job posting for a project manager position, which is shown in the Appendix. The only difference between the three disclosure conditions is the pay information in the hypothetical job posting. Each of the disclosure conditions has a different version of a salary disclosure.

Participants were shown the same job posting throughout the experiment for reference and answered three attention check questions throughout the survey. After seeing the job posting for the first time, participants answered two attention check questions: (1) "How is your salary determined for this position?" and (2) "Which of these are not a skill you need to be successful at this project manager job?". Participants then answered the following questions: their likelihood of applying to the job and their perception of the pay certainty for the position. After a page break, the participants were told that they had been offered a salary of $60,000 for the hypothetical position. The participants answered a question regarding their likelihood of negotiating their salary. Before the post-experimental questionnaire, participants answered the third attention check question: "How much did the firm initially offer you in salary?".

Dependent Variables

Our two primary dependent variables are *Application Likelihood* and *Negotiation Likelihood*. To measure *Application Likelihood*, we asked participants the following question on a

0 - 100% scale: "Assuming that you're currently looking for a project manager position, how likely would you be to apply to this job?" After participants answered a few questions related to their likelihood of applying for the job, participants were informed that they had been offered $60,000 for the hypothetical project manager position. To measure *Negotiation Likelihood*, we asked participants the following question on a 0 - 100% scale: "How likely would you be to negotiate with the company over your annual salary?"

Control Variables

We control for several variables that could influence labor market participants' application and negotiation likelihood. First, we control for participants' self-assessed qualifications because participants who think they are very qualified for the job position would be more likely to apply for the job and could be more likely to negotiate salary. We collected data on how skilled the participants believed they were at each of the qualifications listed in the bullet points in the job posting. The participants rated their skill on a 5-point Likert scale and we averaged the participants' ratings across all the qualifications to obtain a *Self-Assessed Qualifications* measure, which captures how good the participant believes they will be at the position overall.

Second, we control for participants' risk aversion because job candidates' risk preferences could influence both their application likelihood and negotiation likelihood. We measure *Risk Aversion* using the participants' response about the extent to which they agree or disagree with the statement "I am risk-seeking" (1-5) (reverse coded).

Lastly, we control participants' annual income, years of work experience, and whether they are currently employed because these variables could influence participants' responses to the application likelihood and negotiation likelihood questions in our experiment. For example, participants with higher annual income, more job experience, or who are already employed could be more likely to negotiate salary.

IV. RESULTS

Descriptive Statistics

We recruited 600 participants via Connect, a crowdsourcing platform for online research developed by Cloud Research. Table 1 provides descriptive statistics for the characteristics of our participants. Among the 600 participants, five of the participants chose not to identify their gender as either male or female and are excluded from the sample. In our primary analysis, we excluded 25 additional participants who reported an unusually low *Application Likelihood*. Using a statistical analysis of outliers, we identify a cutoff of below seventeen percent for *Application Likelihood*. In practice, most people who are viewing a job posting are interested in searching for the type of position in the job posting, so it is most meaningful to examine how pay range disclosures affect people who are reasonably interested in the position. These very low likelihoods are approximately equally distributed across the three pay disclosure types and across gender indicating that they are unlikely to be driven by disclosure type and instead by some underlying disinterest in the job role.[10] Of the remaining 570 participants, 284 (50%) identify as male and 286 (50%) identify as female. Additionally, 133 (23.37%) identify as BIPOC and 57 (10.09%) identify as part of the LGBTQ community. On average, the participants have an average age of 44, an average of 22 years of work experience. They also have approximately $49,258 in average annual income meaning that their actual salaries are comparable to the ranges provided to them in these job postings. This means that the experimental design was well chosen for the sample and the variation in salary presented to them is likely a realistic but still meaningful amount to them.

Test of H1a and H1b

In order to begin the formal tests of our hypotheses, we first create the following four variations of *Disclosure Dummy*:

1. *Anyvsnone*: Takes a value of 1 if the *Disclosure Type* is either *Broad Range* or *Narrow Range*, and 0 if *Disclosure Type* is *No Pay Range*.

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[10] Our main results are qualitatively similar if the outliers are included or excluded from the analysis.

2.   *Narrowvsbroad*: Takes a value of 1 if the *Disclosure Type* is *Narrow Range*, and 0 if *Disclosure Type* is *Broad Range*.

3.   *Narrowvsnone*: Takes a value of 1 if the *Disclosure Type* is *Narrow Range*, and 0 if *Disclosure Type* is *No Pay Range*.

4.   *Broadvsnone*: Takes a value of 1 if the *Disclosure Type* is *Broad Range*, and 0 if *Disclosure Type* is *No Pay Range*.

The dummy variable *Anyvsnone* compares the effect of any pay range disclosure to the effect of no pay range disclosure. The variable *Narrowvsbroad* compares the effect of the narrow and broad pay range disclosures. The dummy variables *Broadvsnone* and *Narrowvsnone* allow us to determine whether the effect of *Anyvsnone* is primarily driven by narrow or broad ranges.

H1a predicts that the positive effect of pay range disclosure on job candidates' likelihood of applying to a position is stronger for female job candidates than for male job candidates. In our analysis, we control for the participants' annual income, years of work experience, current employment status, self-assessed qualifications and risk aversion because these factors are likely to have an impact on participants' likelihood to apply for a position. Panel A of Table 2 presents descriptive statistics for *Application Likelihood* and Panel B1 provides the ANOVA results for H1a. As shown in Table 2, Panel B1, we do not find a significant interaction effect between *Gender* and *Anyvsnone* ($F_{1,547} = 1.09$; one-tailed $p = 0.15$). In our additional analysis shown in Table 2, Panels C1 and C2, we find a significant interaction effect between *Gender* and *Narrowvsnone* ($F_{1,367} = 3.86$; one-tailed $p = 0.03$) but do not find a significant interaction effect between *Gender* and *Broadvsnone* ($F_{1,355} = 0.02$; one-tailed $p = 0.45$). These results suggest that narrow pay ranges (compared to no pay range disclosure) have a differential effect on application likelihood based on gender. However, broad pay ranges and any disclosure (compared to no pay range disclosure) do not have a differential effect on application likelihood based on gender. These results provide partial support for H1a.

H1b predicts that the positive effect of narrow (vs. broad) pay range disclosures on job candidates' likelihood of applying to a job is stronger for female job candidates than for male job

candidates. Table 2, Panel B2 provides the ANOVA results for H1b. Consistent with H1b, we find a significant *Gender* and *Narrowvsbroad* interaction ($F_{1,363}$ = 4.36; one-tailed p = 0.02). These results suggest that, relative to broad pay ranges, the positive effect of narrow pay ranges on job candidates' likelihood of applying to a position is stronger for women than for men.

We further examine the shape of the interaction through simple main effects tests presented in Table 2, Panel D. These tests confirm that the positive effect of narrow pay ranges (compared to no pay range disclosure) is significant for female job candidates (one-tailed p = 0.05), but not for male job candidates (two-tailed p = 0.26). We further find that the positive effect of narrow pay ranges (compared to broad pay ranges) is significant for female job candidates (one tailed p = 0.00), but not for male job candidates (two-tailed p = 0.78). Overall, these results provide support for H1b and partial support for H1a.

Mediation Analysis: Perceived Fairness

In our theoretical development, we proposed that one of the reasons why broad pay ranges might be negatively viewed by job applicants is that they can lead to perceptions of pay inequity or lower pay fairness. In addition, since women are more likely to be affected by the possibility of pay discrimination, we predicted that their perceptions of pay fairness may have an impact on their application likelihood. To provide evidence for the theoretical mechanism, we conduct additional analysis to examine whether disclosure type has a differential effect on participants' perceptions of pay fairness (*Perceived Fairness*). *Perceived Fairness* measures how participants answered the following question on a 5-point Likert scale in the post-experimental questionnaire: "If I accept this job and work at this firm, I will be paid fairly for my work."

Panel A of Table 3 presents descriptive statistics for *Perceived Fairness* and Panels B and C provide the ANOVA results. We find a marginally significant *Gender* and *Broadvsnone* interaction ($F_{1,354}$ = 4.05; two-tailed p = 0.04) and a statistically significant *Gender* and *Narrowvsbroad* interaction ($F_{1,363}$ = 11.66; two-tailed p = 0.00). However, we do not find a significant *Gender* and *Anyvsnone* interaction ($F_{1,546}$ = 0.04; two-tailed p = 0.84) or a significant *Gender* and *Narrowvsnone* interaction ($F_{1,366}$ = 2.30; two-tailed p = 0.13). These results suggest

that broad ranges, compared to both narrow ranges and no pay range, have a differential effect on *Perceived Fairness* based on gender.

Table 3, Panel D presents results of follow-up simple effects. These tests show that the effect of broad pay ranges (compared to narrow ranges) is significant for both male (two-tailed $p = 0.01$) and female applicants (two-tailed $p = 0.04$). However, the effect of broad pay ranges (compared to no pay range) is insignificant for both male (two-tailed $p = 0.12$) and female applicants (two-tailed $p = 0.20$). Although we expected that female applicants would be more likely to perceive broader pay ranges as a signal of lower pay fairness, it is surprising that male applicants view broader ranges as a signal of higher pay fairness and that male applicants view narrow ranges as the least fair. As shown in Table 3, Panel A, male participants had an average perceived fairness rating of 4.25 in the broad pay range disclosure condition, compared to ratings of 3.91 and 4.07 for narrow pay range and no pay range disclosure conditions, respectively. In contrast, female participants view narrow pay ranges to be the most fair (4.12), followed by no pay ranges (4.04) and broad pay ranges (3.88). One possible explanation is that men are more likely to be confident in their job performance and view the broader pay range as a means for them to be rewarded for their job performance.

In our primary analysis, we found that there is a significant interaction of *Gender* and *Narrowvsnone* on *Application Likelihood* ($F_{1,367} = 3.86$; one-tailed $p = 0.03$) and a significant interaction of *Gender* and *Narrowvsbroad* ($F_{1,363} = 4.36$; one-tailed $p = 0.02$). To test whether these results are driven by participants' perceived pay fairness at the company, we use a moderated mediation analysis model (Hayes 2018, model 7) to examine whether *Disclosure Type* has an indirect effect on *Application Likelihood* through *Perceived Fairness*. These results are presented in Figures 1a and 1b.

When comparing the *Narrow Range* condition with the *No Pay Range* condition, we find that there is an insignificant interaction of *Narrowvsnone* and *Gender* on *Perceived Fairness* ($\alpha_3 = 0.28$; two-tailed $p = 0.13$). Additionally, we find that *Perceived Fairness* has a significant effect on *Application Likelihood* ($\beta_2 = 0.06$; two-tailed $p = 0.00$) and that *Narrowvsnone* has an insignificant

effect on *Application Likelihood* ($\beta_1 = 0.01$; two-tailed $p = 0.66$). We find that for both men and women, the indirect effect is insignificant based on their respective confidence intervals ([-0.02, 0.00] and [-0.01, 0.02]). The index of moderated mediation is also insignificant ([-0.00, 0.04]).

When comparing the *Narrow Range* condition with the *Broad Range* condition, we find that there is a significant interaction of *Narrowvsbroad* and *Gender* on *Perceived Fairness* ($\alpha_3 = 0.62$; two-tailed $p = 0.00$). Additionally, we find that *Perceived Fairness* has a significant effect on *Application Likelihood* ($\beta_2 = 0.08$; two-tailed $p = 0.00$) and that *Narrowvsbroad* has a marginally significant effect on *Application Likelihood* ($\beta_1 = 0.04$; two-tailed $p = 0.05$). We find that for both men and women, the indirect effects are significant ([-0.05, -0.01] and [0.00, 0.04], respectively). The index of moderated mediation is significant ([0.02, 0.08]), which allows us to conclude that the indirect effect is moderated by *Gender*.

One possible explanation for the significance in the narrow vs. broad pay range mediation model and the insignificance in the narrow vs. no pay range mediation model is that the presence of pay range disclosures in the job postings make pay fairness more salient to participants. Because pay ranges on job postings are a relatively recent phenomenon and not required everywhere in the United States, the participants in the no pay range condition may not have noticed a lack of a pay range disclosure. However, when a pay range is present, the participants are more likely to think about pay fairness. Surprisingly, male and female participants have opposite perceptions of fairness regarding broad and narrow pay ranges, where men find broad ranges to be the most fair and women view narrow ranges to be the most fair.

Ruling out Pay Certainty as an Alternative Explanation

One potential alternative explanation for our main results is that pay ranges increase perceived pay certainty compared to when there is no pay range. Since pay certainty concerns are likely more salient to women, the effect of pay range disclosures on perceived pay certainty is also likely more salient to women. We examined whether pay range disclosures have a differential effect on perceived pay certainty based on gender. To measure perceived pay certainty, we asked

the participants to answer the following question on a 5-point scale: "How sure are you about the pay you are going to receive for this job?"

Panel A of Table 4 presents descriptive statistics for *Pay Certainty* and Panels B and C provide the ANOVA results. We do not find a significant *Gender* and *Anyvsnone* interaction ($F_{1,546}$ = 0.33; two-tailed p = 0.57) or a significant *Gender* and *Narrowvsbroad* interaction ($F_{1,362}$ = 0.22; two-tailed p = 0.64). Additionally, we do not find a significant *Gender* and *Narrowvsnone* interaction ($F_{1,367}$ = 0.83; two-tailed p = 0.36) or a significant *Gender* and *Broadvsnone* interaction ($F_{1,354}$ = 0.11; two-tailed p = 0.74). These results indicate that pay range disclosures do not have a differential effect on male and female participants' perceived pay certainty, suggesting that perceived pay certainty is unlikely to drive our results for H1.

Ruling out Company Culture as an Alternative Explanation

Another potential alternative explanation for our main results is that various pay ranges may provide different signals about a company's culture. For example, variations in a position's pay range may lead to job candidates' different perceptions of the company's collaborative vs. competitive culture or work-life balance. Women typically have a preference for jobs with better anticipated work-life balance (Barbulescu and Bidwell, 2013). We examine whether pay range disclosures have a differential effect on perceived company culture based on gender. To measure company culture, we average the participants' responses about the extent to which they agree or disagree with the following statements on a 5-point scale: (1) "The company culture is collaborative." (2) "The company culture is competitive." (reverse-coded) and (3) "Employees at the company have good work-life balance."

Panel A of Table 5 presents descriptive statistics for *Company Culture* and Panels B and C provide the ANOVA results. We do not find a significant *Gender* and *Anyvsnone* interaction ($F_{1,545}$ = 0.83; two-tailed p = 0.36) or a significant *Gender* and *Narrowvsbroad* interaction ($F_{1,362}$ = 0.45; two-tailed p = 0.50). Additionally, we do not find a significant *Gender* and *Narrowvsnone* interaction ($F_{1,365}$ = 1.45; two-tailed p = 0.23) or a significant *Gender* and *Broadvsnone* interaction

($F_{1,354} = 0.34$; two-tailed $p = 0.56$). These results indicate that pay range disclosures do not have a differential effect on male and female participants' perceived company culture, suggesting that perceived company culture is unlikely to drive our results for H1.

Test of H2a and H2b

H2a predicts that the positive effect of pay range disclosure on job candidates' likelihood of negotiating salary is stronger for female job candidates than for male job candidates. In addition to annual income, years of work experience, current employment status, and self-assessed qualifications, we also control for the candidate's *Application Likelihood*. This is because if a person is likely to apply for a job, they are likely to be more invested in negotiating for their desired salary. In contrast, if a person is not interested in applying for a position, they will likely not care to negotiate. Panel A of Table 6 presents descriptive statistics for *Negotiation Likelihood* and Panel B1 provides the ANOVA results for H2a.

Consistent with H2a, Table 6, Panel B1 shows a marginally significant *Gender* and *Anyvsnone* interaction ($F_{1,546} = 1.80$; one-tailed $p = 0.09$). We further find a marginally significant *Gender* and *Narrowvsnone* interaction ($F_{1,366} = 2.11$; one-tailed $p = 0.07$) and a non-significant *Gender* and *Broadvsnone* interaction ($F_{1,354} = 0.80$; one-tailed $p = 0.19$). These results suggest that the marginally significant *Gender* and *Anyvsnone* interaction is driven by narrower pay ranges, where narrower pay ranges make female applicants, but not male applicants, more likely to negotiate.

We further examine the shape of the interaction through simple main effects tests presented in Table 6, Panel D. These tests confirm that the effect of any pay range disclosure (compared to no pay range disclosure) is significantly positive for female applicants (one-tailed $p = 0.01$), but insignificant for male job candidates (two-tailed $p = 0.55$). Additionally, we find a significantly positive effect of narrow pay ranges (compared to no pay range disclosure) on female job candidates' likelihood to negotiate salary (one-tailed $p = 0.01$), but an insignificant effect for male job candidates' likelihood to negotiate salary (two-tailed $p = 0.59$). These findings are consistent with pay range disclosure signaling to female applicants that the salary for a position is negotiable.

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However, male applicants are similarly willing to negotiate regardless of whether there is pay range disclosure or no pay range disclosure.

H2b predicts that the effect of narrow (vs. broad pay range disclosure) on job candidates' likelihood of negotiating salary will be stronger for female than for male job candidates. To test H2b, we examine the interaction between Gender and *Narrowvsboard*. We do not find a significant *Gender* and *Narrowvsbroad* interaction ($F_{1,362} = 0.38$; two-tailed $p = 0.54$), which suggests that narrow pay ranges (compared to broad pay ranges) do not have a differential effect based on gender and we are unable to find support for H2b. The lack of support for this hypothesis may be because the experiment was not sensitive enough to test for these differences. We conjecture that in a higher-pressure real-life negotiation situation, the differences in behavior could be more pronounced. Alternatively, it may be that women in our setting felt sufficiently informed of the pay boundaries in each condition so they felt equally equipped to negotiate. One finding that does lend partial support to the differential effects of narrow vs broad disclosures is that the narrow disclosures, not the broad ones, appear to be driving the increase in negotiation behavior relative to no pay range disclosures in the findings from H2a.

V. CONCLUSION

Using an experiment, we examine the effects of different types of pay range disclosures in job postings (i.e., broad range, narrow range or no pay range) on the application and negotiation behaviors of female and male job candidates. Regarding application behavior, we find that a narrow pay range disclosure (compared to no pay range disclosure) has a stronger effect on female job candidates compared to male job candidates. Additionally, we find that a narrow pay range disclosure (compared to broad pay range disclosure) has a stronger effect on female job candidates compared to male job candidates. Overall, male candidates' application likelihood is not affected by the type of pay disclosure. Furthermore, we show that perceived fairness explains the gender differences in disclosure type on application likelihood when comparing narrow pay ranges to broad pay ranges, but not when comparing narrow pay ranges to no pay ranges.

Regarding negotiation behavior, we find that any pay range disclosure increases the likelihood that female applicants will negotiate salary, and that this result is driven by the effect of narrower pay ranges. However, we do not find that there is a differential effect of narrow verse broad disclosures. Similar to application likelihood, male job candidates' likelihood of negotiating salary is not affected by the type of pay range disclosure.

We contribute to the pay transparency literature by documenting how a new set of pay transparency laws influence labor market participants' behaviors in each step in the job application and acceptance process and by shedding light on the mechanisms behind labor market participants' reactions. In addition, our study contributes to two streams of economics literature that examine the effects of firm-specific pay policies on gender pay gap by demonstrating the potential consequences of pay range disclosures in job postings on gender pay gap. Furthermore, results of our study contribute to the accounting literature on the effects of wages and labor practices on job candidates and employees' behaviors and outcomes.

Our study has important implications for both companies that are determining how to disclose pay information and jurisdictions that are considering passing pay transparency laws. Since companies have discretion over pay disclosures, job descriptions, and job designs, our study provides insights on how companies can best present the pay disclosures in their job descriptions to attract the optimal applicant pool. For policymakers, our findings suggest that narrower pay ranges may be more successful in achieving the purpose of decreasing the gender wage gap and that they may want to explicitly include limits on the ranges allowed in the postings.

Limitations of our study provide opportunities for future research. First, prior research suggests that when roles are female-typed (compared to male-typed), the gender gap in self-evaluation and self-reporting of skills decreases, suggesting that a female-typed role could increase female job candidates' application and negotiation likelihood relative to a male-typed role (e.g. Bordalo et al., 2019; Exley and Kessler, 2022; Murciano-Goroff, 2022). Drawing on this research, we use a relatively gender-neutral job of project manager in our experiment to isolate the effect of the salary range disclosures from the gender type of the job. We expect our theory to be

generalizable to and our results to be more pronounced in traditionally male-dominated industries. This is because we expect pay fairness concerns to be even more salient in these industries for female job candidates, and therefore, we expect pay range disclosures to have a stronger effect in mitigating female job candidates' potential concerns of pay discrimination. To the extent that a female-typed role increases female job candidates' application and negotiation likelihood, we expect our results to be less pronounced in female-dominated industries. Future research can explore this phenomenon in male-dominated or female-dominated industries.

Second, a limitation of our study is that the narrow versus broad salary ranges in our experiment are relative in nature. Like all experiments, we focus on the direction rather than the magnitude of the documented effects. While we document that narrower pay range disclosures are more likely to increase female job candidates' application and negotiation likelihood than broader pay range disclosures are, we cannot speak to exactly how narrow the pay ranges need to be to achieve these effects. Also, we expect the thresholds for "narrow" pay ranges to vary by industry and by the pay level. Future research can use the archival or survey method to shed light on how narrow the disclosed pay range needs to be in different circumstances. That said, our results can still speak to the type of wide pay ranges seen in practice (e.g. pay ranges in excess of three times the minimum annual salary of a job) that are likely disclosed by companies in an attempt to comply with the letter, but not the spirit, of pay transparency laws.

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Appendix

This Appendix presents the hypothetical project manager job posting used in the experiment.

Project Manager

Qualifications
• High school diploma or equivalent
• Experience with using Excel, Word, Outlook email, phone system, calculator, copy machine and other office equipment as needed
• Must be detail-oriented and thorough
• Strong communication and interpersonal skills
• Outstanding organizational and time management skills
• Ability to handle confidential information

Benefits

Shown to participants in the *No Pay Range* Condition:
• Salary is determined by a range of factors, including your skills, qualifications and experience.

Shown to participants in the *Narrow Pay Range* Condition:
• Salary is determined by a range of factors, including your skills, qualifications and experience. The salary range for this position has been established at $50,000 - $70,000.

Shown to participants in the *Broad Pay Range* Condition:
• Salary is determined by a range of factors, including your skills, qualifications and experience. The salary range for this position has been established at $30,000 - $90,000.

Figure 1a

Mediation Analysis: Application Likelihood (Narrow vs. No Pay Range)

Panel A: Mediation Model[a, b]
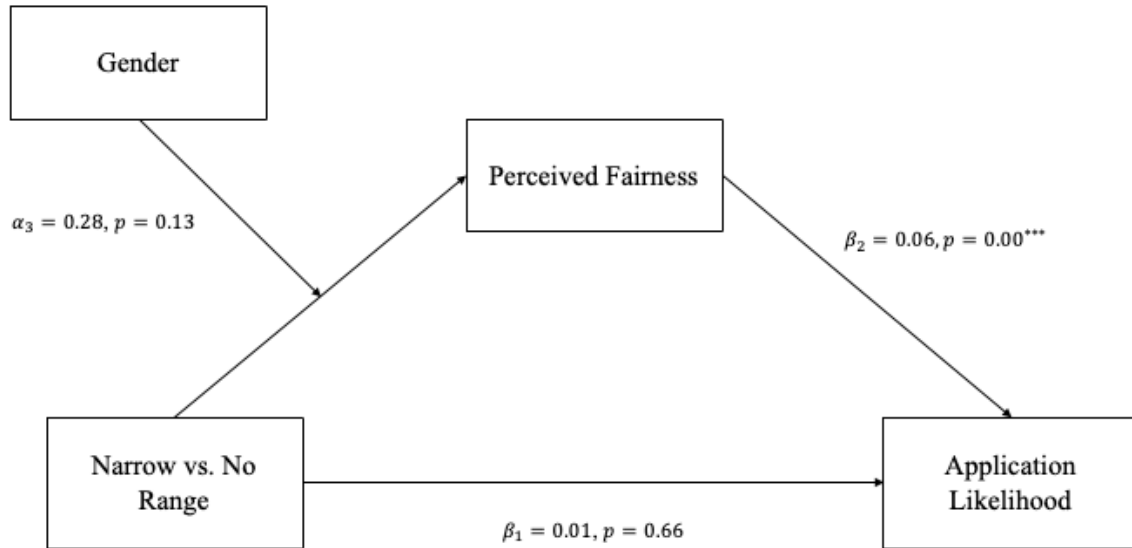
Panel B: Bootstrap Results

Conditional Indirect Effects			
Gender	Effect	Bootstrapped SE	Bootstrapped 90% CI
Male	-0.01	0.01	(-0.02, 0.00)
Female	0.01	0.01	(-0.01, 0.02)
Index of Moderated Mediation			
	Index	Bootstrapped SE	Bootstrapped 90% CI
Genderdummy	0.02	0.01	(-0.00, 0.04)

a. In this mediation analysis, the disclosure condition dummy takes a value of 1 if the pay range type is *Narrow Range* and a value of 0 if the pay range type is *No Pay Range*. The following variables are controlled for: *Annual Income*, *Years of Experience*, *Current Employment* (dummy), *Self-Assessed Qualifications,* and *Risk Aversion.* See Table 2 for all variable definitions.

b. The numbers on the arrows represent estimated coefficients from the following system of equations:

1) $Perceived\ Fairness = \alpha_1 Gender + \alpha_2 Disclosure\ Condition + \alpha_3 Disclosure\ Condition * Gender + \alpha_4 Annual\ Inc + \alpha_5 Years\ of\ Experience + \alpha_6 Currently\ Employed + \alpha_7 Self - Assessed\ Qualifications + \alpha_8 Risk\ Aversion + \varepsilon_1$

2) $Application\ Likelihood = \beta_1 Disclosure\ Condition + \beta_2 Perceived\ Fairness + \beta_3 Annual\ Inc + \beta_4 Years\ of\ Experience + \beta_5 Currently\ Employed + \beta_6 Self - Assessed\ Qualifications + \beta_7 Risk\ Aversion + \varepsilon_2$

Figure 1b

Mediation Analysis: Application Likelihood (Narrow vs. Broad Range)

Panel A: Mediation Model[a, b]
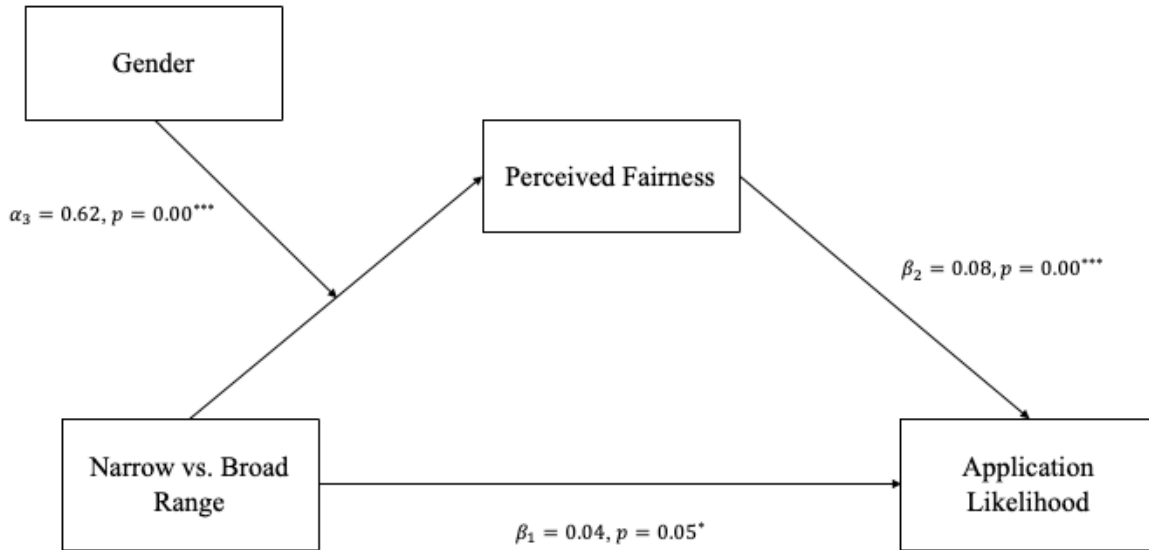
$\alpha_3 = 0.62, p = 0.00^{***}$

$\beta_2 = 0.08, p = 0.00^{***}$

$\beta_1 = 0.04, p = 0.05^{*}$

Panel B: Bootstrap Results

Conditional Indirect Effects			
Gender	Effect	Bootstrapped SE	Bootstrapped 90% CI
Male	-0.03	0.01	(-0.05, -0.01)
Female	0.02	0.01	(0.00, 0.04)
Index of Moderated Mediation			
	Index	Bootstrapped SE	Bootstrapped 90% CI
Genderdummy	0.05	0.02	(0.02, 0.08)

a. In this mediation analysis, the disclosure condition dummy takes a value of 1 if the pay range type is *Narrow Range* and a value of 0 if the pay range type is *Broad Range*. The following variables are controlled for: *Annual Income*, *Years of Experience*, *Current Employment* (dummy), *Self-Assessed Qualifications* and *Risk Aversion*. See Table 2 for all variable definitions.
b. The numbers on the arrows represent estimated coefficients from the following system of equations:
   1) $Perceived\ Fairness = \alpha_1 Gender + \alpha_2 Disclosure\ Condition + \alpha_3 Disclosure\ Condition * Gender + \alpha_4 Annual\ Inc + \alpha_5 Years\ of\ Experience + \alpha_6 Currently\ Employed + \alpha_7 Self - Assessed\ Qualifications + \alpha_8 Risk\ Aversion + \varepsilon_1$
   2) $Application\ Likelihood = \beta_1 Disclosure\ Condition + \beta_2 Perceived\ Fairness + \beta_3 Annual\ Inc + \beta_4 Years\ of\ Experience + \beta_5 Currently\ Employed + \beta_6 Self - Assessed\ Qualifications + \beta_7 Risk\ Aversion + \varepsilon_2$

Table 1: Descriptive Statistics

	Full Sample	Male Participants	Female Participants	Difference p-value
	(1)	(2)	(3)	(4)
Number of Participants	570	284	286	
Female	50%	0%	100%	
BIPOC	23.37%	26.50%	20.28%	0.08*
LGBTQ	10.09%	6.36%	13.83%	0.00***
Currently Employed	77.78%	81.29%	74.29%	0.05**
Age	44.41	41.54	47.27	0.00***
	(14.46)	(14.49)	(13.88)	
Years of Work	22.25	20.44	24.04	0.00***
Experience	(13.77)	(13.92)	(13.39)	
Annual Income	49,258	53,203	45,340	0.01***
	(34,358)	(35,365)	(32,925)	
Dependent Variables				
Application Likelihood	0.77	0.76	0.78	0.51
	(0.21)	(0.20)	(0.21)	
Negotiation Likelihood	0.52	0.57	0.47	0.00***
	(0.37)	(0.36)	(0.36)	

Notes. This table presents average values of participant characteristics. We report standard deviations of continuous outcomes in parentheses. Column (1) pools together all participants. Columns (2) and (3) separately consider the characteristics of male and female participants, respectively. Column (4) presents *p*-values from difference-in-means tests that compare the characteristics of male versus female participants. In the post-experimental questionnaire, there were five respondents who did not indicate that they were male or female and were excluded from the sample. In our primary analysis, we excluded 25 additional participants who reported an unusually low *Application Likelihood*, or an *Application Likelihood* below seventeen percent. Our main results are qualitatively similar if outliers are included or excluded from the analysis.

Table 2: Test of H1a and H1b (Application Likelihood)

Panel A: Means for Application Likelihood[a] (Standard Deviation)

Disclosure Condition[b]	Narrow Pay Range[c]	Broad Pay Range[d]	No Pay Range[e]
Male	0.75	0.76	0.78
	(0.20)	(0.20)	(0.21)
	$n = 104$	$n = 88$	$n = 92$
Female	0.81	0.75	0.77
	(0.19)	(0.21)	(0.23)
	$n = 90$	$n = 97$	$n = 99$

Panel B1: Analysis of Variance Results (Disclosure Condition = Presence vs. Absence of Pay Range Info)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value[j]
Gender	0.01	1	0.01	0.24	0.62
Disclosure Condition[b]	0.01	1	0.01	0.24	0.62
Gender * Disclosure Condition	0.05	1	0.05	1.09	**0.15**
Annual Income[f]	1.05	1	1.05	25.02	0.00***
Years of Experience[g]	0.08	1	0.08	1.81	0.18
Currently Employed[h]	0.03	1	0.03	0.70	0.40
Self-Assessed Qualifications[i]	0.25	1	0.25	5.87	0.02**
Risk Aversion[j]	0.01	1	0.01	0.13	0.72
Error	22.85	547	0.04		

Panel B2: Analysis of Variance Results (Disclosure Condition = Narrow Range or Broad Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.01	1	0.01	0.14	0.71
Disclosure Condition	0.11	1	0.11	2.84	0.09
Gender * Disclosure Condition	0.17	1	0.17	4.36	**0.02****
Annual Income	0.82	1	0.82	21.69	0.00***
Years of Experience	0.04	1	0.04	1.06	0.30
Currently Employed	0.03	1	0.03	0.88	0.35
Self-Assessed Qualifications	0.28	1	0.28	7.33	0.01
Risk Aversion	0.02	1	0.02	0.61	0.44
Error	13.75	363	0.04		

Panel C1: Analysis of Variance Results (Disclosure Condition = Narrow Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.01	1	0.01	0.22	0.64
Disclosure Condition	0.01	1	0.01	0.16	0.69
Gender * Disclosure Condition	0.16	1	0.16	3.86	**0.03****
Annual Income	0.84	1	0.84	20.13	0.00***
Years of Experience	0.11	1	0.11	2.53	0.11
Currently Employed	0.09	1	0.09	2.05	0.15
Self-Assessed Qualifications	0.08	1	0.08	1.95	0.16
Risk Aversion	0.00	1	0.00	0.09	0.76
Error	15.28	367	0.04		

Panel C2: Analysis of Variance Results (Disclosure Condition = Broad Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.06	1	0.06	1.33	0.25
Disclosure Condition	0.05	1	0.05	1.15	0.28
Gender * Disclosure Condition	0.00	1	0.00	0.02	**0.45**
Annual Income	0.55	1	0.55	12.20	0.00***
Years of Experience	0.02	1	0.02	0.45	0.50
Currently Employed	0.00	1	0.00	0.03	0.86
Self-Assessed Qualifications	0.24	1	0.24	5.27	0.02**
Risk Aversion	0.00	1	0.00	0.00	0.95
Error	16.05	355	0.05		

Panel D: Simple Main Effects

	df	F-statistic	p-value
Effect of disclosure (narrow or broad range) for women	1	7.07	**0.00***
Effect of disclosure (narrow or broad range) for men	1	0.08	0.78
Effect of disclosure (narrow or no range) for women	1	2.73	**0.05**
Effect of disclosure (narrow or no range) for men	1	1.26	0.26

a. *Application Likelihood* is the participant's answer to the question "Assuming that you're currently looking for a project manager position, how likely would you be to apply to this job?" (0 – 100%)

b. We manipulate pay range type on a hypothetical project manager posting as either absent (*No Pay Range* condition) or present at one of two levels: relatively more broad pay range disclosure (*Broad Range* condition) or more narrow pay range disclosure (*Narrow Range* condition). We present the ANOVA results for H1a in panel B1 and the ANOVA results for H1b in panel B2. We present additional analysis in panels C1 and C2.

c. The *Narrow Pay Range* condition states "Salary is determined by a range of factors, including your skills, qualifications and experience. The salary range for this position has been established at $50,000 - $70,000." in the job posting.

d. The *Broad Pay Range* condition states "Salary is determined by a range of factors, including your skills, qualifications and experience. The salary range for this position has been established at $30,000 - $90,000." in the job posting.

e. The *No Pay Range* condition states "Salary is determined by a range of factors, including your skills, qualifications and experience." in the job posting.

f. *Annual Income* is the participant's answer to the question "Approximately how much is your annual income?" ($0 - $150,000+)

g. *Years of Experience* is the participant's answer to the question "How many years of work experience do you have?" (0 – 50+)

h. *Currently Employed* is a dummy variable that takes a value of 1 if the participant responded that they are currently employed and a value of 0 if the participant responded that they are currently unemployed.

i. *Self-Assessed Qualifications* is a variable calculated by averaging the participant's self-reported ratings (on a scale from 1 – 5) for how skilled they believe themselves to be at each of the bullet points in the job posting.

j. *Risk Aversion* is a variable calculated taking the participants' response about the extent to which they agree or disagree with the statement "I am risk-seeking" (1-5) and reverse coding the values.

k. Reported significance tests for directional predictions are one-tailed and are indicated by **bold** face.

Table 3: Additional Analysis for H1 (Perceived Fairness)

Panel A: Means for Perceived Fairness[a] (Standard Deviation)

Disclosure Condition	Narrow Pay Range	Broad Pay Range	No Pay Range
Male	3.91	4.25	4.07
	(0.95)	(0.73)	(0.89)
	$n = 104$	$n = 88$	$n = 91$
Female	4.12	3.89	4.04
	(0.88)	(0.91)	(0.88)
	$n = 90$	$n = 97$	$n = 99$

Panel B1: Analysis of Variance Results (Disclosure Condition = Presence or Absence of Pay Range Info)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value[b]
Gender	1.02	1	1.02	1.32	0.25
Disclosure Condition	0.01	1	0.01	0.02	0.89
Gender * Disclosure Condition	0.03	1	0.03	0.04	0.84
Annual Income	11.51	1	11.51	14.89	0.00***
Years of Experience	5.89	1	5.89	7.63	0.01***
Currently Employed	0.93	1	0.93	1.20	0.27
Self-Assessed Qualifications	0.15	1	0.15	0.19	0.66
Risk Aversion	0.71	1	0.71	0.92	0.34
Error	421.92	546	0.77		

Panel B2: Analysis of Variance Results (Disclosure Condition = Narrow Range or Broad Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	1.16	1	1.16	1.55	0.21
Disclosure Condition	0.19	1	0.19	0.26	0.61
Gender * Disclosure Condition	8.72	1	8.72	11.66	0.00***
Annual Income	9.38	1	9.38	12.53	0.00***
Years of Experience	2.66	1	2.66	3.56	0.06*
Currently Employed	0.76	1	0.76	1.01	0.32
Self-Assessed Qualifications	0.01	1	0.01	0.01	0.93
Risk Aversion	1.17	1	1.17	1.57	0.21
Error	271.62	363	0.75		

Panel C1: Analysis of Variance Results (Disclosure Condition = Narrow Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.03	1	0.03	0.04	0.84
Disclosure Condition	0.02	1	0.02	0.03	0.87
Gender * Disclosure Condition	1.81	1	1.81	2.30	0.13
Annual Income	10.28	1	10.28	13.07	0.00***
Years of Experience	9.79	1	9.79	12.45	0.00***
Currently Employed	1.74	1	1.74	2.22	0.14
Self-Assessed Qualifications	0.21	1	0.21	0.27	0.61
Risk Aversion	0.10	1	0.10	0.13	0.72
Error	287.90	366	0.79		

Panel C2: Analysis of Variance Results (Disclosure Condition = Broad Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	4.42	1	4.42	5.94	0.02**
Disclosure Condition	0.04	1	0.04	0.06	0.81
Gender * Disclosure Condition	3.02	1	3.02	4.05	0.04**
Annual Income	4.77	1	4.77	6.41	0.01**
Years of Experience	1.15	1	1.15	1.55	0.21
Currently Employed	0.17	1	0.17	0.23	0.63
Self-Assessed Qualifications	0.08	1	0.08	0.10	0.75
Risk Aversion	0.72	1	0.72	0.97	0.33
Error	263.56	354	0.74		

Panel D: Simple Main Effects

	df	F-statistic	p-value
Effect of disclosure (narrow or broad range) given female	1	4.16	0.04**
Effect of disclosure (narrow or broad range) given male	1	7.68	0.01***
Effect of disclosure (broad or no range) given female	1	1.63	0.20
Effect of disclosure (broad or no range) given male	1	2.45	0.12

a.   *See Table 2 for variable definitions.*
b.   Reported significance tests for directional predictions are one-tailed and are indicated by **bold** face.

Table 4: Additional Analysis for H1 (Ruling out Pay Certainty as an Explanation)

Panel A: Means for Pay Certainty[a] (Standard Deviation)

Disclosure Condition	Narrow Pay Range	Broad Pay Range	No Pay Range
Male	3.38	2.91	2.84
	(1.12)	(1.25)	(1.23)
	$n = 104$	$n = 87$	$n = 92$
Female	3.26	2.75	2.57
	(1.10)	(1.15)	(1.23)
	$n = 90$	$n = 97$	$n = 99$

Panel B1: Analysis of Variance Results (Disclosure Condition = Presence or Absence of Pay Range Info)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value[b]
Gender	2.39	1	2.39	1.74	0.19
Disclosure Condition	20.85	1	20.85	15.22	0.00***
Gender * Disclosure Condition	0.45	1	0.45	0.33	0.57
Annual Income	0.00	1	0.00	0.00	0.96
Years of Experience	1.42	1	1.42	1.03	0.31
Currently Employed	3.48	1	3.48	2.54	0.11
Self-Assessed Qualifications	5.08	1	5.08	3.71	0.05*
Risk Aversion	18.35	1	18.35	13.39	0.00***
Error	747.90	546	1.37		

Panel B2: Analysis of Variance Results (Disclosure Condition = Narrow Range or Broad Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.67	1	0.67	0.53	0.47
Disclosure Condition	23.54	1	23.54	18.35	0.00***
Gender * Disclosure Condition	0.29	1	0.29	0.22	0.64
Annual Income	2.24	1	2.24	1.74	0.19
Years of Experience	0.00	1	0.00	0.00	0.97
Currently Employed	6.19	1	6.19	4.83	0.03**
Self-Assessed Qualifications	6.85	1	6.85	5.34	0.02**
Risk Aversion	5.46	1	5.46	4.26	0.04**
Error	464.55	362	1.28		

Panel C1: Analysis of Variance Results (Disclosure Condition = Narrow Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	1.46	1	1.46	1.10	0.30
Disclosure Condition	40.12	1	40.12	30.06	0.00***
Gender * Disclosure Condition	1.10	1	1.10	0.83	0.36
Annual Income	0.13	1	0.13	0.10	0.76
Years of Experience	4.62	1	4.62	3.46	0.06*
Currently Employed	3.01	1	3.01	2.25	0.13
Self-Assessed Qualifications	0.64	1	0.64	0.48	0.50
Risk Aversion	13.56	1	13.56	10.16	0.00***
Error	489.77	367	1.33		

Panel C2: Analysis of Variance Results (Disclosure Condition = Broad Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	1.35	1	1.35	0.99	0.32
Disclosure Condition	2.03	1	2.03	1.49	0.22
Gender * Disclosure Condition	0.15	1	0.15	0.11	0.74
Annual Income	2.39	1	2.39	1.75	0.19
Years of Experience	0.77	1	0.77	0.57	0.45
Currently Employed	1.89	1	1.89	1.38	0.24
Self-Assessed Qualifications	9.57	1	9.57	7.01	0.01
Risk Aversion	13.19	1	13.19	9.67	0.00
Error	483.05	354	1.36		

a. *See Table 2 for variable definitions.*
b. Reported significance tests for directional predictions are one-tailed and are indicated by **bold** face.

Table 5: Additional Analysis for H1 (Ruling out Company Culture as an Explanation)

Panel A: Means for Company Culture[a] (Standard Deviation)

Disclosure Condition	Narrow Pay Range	Broad Pay Range	No Pay Range
Male	1.15	1.13	1.21
	(0.60)	(0.47)	(0.50)
	$n = 104$	$n = 88$	$n = 92$
Female	1.20	1.10	1.14
	(0.49)	(0.54)	(0.50)
	$n = 89$	$n = 97$	$n = 98$

Panel B1: Analysis of Variance Results (Disclosure Condition = Presence or Absence of Pay Range Info)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value[b]
Gender	0.06	1	0.06	0.22	0.64
Disclosure Condition	0.16	1	0.16	0.59	0.44
Gender * Disclosure Condition	0.23	1	0.23	0.83	0.36
Annual Income	0.35	1	0.35	1.29	0.26
Years of Experience	0.00	1	0.00	0.00	0.96
Currently Employed	0.48	1	0.48	1.73	0.19
Self-Assessed Qualifications	0.14	1	0.14	0.50	0.48
Risk Aversion	0.23	1	0.23	0.84	0.36
Error	149.85	545	0.27		

Panel B2: Analysis of Variance Results (Disclosure Condition = Narrow Range or Broad Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.08	1	0.08	0.29	0.59
Disclosure Condition	0.49	1	0.49	1.72	0.19
Gender * Disclosure Condition	0.13	1	0.13	0.45	0.50
Annual Income	0.39	1	0.39	1.36	0.24
Years of Experience	0.24	1	0.24	0.84	0.36
Currently Employed	1.01	1	1.01	3.55	0.06[*]
Self-Assessed Qualifications	0.00	1	0.00	0.00	0.94
Risk Aversion	0.21	1	0.21	0.74	0.39
Error	102.69	362	0.28		

Panel C1: Analysis of Variance Results (Disclosure Condition = Narrow Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.03	1	0.03	0.10	0.75
Disclosure Condition	0.00	1	0.00	0.00	0.97
Gender * Disclosure Condition	0.41	1	0.41	1.45	0.23
Annual Income	0.58	1	0.58	2.03	0.15
Years of Experience	0.34	1	0.34	1.20	0.27
Currently Employed	0.77	1	0.77	2.73	0.10[*]
Self-Assessed Qualifications	0.06	1	0.06	0.19	0.66
Risk Aversion	0.11	1	0.11	0.40	0.53
Error	103.41	365	0.28		

Panel C2: Analysis of Variance Results (Disclosure Condition = Broad Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.12	1	0.12	0.48	0.49
Disclosure Condition	0.39	1	0.39	1.50	0.22
Gender * Disclosure Condition	0.09	1	0.09	0.34	0.56
Annual Income	0.04	1	0.04	0.17	0.68
Years of Experience	0.02	1	0.02	0.07	0.79
Currently Employed	0.00	1	0.00	0.00	0.99
Self-Assessed Qualifications	0.21	1	0.21	0.82	0.37
Risk Aversion	0.08	1	0.08	0.32	0.57
Error	91.16	354	0.26		

a. *See Table 2 for variable definitions*.
b. Reported significance tests for directional predictions are one-tailed and are indicated by **bold** face.

Table 6: Test of H2a and H2b (Negotiation Likelihood)

Panel A: Means for Negotiation Likelihood[a] (Standard Deviation)

Disclosure Condition	Narrow Pay Range	Broad Pay Range	No Pay Range
Male	0.59	0.58	0.56
	(0.34)	(0.38)	(0.38)
	$n = 104$	$n = 88$	$n = 92$
Female	0.52	0.49	0.39
	(0.38)	(0.34)	(0.36)
	$n = 90$	$n = 97$	$n = 99$

Panel B1: Analysis of Variance Results (Disclosure Condition = Presence vs. Absence of Pay Range Info)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value[b]
Gender	0.63	1	0.63	5.59	0.02**
Disclosure Condition	0.54	1	0.54	4.80	0.03**
Gender * Disclosure Condition	0.20	1	0.20	1.80	**0.09***
Annual Income	3.91	1	3.91	34.43	0.00***
Years of Experience	0.02	1	0.02	0.14	0.71
Currently Employed	0.10	1	0.10	0.89	0.35
Self-Assessed Qualifications	0.75	1	0.75	6.63	0.01**
Risk Aversion	0.94	1	0.94	8.24	0.00***
Application Likelihood[c]	0.31	1	0.31	2.76	0.10*
Error	61.98	546	0.11		

Panel B2: Analysis of Variance Results (Disclosure Condition = Narrow Range or Broad Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.09	1	0.09	0.83	0.36
Disclosure Condition	0.05	1	0.05	0.45	0.50
Gender * Disclosure Condition	0.04	1	0.04	0.38	0.54
Annual Income	2.45	1	2.45	22.20	0.00***
Years of Experience	0.00	1	0.00	0.00	0.98
Currently Employed	0.18	1	0.18	1.60	0.21
Self-Assessed Qualifications	0.38	1	0.38	3.41	0.07*
Risk Aversion	0.66	1	0.66	5.97	0.02**
Application Likelihood	0.17	1	0.17	1.54	0.22
Error	39.97	362	0.11		

Panel C1: Analysis of Variance Results (Disclosure Condition = Narrow Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.28	1	0.28	2.47	0.12
Disclosure Condition	0.57	1	0.57	4.92	0.03**
Gender * Disclosure Condition	0.24	1	0.24	2.11	**0.07***
Annual Income	2.37	1	2.37	20.64	0.00***
Years of Experience	0.06	1	0.06	0.51	0.48
Currently Employed	0.21	1	0.21	1.87	0.17
Self-Assessed Qualifications	0.38	1	0.38	3.35	0.07*
Risk Aversion	0.76	1	0.76	6.62	0.01**
Application Likelihood	0.24	1	0.24	2.11	0.15
Error	42.09	366	0.12		

Panel C2: Analysis of Variance Results (Disclosure Condition = Broad Range or No Pay Range)

Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Gender	0.68	1	0.68	5.85	0.02**
Disclosure Condition	0.27	1	0.27	2.33	0.13
Gender * Disclosure Condition	0.09	1	0.09	0.80	**0.19**
Annual Income	2.75	1	2.75	23.47	0.00***
Years of Experience	0.00	1	0.00	0.04	0.85
Currently Employed	0.00	1	0.00	0.03	0.85
Self-Assessed Qualifications	0.89	1	0.89	7.57	0.01***
Risk Aversion	0.46	1	0.46	3.89	0.05**
Application Likelihood	0.30	1	0.30	2.56	0.11
Error	41.41	354	0.12		

Panel D: Simple Main Effects

	df	F-statistic	p-value
Effect of disclosure (any or none) for women	1	6.31	**0.01***
Effect of disclosure (any or none) for men	1	0.35	0.55
Effect of disclosure (narrow or none) for women	1	6.56	**0.01***
Effect of disclosure (narrow or none) for men	1	0.29	0.59

a. *Negotiation Likelihood* is the participant's answer to the question "How likely would you be to negotiate with the company over your annual salary? Keep in mind the company has offered you $60,000." (0 – 100%)

b. Reported significance tests for directional predictions are one-tailed and are indicated by **bold** face.

c. *Application Likelihood* is the participant's answer to the question "Assuming that you're currently looking for a project manager position, how likely would you be to apply to this job?" (0 – 100%). For all other variable definitions, see Table 2.