Ill-informed beliefs:

Misperceptions of the costs of unplanned parental absences

Erin Giffin, Jessica B. Hoel, and Prachi Jain*

December 19, 2024

Abstract

While most heterosexual couples say they want to divide childcare responsibilities evenly, they tend to allocate childcare unevenly. To explain this inconsistency, we focus on one possible channel, beliefs: workers anticipate (correctly or incorrectly) that employers penalize men and women differently for absences from work related to children. We conduct an online hiring experiment using framed "childcare shocks" with workers and employers. We elicit workers' beliefs about employer wage penalties for work absences and examine whether these beliefs align with employers' wage offers. Workers expect employers to penalize workers more harshly than employers do. Workers expect penalties to be worse for men than women, but employers penalize women more than men.

Keywords: parent penalty, gender wage gap, discrimination, experiment JEL Codes: J13, D1, C91

^{*}Giffin: Colby College, egiffin@colby.edu; Hoel: Colorado College, jhoel@coloradocollege.edu; Jain: Loyola Marymount University, prachi.jain@lmu.edu. This study was reviewed and approved by the IRBs at Colby College (2019-013), Colorado College, and Loyola Marymount College (2021 FA 24-R). We thank Martin Abel, Billur Aksoy, Mackenzie Alston, Emily Beam, Ian Chadd, Fulya Ersoy, Raissa Fabregas, Anne Fitzpatrick, Laura Gee, Neeraja Gupta, Jorgen Harris, Boon Han Koh, Shanthi Manian, Hope Michelson, Kirby Nielsen, Sarah Pearlman, Olga Stoddard, and seminar participants at Colorado College, Colorado State University, ESA North America, Harvard University, LACBEE, LACLABPUB, Loyola Marymount University, NABE, SABE, University of Chicago, and the University of Colorado - Boulder for helpful comments. We also thank Joanna Venator, Josh Goodman, Mike Makowsky, and #EconTwitter for help titling the paper. We are grateful for financial support from the Colby College Social Science Division and Colorado College Social Science Executive Committee and Chapman and Souchek Research Funds.

1 Introduction

Parents spend substantial time raising their children (Guryan et al., 2008). Most restructure their lives to manage these responsibilities. In surveys, both men and women say they want to share childcare, household, and labor market work equally with their partner (Gerson, 2010; Pedulla and Thébaud, 2015; Thébaud and Halcomb, 2019). However, in heterosexual families, women take on more childcare and other domestic responsibilities than men, even when both parents work full time (BLS, 2021) and wives are the higher wage-earner (Downs et al., 2023; Fry et al., 2023).

Why do parents say they want to share the work of raising children symmetrically but then arrange their lives asymmetrically? We propose one possible channel: workers may anticipate gender differences in employer penalties for missing work for childcare needs (and behave accordingly). If workers believe that employers will penalize men and women differently for missing work due to children, then workers may choose to optimally divide childcare responsibilities unevenly between parents with that assumed penalty in mind.

A laboratory experiment is necessary to examine whether parents expect gender differences in employer penalties for absences and whether those beliefs are correct. When a couple has a sick child in the real world, they consider many factors when deciding who should care for that child, including current wages, occupations, job flexibility, promotion possibilities, alternate childcare cost and availability, and household bargaining status. To isolate the channel of beliefs about gendered penalties for absences, all of these other factors must be held equal. However, it is not possible to exogenously assign these factors or effectively control for them in a study using observational data. Additionally, in the real world, labor market and household specialization behaviors based on disparate preferences, externally imposed cultural norms, actual employer discrimination, or anticipated employer discrimination are observationally equivalent.² Therefore, it is not possible to infer work-

¹In contrast, parents in same-sex households divide household responsibilities relatively equally (Solomon et al., 2005; Goldberg and Perry-Jenkins, 2007; Moberg, 2016; Brewster, 2017; Downs et al., 2023), suggesting that there are different dynamics in effect for different-sex households. Since we are interested in these dynamics, we focus on different-sex households in this paper.

²If men prefer to work and women prefer to spend time with children, then heterosexual households will

ers' beliefs about anticipated discrimination from observed behaviors. A tightly controlled laboratory experiment that carefully measures workers' beliefs is needed.

We conduct an online hiring experiment on Prolific. Participants are recruited from our population of interest, working-age individuals in the United States. In the experiment, participants are assigned to either the role of "worker" or "employer." Workers perform a simple real-effort task over several periods, but they may not be able work in some periods because the worker or their child may be "sick." If the worker is "sick," they cannot work that period. If the worker's "child is sick," they choose to either not work (to "take care of their sick child") or pay a fee to "hire a babysitter" and work that period. Including both sickness and childcare shocks introduces ambiguity in the reason for absences. This is designed to represent real-world conditions where employers do not always know why a worker is not at work and allows employers to differently attribute missed work to own versus child sickness based on worker gender.

We use these data from workers to generate truthful profiles to show employers. Employers are shown profiles of several workers and asked the highest dollar amount ("wage") they would be willing to pay to hire each of those workers. One worker is selected at random, and if the employer's wage offer is above a randomly selected threshold, the worker is "hired" (this is known as the Becker-DeGroot-Marschak method, a well-established incentive-compatible mechanism to measure the highest amount a participant is willing to pay for something). The worker is paid a bonus based on employers' wage offers, and the employer is paid based on how many periods their hired worker completed the task. Thus, employers are incentivized to offer higher wages to the workers they believe will work more by "hiring a babysitter"

choose for men to spend more time at work and women to spend more time with children. Buzard et al. (2023) show that there are gender differences in external demands on parents, as elementary school principals call mothers more often than fathers; this likely contributes to household specialization in work and family life. If employers discriminate against mothers, then heterosexual families will find themselves with uneven time allocations. If workers believe that employers will penalize men more harshly than women for absences from work, then heterosexual households will choose for men to go to work and women to stay home when children need care. The resulting patterns in the observational data due to preferences, cultural constraints, actual discrimination, and beliefs about discrimination are identical.

³Whether the worker and their child are both "healthy," the worker is "sick," or the worker's "child is sick" is determined by a random number generator at the start of each period.

⁴We used framed shocks related to children to activate social norms around childcare. Previous studies find framing to be an effective method of activating gender norms (Roncolato and Roomets, 2020; Görges, 2021).

when faced with a "sick child," and workers are incentivized to "hire a babysitter" if they anticipate employers will penalize them for missing work.

Experimental treatments vary whether workers' profiles include information about their work history. In the No Information condition, profiles include only workers' gender and some "filler" information (age and favorite color). This situation is comparable to real-world scenarios when a worker is being considered for a job, as the employer deciding whether to hire the worker does not know how often the parent will be absent from work. In the Information condition, profiles also include how many periods the worker did and did not work. This situation mimics real-world conditions in which the employer deciding whether to promote a worker knows about the worker's absence history. These conditions allow us to determine if employers treat men and women differently in anticipation of work absences (No Information) or differently after absences are observed (Information). Both employers and workers know the information participants in the other role had (would have) when making their decisions. That is, workers know what information would be included in their profile; employers are aware that workers know that employers would see these profiles when making their decisions.

We elicit workers' beliefs about employers' wage offers. Workers are shown profiles of other workers in their same experimental condition and are asked what they think employers' offered wage was for each of those workers. We compare these beliefs to how employers behaved in the experiment to examine the (in)accuracy of workers' beliefs.

We find that workers expect employers will treat male and female workers differently. Workers expect women will receive 19% lower wages than men when employers have no information about their work history. When employers know how often a worker is absent, workers expect that men will face steeper wage penalties than women for each absence. These beliefs could explain why women are more likely to take on childcare responsibilities. Workers believe mothers will be penalized at the outset for anticipated absences but will be punished less harshly than fathers when absent. If workers' beliefs are similar in the real world, it then makes sense for families to prioritize investment in men's jobs (because families expect men will be paid more than women at the outset) and male attendance at

work (because families expect men will be punished more than women for absences that could be attributed to childcare).

We find that workers' beliefs about employers' behaviors are incorrect in our setting. Employers do not offer different wages to men and women when they have no information about work history; the difference is statistically insignificant and qualitatively small, corresponding to a 1% difference in wages. When employers know how often workers are absent, they penalize absences but not as harshly as workers expect. Employers treat men and women differently but in the opposite direction than workers anticipate. Employers penalize women more than men when absent and reward the women who do not miss any work. Our results show that workers misjudge both the magnitude and direction of gender differences in employers' wage penalties.⁵ If this disconnect between workers' beliefs about discrimination and employers' discriminatory behavior is similar in the real world, then workers may be incorrectly optimizing. Our results suggest that, in addition to policies to reduce employers' discriminatory practices, policymakers may want to examine workers' beliefs about discrimination.

Our paper contributes to an extensive literature that seeks to disentangle *why* there are gender differences in labor market and household specialization decisions (e.g., Olivetti and Petrongolo, 2016; Blau and Kahn, 2017). Several possible explanations include disparate preferences, gender norms, and the biological considerations of pregnancy and breastfeeding (Andresen and Nix, 2022b).^{6,7} We focus on an understudied channel related to discrimination:

⁵Because attitudes about parenting and career may shift when children join the family, potentially differently for men and women, we stratify the sample and explore heterogeneity by parental status and gender. We find similar results across groups, both on workers' beliefs and employer behaviors. We find suggestive evidence that mothers and non-parents drive workers' incorrect beliefs when employers know about worker absences.

⁶The preferences argument supposes that women enjoy spending time with children more than men, while the gender norms argument suggests that couples default to traditional gender norms when deciding who should bear the cost of childcare. The evidence does not support differences due to the pregnancy, childbirth, and postpartum period that biological mothers experience (Kleven et al., 2019, 2021; Andresen and Nix, 2022b) nor comparative advantage within the household (Kleven et al., 2021; Andresen and Nix, 2022b) as causes of the child penalty.

⁷Labor market outcomes and gender specialization within the household could occur both before children arrive, as people make education and career choices in anticipation of parenthood, and after children arrive, as people adjust their labor market activity (such as hours worked, occupation, or firm).

workers' beliefs about employers' gendered discrimination against parents.^{8,9}

We also contribute to the rich literature that focuses on the effects of parents' long-term absences from the workforce on the gender gap in wages and policies that mitigate these effects, such as those improving families' access to childcare (Andresen and Nix, 2022a; Albanesi et al., 2023; Gruber et al., 2023; Kleven et al., 2024), flexible work arrangements (Bang, 2021; Arntz et al., 2022; Ciasullo and Uccioli, 2024), and parental leave at the time of birth (Hotz et al., 2018; Stearns, 2018; Farré and González, 2019; Gallen, 2019; Gallen et al., 2019; Patnaik, 2019; Andresen and Nix, 2022a; Albanesi et al., 2023; Frodermann et al., 2023; Bailey et al., 2024; Kleven et al., 2024). However, even when working parents have access to affordable and reliable childcare, unexpected short-term childcare disruptions still affect parents' labor supply: children get sick, and schools close unexpectedly due to weather. We contribute by focusing on such unexpected short-term childcare disruptions. Our experiment mimics inflexible work in which a parent has to hire expensive short-term childcare or take time off to manage unexpected short-term childcare interruptions. Such dynamics are particularly relevant for people who work jobs with less flexibility or with less access to informal childcare options, such as extended family, to fill in the childcare gap.

Finally, our design allows us to capture a parent penalty that the sociological and psychological literature has suggested but is less frequently discussed in the economics literature - a penalty against men that emerges when they are acting "against their gender norm" (Heilman and Wallen, 2010; Rudman and Mescher, 2013; Thébaud and Pedulla, 2016; Berdahl et al., 2018; Bosak et al., 2018; Chaney et al., 2019; Steffens et al., 2019; Thébaud and

⁸While Kuziemko et al. (2018) similarly study the accuracy of beliefs regarding parenthood, their focus differs from ours. They find that women in modern cohorts underestimate the employment costs of motherhood, which can explain why, pre-motherhood, women make human capital decisions assuming it will be easier to be a working mother than they find it to be after having children. In contrast, we focus on mothers' (and fathers') beliefs regarding employers' discrimination against parents, which can explain individuals' pre- and post-parenthood human capital and household specialization decisions.

⁹Our paper contributes to a growing experimental literature that studies the accuracy of gendered beliefs, including Bordalo et al. (2019); Coffman et al. (2021); Avery (2023); Bohren et al. (2023); Exley and Nielsen (2024).

¹⁰While Gunter (2023) and Price and Wasserman (2024) also focus on the effects of short-term interruptions on parents' labor supply using observational data, we instead focus on how worker beliefs about employer wage penalties could drive the gendered differences in labor supply documented in these papers. Buzard et al. (2023) focus on the gendered external demands for parent involvement, whereas we consider the supply side (workers' beliefs) in a context with demands on parents.

Pedulla, 2022; Parks-Stamm and Tharp, 2023).¹¹ In our context, this penalty against male workers could occur when they miss work in the *Information* condition.¹² Consistent with the literature in other disciplines, we find that workers expect that fathers will be penalized more than mothers when they miss work, potentially for childcare duties, but that employers actually punish mothers more than fathers.

The paper proceeds as follows: In Section 2 we describe the experimental design. Section 3 presents the results and Section 5 concludes.

2 Experimental design

In this section, we describe the experimental design. Detailed experimental scripts are provided in Appendix E.

The study is a two-sided stylized hiring experiment based on Bohren et al. (2023). We recruited two samples of participants on Prolific to complete either the worker experiment or the employer experiment. Our population of interest is working-age individuals in the United States, so our inclusion criteria were that participants needed to be age 25-55 and living in the U.S. We balanced the sample by gender, parental status, and gender by parental status. All data were collected in February 2022.

The worker experiment consists of two parts. In Part 1, workers perform a real-effort task and make "childcare outsourcing" decisions. In Part 2, we elicit workers' beliefs about employers.

Workers Part 1 (Work Task): In Part 1 of the worker experiment, workers face a

 $^{^{11}}$ This penalty is distinct from the motherhood penalty that has been established using audit or correspondence studies (e.g., Correll et al., 2007). This motherhood penalty is comparable to gendered wage penalties in our *No Information* condition.

¹²Alternatively, if male workers benefit when they miss work due to being seen as "good fathers" while women are perceived as "bad workers," this would materialize as a penalty against female workers in the *Information* condition.

¹³We intentionally recruit working-age individuals with and without children. If expectations about parent penalties are a factor in individuals' choices of whether and when to have children, it is relevant to explore beliefs among individuals who do not currently have children. Non-parents are also employers who may behave differently from parents who are employers. Thus, it is important to include both groups.

real-effort task in each of twelve periods. A worker is shown two 3×3 grids of Os and As and is asked to count the number of Os in each grid. If they do this correctly for at least one grid within 30 seconds, they are paid 0.20 for that period.

However, a worker may not be able to work in every period because they may experience a shock. At the start of each period a random number is drawn and the outcome determines if the worker is "sick," if the worker's "child is sick," or if both the worker and their child are "healthy." There is a 20% chance that the worker is "sick," which means they are not able to work that period. There is a 30% chance that the worker's "child is sick," and the worker must make a choice: not work that period to "take care of their sick child" or pay \$0.25 to "hire a babysitter" to be able to work. These shocks are mutually exclusive, so the chance that both the worker and their child are "healthy" is 50%. While these shocks are exogenous, we frame them using the language of sickness and childcare to encourage participants to think about how they would act if faced with this scenario in their lives and activate gender norms. 16,17

The purpose of including a chance that the worker is sick is to introduce ambiguity in the reason for absences. If a worker does not work in a period, it could be because they got sick and were not able to work or because their child got sick and they chose to stay home. We want this ambiguity because there is substantial evidence that discrimination is more likely

¹⁴To minimize (concerns about) shirking, we selected a real-effort task that is easy to complete. In practice there were 3 periods out of 3004 (0.1%) in which the worker did not count at least one grid correctly. We also selected a task that would be perceived as gender neutral (Halladay and Landsman, 2023). In our study, conditional on facing the task, there were no gender differences in completing the task correctly.

¹⁵In reality, parents may have other options for back-up care, like a co-parent or extended family. We choose to have a third-party actor (babysitter) to focus on individual decision-making and remove factors such as household bargaining or couple dynamics.

¹⁶Previous studies using laboratory experiments find similar framing to be an effective method of activating gender norms. For example, Roncolato and Roomets (2020) use a gender-loaded frame on the distribution of labor between care and market work ("Multiplication" vs. "Monitoring" Activity or "Employment" vs. "Care" Activity), and Görges (2021) uses a gender-loaded frame on household specialization choices ("Career" vs. "Family" or "A" vs. "B"). Both papers find that women and men are more likely to select the choice corresponding to their gender norms in the framed treatment.

¹⁷People's decisions in their personal lives to outsource childcare could depend on why their child is sick. We use a framed online experiment to avoid the messiness of real-world differences in what people consider "sick." We frame our instructions as neutrally as possible and identically to both workers and employers across treatments. We do not describe the illness beyond saying that someone must care for the sick child. While differing interpretations of what "sick" means could affect decisions in the experiment, it would only bias our results if those perceptions differ across treatment arms and the gender of the worker. Unfortunately, we do not have any information on how participants perceive sickness in our experiment.

to occur when there is ambiguous information that could potentially obscure discriminatory motives (Bertrand et al., 2005; Eyting, 2022; Barron et al., 2024).¹⁸ It also mimics real-world conditions in which employers do not always know why a worker missed work.

The worker's payment for Part 1 is \$0.20 times the number of periods they completed the real-effort task, minus \$0.25 times the number of times they hired a babysitter, plus employers' average wage offer for that worker (described in more detail below). The key is that because it costs more to hire a babysitter than the piece-rate, hiring a babysitter serves as a costly signal to employers. To maximize their payment, the worker should hire a babysitter if they believe this action will increase employers' wage offer.

Treatments: The data from Part 1 of the worker experiment are used to generate truthful profiles to show employers. Experimental treatments vary if workers' profiles include information about their work history. In the *No Information* condition, profiles do not include any information about work history. This means workers' profiles have only their gender and some "filler" information (age and favorite color). In the *Information* condition, profiles also include how many periods the worker did and did not work for eight randomly selected periods. Since absences can be due to either the worker being sick or the worker choosing not to outsource a childcare shock, this condition intentionally provides ambiguous information about the worker's likelihood of outsourcing a childcare shock. Workers know what information will be included in their profiles when they complete Part 1.

The employer experiment consists of two parts. In Part 1, employers complete a hiring

¹⁸An alternative design would have been to only allow absences due to the worker's child being sick and, in the *Information* condition, reveal the number of absences due to children's illness. We expect that discrimination or wage penalties against female workers would be reduced because this alternative condition captures more explicit discrimination and due to possible experimenter demand effects.

¹⁹We also ran a set of treatments in which the workers' gender was not revealed. These results are not central to our analysis and complicate the exposition of the main results, so we move their discussion to Appendix D.

²⁰We also ran a third information, *More Information*, in which employers were told how many periods the worker did and did not work as well as the reason for absences (how many of their absences were due to the worker being sick and how many were due to them staying home with their sick child). Since the employer knows the reason for absences, this provides a more precise (but not perfect) signal than the *Information* condition. Unfortunately, during the execution of this condition, the fraction of periods absent and spent in childcare were not balanced across genders in the worker profiles used in Part 1 of the employer experiment and in Part 2 of the worker experiment. As a result, we move the discussion of this treatment to Appendix C.

task so we can elicit their willingness to pay for workers. In Part 2, we elicit employers' beliefs about workers.

Employers Part 1 (Hiring Decisions): In the employer experiment, employers are told about the worker experiment. They are given a "counting Os" example to familiarize them with the real-effort task workers performed. They are told the details of the work task, meaning they know workers are Prolific participants and that the sickness and childcare shocks are randomly determined.

They are then told they have been assigned to the role of an "employer" and can potentially "hire" one of the workers. The employer is shown a total of 18 randomly selected worker profiles. The employer states the highest dollar amount ("wage") between \$0 and \$1 they are willing to pay to hire each of those workers. They are paid \$0.25 for each period the hired worker worked in four randomly selected periods. We assign payment using a Becker-DeGroot-Marschak mechanism. One of the employer's decisions is randomly selected to implement. A random number between \$0 and \$1 is drawn. If the employer's wage offer for that worker is above the random number, the employer "hires" the worker and the employer is paid \$0.25 times the number of worked periods minus the random number. If the employer's wage offer is below the random number, the employer does not hire the worker and does not receive any payment for Part 1. This means that to maximize their payment, the employer should be willing to pay more for workers they think are more likely to "hire a babysitter" when faced with a childcare shock.

The employer sees profiles from only one treatment condition, *No Information* or *Information*. Employers in the *Information* condition are provided with information about absences for eight periods. Then, if they hire a worker, they are paid based the remaining four periods they did not have information about. These conditions allow us to determine if employers treat men and women differently in anticipation of work absences (*No Information*) or differently after absences are observed (*Information*).

Workers and Employers Part 2 (Belief Elicitation): In Part 2 of both the worker and employer experiments, we elicit participants' beliefs. We elicit workers' beliefs about

employers' wage offers. Workers are shown six profiles of other workers in their same experimental condition and asked what they think employers' wage offer was for each of those workers. One of the profiles is randomly selected for payment, and the worker can earn up to \$2 for correctly answering that question.²¹

We elicit employers' beliefs about workers' absences. One profile is randomly selected for payment, and the employer can earn up to \$2 for correctly answering that question.

Survey: After completing the experiment, all participants fill out a survey that includes demographic questions as well as questions about their job, parental status and child-rearing, risk preferences, and gender norms.

2.1 Procedures

370 participants completed the worker experiment. They were paid \$5.16 on average and the average completion time was 24.5 minutes. 203 participants completed the employer experiment. They were paid an average of \$5.31 and the average completion time was 28.6 minutes.

2.2 Balance

Table 1 shows the demographic and personal characteristics summary statistics of employers and workers in the experiment by treatment group. Participants are balanced on gender and parental status by construction. In results available upon request, we examine whether treatment assignment is balanced across demographic and personal characteristics using OLS, probit and ordered probit regressions. Across all comparisons, we find that treatment assignment is balanced.

 $^{^{21}}$ For both workers' and employers' beliefs, we use the payment rule from Bohren et al. (2023), in which participants are paid based on their deviation from the correct answer. In our study, payment for the question selected for payment is (\$0.20 - deviation from the correct answer) \times 10. We tell participants that they will earn the largest payment from this part of the experiment by reporting their most accurate guess for each profile, and we provide them with an option to read the details of the payment rule at the end of the experiment.

Participants are, on average, 36.5 years old, more likely to be married than not, and are mostly heterosexual, white, college-educated, and working full-time. More than half of the participants have ever participated in hiring workers in their everyday lives. Where comparable data is available, we present descriptive statistics for individuals aged 25 to 55 from the American Community Survey (Column 5, Table 1). Note that we expect differences between our participants and the general population since we intentionally stratified our sample by gender and parental status and because we expect some sample selection as Prolific is an online website used to collect data. While differences between our participants and the general population affect the generalizability of our results, these differences do not impact internal validity as conditions are randomized across participants in our sample. Qualitatively, we find that our participants are younger, less likely to be married, more likely to be white, less likely to have a college (or more) education, and less likely to be working full-time than similarly aged respondents in the general population.

3 Results

3.1 Workers' beliefs regarding wages and Employers' wage offers

Our main outcomes of interest are workers' beliefs about the wages that employers offer to workers based on their profiles, as well as the wages that employers offer to various worker profiles.²² We report the averages (and raw differences) in worker wage beliefs and employer wage offers in Appendix Tables A1 and A2. Histograms of worker's wage beliefs and employers' wage offers are shown in Figures A1 and A3. The mean wage expected and offered by fraction of periods absent and worker gender in the *Information* condition are shown in Figures A2 and A4.

We focus on Tobit regressions of the wage that worker i believes that employers will offer worker w's profile or employer i offers worker w's profile while controlling for information shown on all worker profiles (profile worker w's age and favorite color), as well as the demo-

²²We pre-registered our study with AsPredicted.org at https://aspredicted.org/ky6em.pdf.

graphic characteristics of the individual i and cluster the standard errors at the individual i level.²³ We implement these regressions separately for the *No Information* (equation 1) and the *Information* conditions (equation 2).^{24,25}

The regression equation for the *No Information* condition is:

$$wage_{wi} = \beta_0 + \beta_1 Female_w + \beta_2 age_w + \sum_{x=1}^4 \beta_{3+x} color_w + \delta D_i + \epsilon_{wi}$$
 (1)

The regression equation for the *Information* condition is:²⁶

$$wage_{wi} = \beta_0 + \beta_1 Female_w + \beta_2 Fraction Periods Absent_w$$

$$+\beta_3 Female_w * Fraction Periods Absent_w$$

$$+\beta_4 age_w + \sum_{x=1}^4 \beta_{5+x} color_w + \delta D_i + \epsilon_{wi}$$
(2)

Table 2 shows workers' beliefs (column 1) and employers' behavior (column 2) in the *No Information* condition, as well as a seemingly unrelated regression comparison in column 3 that tests the equality of the coefficients across columns 1 and 2. The omitted category is wages offered to male workers, while the coefficient on "Female worker" shows the difference in wages expected by workers (column 1) or offered by employers (column 2) to women.

When employers have no information about workers' work history and know only workers'

 $^{^{23}}$ We include controls for the individual's age, gender, marital status, sexual orientation, parental status, whether they identify as white, whether they've had some college or more education, whether they are working full time, their risk preference, and their gender attitudes. Means and standard deviations of these control variables are shown in Table 1.

²⁴We deviate from our pre-registration by analyzing the wage data using Tobit regressions rather than OLS regressions. Regressions using OLS are shown in Appendix Tables A3 and A4 and are qualitatively similar, albeit with coefficients that are smaller in magnitude. We prefer to report the Tobit regressions because wage offers are censored and, by design, constrained to be between \$0 and \$1 in the study. Histograms of wage beliefs/offers are shown in Appendix Figures A1 and A3.

²⁵Regressions that do not include demographic controls are shown in Appendix Tables A5 and A6. Results are similar to those shown in the main text.

²⁶We use a specification that is linear in the fraction of periods absent for three reasons. First, employer earnings are linear in the number of periods their (possibly) hired worker works. Second, the raw data show that wages expected and offered are essentially linear in the fraction of periods absent (see Figures A2 and A4). Finally, a linear regression specification generates more statistical power than does a fully non-linear specification. Regression results using a nonlinear specification are similar and available on request.

gender, age, and favorite color, workers expect that employers will offer \$0.116 (19%) lower wages to female profiles than male profiles; this difference is statistically significant at the 1% level. Employers actually offer female profiles \$0.007 (1%) lower wages to female profiles than male profiles, a difference that is not statistically distinguishable from zero. The difference between the gender gap that workers expect (\$0.116) and the gender gap that employers impose (\$0.007) is statistically significant at the 1% level. We acknowledge that these results may suffer from experimental demand and/or social desirability effects as gender is most focal in this condition. It is interesting that we find a mismatch between workers' beliefs in this context; however, we place less weight on the result that employers do not treat female and male workers differently.

Table 3 shows results for the *Information* condition, in which employers additionally know what fraction of periods the workers did not work in their selected work history.²⁷ The omitted category is male workers who missed no work periods (i.e., their profiles show that they worked eight out of the randomly selected eight periods).

When employers have information about worker's work history, workers expect that employers will offer \$0.078 (8.7%) lower wages to female profiles that have not missed any periods of work than equivalent male profiles; this difference that is statistically significant at the 5% level. By contrast, employers actually offer \$0.053 (5.9%) higher wages to female profiles that have not missed any period of work than similar male profiles; this difference that is statistically significant at the 10% level. The difference in the gender gap that workers expect and employers impose is significant at the 1% level.

Workers expect employers to impose steep penalties for missing work: for each period of work missed, they expect that male workers will lose \$0.252 (1/8 of -\$2.019), or 28% of the wage offered to male workers who missed no work; they expect female workers will be penalized slightly less, \$0.221 per period of work missed (1/8 of -\$2.019+\$0.248), or 27% (25%) of the wage offered to female (male) workers who missed no work. The expected

²⁷Recall that workers participated in 12 periods in total. Employers were told how many of eight randomly chosen periods the workers worked; workers could have been absent due to a childcare shock or personal illness, but employers did not know the reason for the absence to create ambiguity about the reason for the absence.

gender difference in the wage penalty for absences is marginally significant (at the 10% level). By contrast, employers are not nearly as harsh as workers expect: for each period of work missed, employers penalize male workers \$0.107, or 12% of the wage offered to male workers who missed no work; also contrary to workers' beliefs, employers penalize female workers who miss work more than male workers, taking off \$0.123, or 12.9% (13.7%) per period they miss work compared to the wage offered to female (male) profiles that did not miss any work. The gender difference in the wage penalty for absences that employers impose is statistically significant at the 5% level but in the opposite direction to what workers expect. The differences in workers' beliefs about penalties for missing work and employers' realized penalties are all significant at the 1% level.

Workers' beliefs about the wages offered to men and women with different work histories, as well as employers' behaviors in the *Information* condition are shown graphically in Figure 1. Notice that the workers' beliefs lines (dashed) are much steeper than the employers' behaviors line (solid); this shows that workers expect much harsher penalties for absences than employers impose. Note also that relative intercepts and slopes of the male lines (black line) and the female lines (lighter grey lines) are in opposite orders for workers' beliefs and employers' behaviors. Workers expect that men who miss no work will be rewarded more than women for outsourcing all childcare shock (corresponding to the coefficient on "Female worker" in Table 3). Workers then expect that men who miss some work will be penalized more than women (corresponding to the coefficient on "Female worker x Fraction periods absent" in Table 3).

Table 1: Demographic summary statistics

	(1)	(2)	(3)	(4)	(5)
	Employers, No Info	Employers, Info	Workers, No Info	Workers, Info	ACS, 2022
	mean/sd	mean/sd	mean/sd	mean/sd	mean/sd
Age	36.66	37.76	35.68	36.73	40.10
	(8.59)	(8.43)	(8.12)	(8.18)	(8.93)
Male	0.54	0.55	0.48	0.51	0.50
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)
Married or partnered	0.49	09.0	0.63	0.65	0.57
	(0.50)	(0.49)	(0.48)	(0.48)	(0.50)
Heterosexual	0.84	0.78	0.78	0.81	
	(0.37)	(0.42)	(0.41)	(0.39)	
Parent	0.46	0.54	0.48	0.58	0.51
	(0.50)	(0.50)	(0.50)	(0.49)	(0.50)
White	0.81	0.78	0.88	98.0	0.63
	(0.39)	(0.42)	(0.33)	(0.35)	(0.48)
Some college or more education	0.87	0.86	0.88	0.90	0.62
	(0.34)	(0.35)	(0.33)	(0.30)	(0.49)
Working full time	0.58	0.64	09.0	99.0	0.75
	(0.50)	(0.48)	(0.49)	(0.48)	(0.43)
Ever been involved in hiring workers	0.58	0.54	0.48	0.55	
	(0.50)	(0.50)	(0.50)	(0.50)	
Quantitative risk score (out of 5)	2.33	2.61	2.43	2.59	
	(1.91)	(1.74)	(1.93)	(1.88)	
Gender conforming attitude	0.09	0.04	90.0-	-0.03	
	(1.81)	(2.15)	(1.95)	(1.79)	
Observations	116	87	176	194	1250476

be primarily done by the woman, or should be shared equally between them." The respondent's choices in the eight questions were condensed into a survey we simply ask whether respondents work full time, part time, or did not work. We define the respondent as having children in the ACS if they report any positive number of own children (biological or adopted) in the household; in our survey we simply ask the respondent if they have Notes: The table shows means and standard deviations of the demographic and personal characteristics used as control variables in the main regressions. Details are in the experimental protocols in Appendix E. Risk preference was measured by how many of five tokens the respondent chose to invest in a risky gamble. Gender attitudes were measured by Likert scale questions asking about eight gender coded tasks: "If a man and a woman in a heterosexual couple are facing these tasks, please indicate the extent to which you believe each task should be primarily done by the man, should single measure using principal component analysis. When possible, we compare our data to respondents aged 25 to 55 years from the 2022 American Community Survey (ACS). We define respondents in the ACS as working full time if they work 30 or more hours in the past week, whereas in our children (yes or no). We define the respondent in the ACS as married or partnered if they report being married, whereas in our survey we directly ask respondents about their sexual orientation and marital status including partnerships. While we provide an "other" option for gender, the ACS simply classifies respondents as male or female.

Table 2: Wages in the No Information condition: Workers' beliefs and Employers' offers

	(1)	(2)	(3)
	Worker wage beliefs	Employer wage offers	p-value $Test(1)=(2)$
Female worker	-0.116***	-0.007	0.006
	(0.036)	(0.017)	
Number of observations	1044	2071	
Number of individuals	174	116	
Mean male wage	0.606	0.716	

Notes: The first two columns of the table show Tobit regressions censored between 0 and 1 of worker wage beliefs and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs or making the wage offer. Standard errors are clustered at the individual level. * indicates p < 0.10, ** indicates p < 0.05, *** indicates p < 0.01. The last row of the table shows the mean male wage, which is the mean of the dependent variable for the omitted category (male workers). The third column shows tests of differences between coefficients using seemingly unrelated regressions.

Table 3: Wages in the *Information* condition: Workers' beliefs and Employers' offers

	(1)	(2)	(3)
	Worker wage beliefs	Employer wage offers	p-value $Test(1)=(2)$
Female worker	-0.078**	0.053*	0.004
	(0.037)	(0.028)	
Fraction periods absent	-2.019***	-0.853**	0.000
	(0.139)	(0.067)	
Female worker x Fraction periods absent	0.248*	-0.130**	0.008
	(0.128)	(0.065)	
Number of observations	1095	1543	
Number of individuals	188	87	
Mean male wage, absent=0	0.901	0.899	
Mean male absent	0.217	0.293	
Mean female absent	0.259	0.284	

Notes: The first two columns of the table show Tobit regressions censored between 0 and 1 of worker wage beliefs and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs or making the wage offer. Standard errors are clustered at the individual level. * indicates The row titled "Mean male absent" shows the mean fraction of periods absent for male workers, while the row titled "Mean female absent" shows the mean fraction of periods absent for female workers. The third column shows tests of differences between coefficients p<0.10, ** indicates p<0.05, *** indicates p<0.01. The omitted category is male workers with zero periods absent. The row titled "Mean male wage, absent=0" shows the mean male wage when no periods are absent; this is the mean of the dependent variable. using seemingly unrelated regressions.

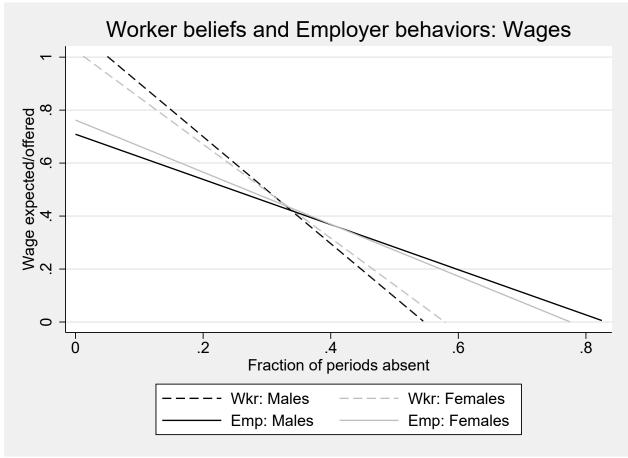


Figure 1: Line graph of wage results in the *Information* condition

Notes: This figure uses the empirical results from Table 3 to plot the corresponding predictions for the worker wage beliefs (dashed lines) and employer wage offers (solid lines) for male workers (black lines) and female workers (grev lines) in the *Information* condition.

3.2 Additional outcomes

We also have data on how workers behaved in the experiment (i.e., whether they decided to "hire a babysitter" when their child was "sick") and employers' beliefs about workers' behaviors. We believe that these results are less informative for several reasons.

First, the results have smaller sample sizes and are under-powered compared to the wage results presented in the main text. Second, it is unclear how to interpret these outcomes. While it was necessary for workers to make choices that could be truthfully presented to employers, the outsourcing decisions themselves are difficult to interpret. If workers only consider the financial incentives within the experiment (employers' wage offers, cost of "hiring a babysitter" and earnings per period of work), they should never "hire a babysitter" or outsource in the *No Information* condition. In practice, workers may choose to "hire a babysitter" due to other considerations. If our framing successfully activates social norms around illness, childcare, and work, we would expect to see that workers may hire babysitters due to their internalized preferences. In addition, workers may outsource if they receive intrinsic joy in completing the real-effort task (or want to avoid boredom).

We show the analyses of these data in Appendix B. We find that 51% of workers choose to "hire the babysitter" when faced with a childcare shock in the No Information condition. The fact that workers outsource in the No Information condition suggests that the framing may have successfully activated social norms and/or preferences around childcare. In the Information condition, workers choose to outsource 70% of childcare shocks. There are no statistically significant differences in outsourcing by gender in both the No Information and Information conditions; qualitatively, women are more likely to outsource than men in the No Information condition, but less likely to outsource in the Information condition. Employer beliefs are consistent with their wage offers in the *Information* conditions, less so in the No Information condition. Specifically, in the No Information condition, employers believe women are less likely to outsource childcare shocks than men, but the result is only marginally significant. In the *Information* condition, employers believe that women with no work absences are more likely to have outsourced a childcare shock, but that women with work absences are less likely to have outsourced a childcare shock than men with similar work histories. These beliefs are consistent with their wage offers and the empirical evidence that discrimination or differential treatment is more likely to occur in the presence of ambiguous information. We discuss possible interpretations of these results at length in the Appendix.

3.3 Heterogeneous results by gender and parental status

We examine whether there were heterogeneous worker beliefs or employer behaviors by gender, parental status, and gender by parental status. Non-parents are a relevant population to examine in their role as employers because they may behave differently towards workers who are parents than employers who are also parents. For non-parent workers, expectations about wage penalties related to childcare could influence subsequent fertility, household, and labor market decisions. Women do not accurately anticipate the effect motherhood will have on their careers (Kuziemko et al., 2018), so the beliefs of non-parents may differ from those of parents. Attitudes about parenting and career shift when children join the family, differently for men and women (Grinza et al., 2022); after becoming mothers, women are more likely to say that households should divide responsibilities according to traditional gender norms. These changing attitudes are likely influenced by workplace constraints (Pedulla and Thébaud, 2015; Thébaud and Halcomb, 2019) and the lived experience of negotiating with one's co-parent, one's employer, and one's co-parent's employer. We balanced our sample by gender, parental status, and gender by parental status to examine patterns by these sub-groups. Appendix Tables A7-A10 and Figures A5-A8 show worker beliefs and employer behaviors by sub-group. We focus on the qualitative patterns because sample sizes are smaller in each sub-group and thus the analyses less well powered.

Table A7 and Figure A5 show workers' beliefs by sub-group in the *No Information* condition. Across the board, workers of different demographic types expect female workers to be paid less than male workers when employers do not know anything about the worker's work history. Qualitatively, moms expect the largest gender gap in wages, while non-dads expect the smallest gap.

Table A8 and Figure A6 show workers' beliefs by sub-group in the *Information* condition. Here, we see important differences across groups in their beliefs about gender differences. The coefficients on "Female worker" show beliefs about gender differences in wages for workers who miss no work, while the coefficients on "Female worker x Fraction periods absent" show beliefs about gender differences in penalties for absences. Most salient, dads and moms have substantially different patterns of beliefs. Dads' beliefs are most in line with what employers actually do (that is, reward female workers who miss no work with higher wages than men who miss no work and impose steeper penalties for women who do miss work than comparable men), while moms' beliefs (that is, penalize women who miss no work more

than men and penalize male workers more harshly for absences than female workers) are the exact opposite pattern to what dads believe, and employers actually do. Women who are not moms hold beliefs similar to those of moms, though not as strongly. Men who are not dads have beliefs similar in pattern to those of women (both moms and non-parent women), but not as strongly as either female group.

Employers of all types do not offer statistically significantly smaller wages to female workers than males when they have no information about work history, as seen in Table A9 and Figure A7. Employers who are dads penalize female workers the most, while employers who are female non-parents pay female workers slightly more than male workers; none of the gender differences are statistically significant.

When employers do have information about workers' histories, we find differences across employers from different demographic groups. Specifically, in Table A10 and Figure A8, we see that the patterns seen in the full sample (reward female workers who miss no work, but then penalizing female workers more harshly for absences) are driven by employers who are parents. Employers who are moments behave very similarly to employers who are dads. By contrast, employers who are not parents do not treat female workers who have missed no work differently than similar male workers, nor do they penalize the genders differently for absences; all coefficients are qualitatively small in magnitude compared to those of parents.

4 Discussion

To summarize our findings, when employers do not know how often workers are absent, workers expect employers to offer lower wages to women. Instead, employers pay male and female workers similarly. This situation is comparable to real-world scenarios when a new baby is born or a worker is newly hired at a firm, as the employers deciding whether to hire or promote the worker do not know how often the parent will be absent from work.

When employers know how often workers are absent, but not why, workers expect that men who miss no work will receive a bonus but then face steeper penalties than women. Employers instead reward high-performing women who defy gender expectations by not missing work at all but also penalize women more harshly than men when they are absent from work. Our employer beliefs (Table B12) are consistent with their wage offers, as employers are more likely to believe that women's lack of work absences is due to outsourcing childcare if they see zero work absences and more likely to attribute women's work absences to children than men with similar work histories. This situation is comparable to real-world scenarios when employers decide whether to promote workers they interact with and can observe how often, but not why, the parent is absent from work. Employer punishments for absences are not as severe as workers expect for either gender.

Employers' relative treatment of men and women in the *Information* condition is similar to what Bohren et al. (2019) find: the highest-performing women are rewarded in a context with subjective criteria. Like Bohren et al. (2019), belief-based discrimination with incorrect, biased beliefs could explain our results.²⁸

Our results could also be interpreted through the lens of different types of discrimination. The No Information condition measures (accurate or inaccurate) statistical discrimination, as employers use their average beliefs about periods worked by gender to determine wages for an individual. In the Information condition, implicit discrimination is possible. Implicit discrimination occurs when employers say they believe productivity is equal across groups but discriminate against an individual when information is ambiguous (Bertrand et al. (2005); while papers sometimes use different terms to describe this behavior, our definition is consistent with Eyting (2022)). Another interpretation of implicit discrimination is that an employer may not (want to) see themself as someone who discriminates, so they use ambiguous information as a cover to (knowingly or unknowingly) rationalize or justify discriminatory behavior. This cover has also been described as moral wiggle room (Dana et al., 2007; Epley and Gilovich, 2016; Thaler, 2021, 2024). In our Information condition, a

²⁸Bohren et al. (2019) formulate a dynamic model of discrimination and test the predictions using a field experiment on an online platform in which other users evaluate content posted by users. When judgements of quality are more subjective, they find that women's posts are favored over men's following a sequence of positive evaluations, reversing the discrimination against posts by female accounts with no prior evaluations. This behavior is consistent with belief-based discrimination with incorrect, biased beliefs. This scenario is most comparable to the women with no work absences in our *Information* condition.

worker's absence provides ambiguous information because the work absence is not directly attributable to a childcare shock that was not outsourced. As a result, employer behavior in the *Information* condition captures implicit discrimination, while worker beliefs capture anticipated implicit discrimination.

Through this lens, our findings suggest that workers expect statistical discrimination against female workers. However, employers do not statistically discriminate when no information about the worker's work history is provided. Workers additionally expect that employers will implicitly discriminate against male workers when employers are presented with ambiguous information about the number of periods in which they missed work, but employers actually implicitly discriminate against women.

5 Conclusion

Young Americans say that if they have children, they would like to split household work evenly with their partners (Gerson, 2010; Pedulla and Thébaud, 2015; Thébaud and Halcomb, 2019), but when they become parents, moms in different-sex couples end up with a disproportionate responsibility for childcare (Downs et al., 2023; Fry et al., 2023). Explanations such as gendered preferences, the biological considerations of pregnancy and breast-feeding, and opportunity costs have previously been considered and rejected (e.g., Andresen and Nix, 2022b).

This paper studies a different explanation: workers expect employers to penalize men and women differently for missing work for childcare needs. We conduct a stylized online hiring experiment with framed childcare shocks to elicit workers' beliefs about employer penalties for work absences and test how these beliefs align with employers' behavior in the experiment. An experiment is necessary because, by the time a childcare need arises in the real world, parents have already made a series of decisions that affect labor market and household work decisions, including decisions related to education, occupation, sorting into family-friendly firms with flexible, remote, or part-time work, and childcare arrangements (for example, in considering the trade-offs between reliability, flexibility, and cost). This paper uses a framed

experiment to attempt to isolate one decision parents must make about childcare: what to do when children are unexpectedly at home, for example, because they are sick or schools are closed. Our stylized and framed online experiment does not capture many aspects of real-life childcare shocks. However, it is necessary to isolate the channel of interest: how workers anticipate employers penalizing women and men differently for work absences due to childcare when *all* other differences between workers are held constant.

We find that workers misjudge both the extent and direction of employer discrimination. Workers believe employer penalties are much larger than what employers actually impose. Workers believe men will be punished more harshly than women for absences, but employers actually penaltize women more than men.

Taken together, these results could explain why women are more likely to take on childcare responsibilities, even when both parents in different-sex households work full time. Workers expect that female workers will be penalized at the outset of their jobs for potential childcare shocks, when the employer has no information about work history. Once employers have information about work history, workers believe that the penalties for missing work are steep and harsher for men than women. If workers' beliefs in our experiment correlate with their beliefs in the labor market, it then makes sense for families to prioritize investment in men's jobs (because men expect to be paid more than women at the outset) and male attendance at work (because men are expected to be punished more than women for absences that could be attributed to childcare). While our experiment intentionally abstracts away from other real-world considerations such as gender differences in the worker's job and occupation, worker beliefs are consistent with evidence that mothers receive a "motherhood penalty" in expectation of having to miss work for childcare shocks (Budig and England, 2001; Anderson et al., 2002; Correll et al., 2007), and that fathers also fear a separate "fatherhood penalty" if they miss work to take care of their children (Rege and Solli, 2013; Rudman and Mescher, 2013; Dahl et al., 2014; Thébaud and Pedulla, 2016; Berdahl et al., 2018; Bosak et al., 2018; Tô, 2018; Chaney et al., 2019; Patnaik, 2019; Steffens et al., 2019; Thébaud and Pedulla, 2022; Parks-Stamm and Tharp, 2023).

Our paper contributes to the literature by studying two different parent penalties: in

anticipation of and after observing work absences that could result from childcare shocks. The results suggest that the parent penalties are complementary and could explain why women in different-sex households are more likely to take on childcare responsibilities. Future work should study such dynamics in real-world settings.

However, the patterns that workers expect differ from what employers actually do. Employers pay women similarly than men when they have no information about their work history. They also are more forgiving about absences than workers expect and, in fact, penalize women more than men for missing work. This result is consistent with evidence that wages are closer to parity early on in women's and men's careers before they have children and that the gender wage gap opens up when children join the family (Angelov et al., 2016; Kleven et al., 2019; Gallen, 2023).

If employers' behavior and workers' gendered beliefs in our experiment capture real-world dynamics, then the mismatch between workers' beliefs and employers' behavior suggests that workers may not be maximizing total family income. Instead, in a world where employers cannot know whether work absences are due to childcare shocks or because the worker is ill, workers should consider adjusting household labor so that dads handle a larger share of childcare absences. Policies that correct inaccurate beliefs (similar to Jensen (2010), Bursztyn et al. (2020), and Bohren et al. (2023)) could reduce gender gaps in labor force participation and wages.

The external validity of our results depend on several factors. While there is evidence that framed experiments can activate gender norms (Roncolato and Roomets, 2020; Görges, 2021), our interpretation of our results rely on the framing triggering social norms around childcare, illness, and working. Our experiment includes relatively low stakes and focuses on monetary penalties; in the real-world, childcare decisions often involve higher monetary stakes and non-pecuniary work penalties (such as co-worker dissatisfaction), as well as intrahousehold frictions as spouses decide how to take care of a sick child. Further, as with most experiments studying discrimination, we cannot rule out the possibilities of experimenter demand effects or social desirability bias that especially influence the employers' behaviors in the *No Information* condition. Despite these caveats, we believe that the design of the

framed online experiment was necessary to understand the role of worker beliefs about anticipated discrimination. With our online experiment, we can abstract away from endogenous real-world factors that parents consider when deciding who should care for a child, including current wages, occupations, job flexibility, promotion possibilities, alternate childcare cost and availability, and household bargaining status. As a result, our experiment is able to separately identify the role of worker beliefs about anticipated discrimination from disparate preferences, externally imposed cultural norms, and actual employer discrimination that affect real-world labor market and childcare decisions.

Future studies could build on our results by examining these beliefs in real-world decisions about the labor market and household decisions. The decisions people face around children and work are much more numerous and complicated than the stylized example studied in this paper. Future work could examine how the mechanism of anticipated employer discrimination may affect other choices, including human capital investment, occupational sorting, locating near or far from extended family, household bargaining around childcare, and deciding whether to have children at all.

References

- Albanesi, S., C. Olivetti, and B. Petrongolo (2023). Families, labor markets, and policy. In *Handbook of the Economics of the Family*, Volume 1, pp. 255–326. Elsevier.
- Anderson, D. J., M. Binder, and K. Krause (2002). The Motherhood Wage Penalty: Which Mothers Pay It and Why? *American Economic Review* 92(2), 354–358.
- Andresen, M. E. and E. Nix (2022a). Can the child penalty be reduced? Evaluating multiple policy interventions. *Working Paper*.
- Andresen, M. E. and E. Nix (2022b). What Causes the Child Penalty? Evidence from Adopting and Same-Sex Couples. *Journal of Labor Economics* 40(4), 971–1004.
- Angelov, N., P. Johansson, and E. Lindahl (2016). Parenthood and the Gender Gap in Pay. Journal of Labor Economics 34(3), 545–579.
- Arntz, M., S. B. Yahmed, and F. Berlingieri (2022). Working from home, hours worked and wages: Heterogeneity by gender and parenthood. *Labour Economics* 76, 102169.
- Avery, M. (2023). The Self-Limiting Dynamics of Affirmative Action. Working Paper.
- Bailey, M. J., T. S. Byker, E. Patel, and S. Ramnath (2024). The Long-Run Effects of California's Paid Family Leave Act on Women's Careers and Childbearing: New Evidence from a Regression Discontinuity Design and U.S. Tax Data. *American Economic Journal: Economic Policy (forthcoming)*.
- Bang, M. (2021). Job Flexibility and Household Labor Supply: Understanding Gender Gaps and the Child Wage Penalty. *Working Paper*.
- Barron, K., R. Ditlmann, S. Gehrig, and S. Schweighofer-Kodritsch (2024). Explicit and Implicit Belief-Based Gender Discrimination: A Hiring Experiment. *Management Science*.
- Berdahl, J. L., M. Cooper, P. Glick, R. W. Livingston, and J. C. Williams (2018). Work as a Masculinity Contest. *Journal of Social Issues* 74(3), 422–448.

- Bertrand, M., D. Chugh, and S. Mullainathan (2005). Implicit Discrimination. *American Economic Review* 95(2), 94–98.
- Blau, F. D. and L. M. Kahn (2017). The Gender Wage Gap: Extent, Trends, and Explanations. *Journal of Economic Literature* 55(3), 789–865.
- BLS (2021). Bureau of Labor Statistics, U.S. Department of Labor, American Time Use Survey 2021 Results.
- Bohren, J. A., K. Haggag, A. Imas, and D. G. Pope (2023). Inaccurate Statistical Discrimination: An Identification Problem. *Review of Economics and Statistics*, 1–45.
- Bohren, J. A., A. Imas, and M. Rosenberg (2019). The Dynamics of Discrimination: Theory and Evidence. *American Economic Review* 109(10), 3395–3436.
- Bordalo, P., K. Coffman, N. Gennaioli, and A. Shleifer (2019). Beliefs about gender. *American Economic Review* 109(3), 739–773.
- Bosak, J., C. Kulich, L. Rudman, and M. Kinahan (2018). Be an advocate for others, unless you are a man: Backlash against gender-atypical male job candidates. *Psychology of Men & Masculinity* 19(1), 156.
- Brewster, M. E. (2017). Lesbian women and household labor division: A systematic review of scholarly research from 2000 to 2015. *Journal of Lesbian Studies* 21(1), 47–69.
- Budig, M. J. and P. England (2001). The Wage Penalty for Motherhood. *American Sociological Review* 66(2), 204–225.
- Bursztyn, L., A. L. González, and D. Yanagizawa-Drott (2020). Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia. *American Economic Review* 110(10), 2997–3029.
- Buzard, K., L. Gee, and O. Stoddard (2023). Who You Gonna Call? Gender Inequality in External Demands for Parental Involvement. *Working Paper*.

- Chaney, K. E., L. A. Rudman, J. C. Fetterolf, and D. M. Young (2019). Paying a Price for Domestic Equality: Risk Factors for Backlash Against Nontraditional Husbands. *Gender Issues* 36, 3–22.
- Ciasullo, L. and M. Uccioli (2024). What Works for Working Mothers? A Regular Schedule Lowers the Child Penalty. *Working Paper*.
- Coffman, K. B., C. L. Exley, and M. Niederle (2021). The role of beliefs in driving gender discrimination. *Management Science* 67(6), 3551–3569.
- Correll, S. J., S. Benard, and I. Paik (2007). Getting a Job: Is There a Motherhood Penalty? American Journal of Sociology 112(5), 1297–1338.
- Dahl, G. B., K. V. Løken, and M. Mogstad (2014). Peer Effects in Program Participation.

 American Economic Review 104(7), 2049–2074.
- Dana, J., R. A. Weber, and J. X. Kuang (2007). Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness. *Economic Theory 33*, 67–80.
- Downs, B., L. Foster, R. Nesbit, and D. H. Sandler (2023). Same-Sex Couples and the Child Earnings Penalty. *Working Paper*.
- Epley, N. and T. Gilovich (2016). The Mechanics of Motivated Reasoning. *Journal of Economic Perspectives* 30(3), 133–140.
- Exley, C. L. and K. Nielsen (2024). The gender gap in confidence: Expected but not accounted for. *American Economic Review* 114(3), 851–885.
- Eyting, M. (2022). Why Do We Discriminate? The Role of Motivated Reasoning. Working Paper.
- Farré, L. and L. González (2019). Does paternity leave reduce fertility? *Journal of Public Economics* 172, 52–66.
- Frodermann, C., K. Wrohlich, and A. Zucco (2023). Parental Leave Policy and Long-run Earnings of Mothers. *Labour Economics* 80, 102296.

- Fry, R., C. Aragão, K. Hurst, and K. Parker (2023). In a Growing Share of US Marriages, Husbands and Wives Earn About the Same. Pew Research Center.
- Gallen, Y. (2019). The effect of parental leave extensions on firms and coworkers. *Working Paper*.
- Gallen, Y. (2023). Motherhood and the Gender Productivity Gap. *Journal of the European Economic Association*, jvad064.
- Gallen, Y., R. V. Lesner, and R. Vejlin (2019). The labor market gender gap in Denmark: Sorting out the past 30 years. *Labour Economics* 56, 58–67.
- Gerson, K. (2010). The Unfinished Revolution: Coming of Age in a New Era of Gender, Work, and Family. Oxford University Press.
- Goldberg, A. E. and M. Perry-Jenkins (2007). The division of labor and perceptions of parental roles: Lesbian couples across the transition to parenthood. *Journal of Social and Personal Relationships* 24(2), 297–318.
- Görges, L. (2021). Of housewives and feminists: Gender norms and intra-household labour division. *Labour Economics* 72, 102044.
- Grinza, E., F. Devicienti, M. Rossi, and D. Vannoni (2022). How Entry into Parenthood Shapes Gender Role Attitudes: New Evidence from the UK. Feminist Economics 28(4), 194–220.
- Gruber, J., T. Kosonen, and K. Huttunen (2023). Paying Moms to Stay Home: Short and Long Run Effects on Parents and Children. *Working Paper*.
- Gunter, S. R. (2023). Effects of Temporary School Closures on Parental Labor Supply: Evidence from Large U.S. School Districts, 2015-16 to 2018-19. Working Paper.
- Guryan, J., E. Hurst, and M. Kearney (2008). Parental Education and Parental Time with Children. *Journal of Economic Perspectives* 22(3), 23–46.
- Halladay, B. and R. Landsman (2023). Gender Perceptions of Common Real-Effort Tasks.

 Working Paper.

- Heilman, M. E. and A. S. Wallen (2010). Wimpy and undeserving of respect: Penalties for men's gender-inconsistent success. *Journal of Experimental Social Psychology* 46(4), 664–667.
- Hotz, V. J., P. Johansson, and A. Karimi (2018). Parenthood, Family Friendly Workplaces, and the Gender Gaps in Early Work Careers. *Working Paper*.
- Jensen, R. (2010). The (Perceived) Returns to Education and the Demand for Schooling. The Quarterly Journal of Economics 125(2), 515–548.
- Kleven, H., C. Landais, J. Posch, A. Steinhauer, and J. Zweimüller (2024). Do Family Policies Reduce Gender Inequality? Evidence from 60 Years of Policy Experimentation.

 American Economic Journal: Economic Policy 16(2), 110–149.
- Kleven, H., C. Landais, and J. E. Søgaard (2019). Children and Gender Inequality: Evidence from Denmark. *American Economic Journal: Applied Economics* 11(4), 181–209.
- Kleven, H., C. Landais, and J. E. Søgaard (2021). Does Biology Drive Child Penalties? Evidence from Biological and Adoptive Families. *American Economic Review: Insights* 3(2), 183–98.
- Kuziemko, I., J. Pan, J. Shen, and E. Washington (2018). The 'Mommy Effect': Do Women Anticipate the Employment Effects of Motherhood? *Working Paper*.
- Moberg, Y. (2016). Does the gender composition in couples matter for the division of labor after childbirth? Working Paper.
- Olivetti, C. and B. Petrongolo (2016). The Evolution of Gender Gaps in Industrialized Countries. *Annual Review of Economics* 8, 405–434.
- Parks-Stamm, E. J. and D. T. Tharp (2023). But what did they do on leave? Differing evaluations of men and women's completion of work tasks on parental leave. Journal of Occupational and Organizational Psychology.
- Patnaik, A. (2019). Reserving Time for Daddy: The Consequences of Fathers' Quotas. Journal of Labor Economics 37(4), 1009–1059.

- Pedulla, D. S. and S. Thébaud (2015). Can We Finish the Revolution? Gender, Work-Family Ideals, and Institutional Constraint. *American Sociological Review* 80(1), 116–139.
- Price, B. M. and M. Wasserman (2024). The Summer Drop in Female Employment. *Review of Economics and Statistics (forthcoming)*.
- Rege, M. and I. F. Solli (2013). The Impact of Paternity Leave on Fathers' Future Earnings.

 Demography 50(6), 2255–2277.
- Roncolato, L. and A. Roomets (2020). Who will change the "baby?" Examining the power of gender in an experimental setting. *Review of Economics of the Household* 18(3), 823–852.
- Rudman, L. A. and K. Mescher (2013). Penalizing Men Who Request a Family Leave: Is Flexibility Stigma a Femininity Stigma? *Journal of Social Issues* 69(2), 322–340.
- Solomon, S. E., E. D. Rothblum, and K. F. Balsam (2005). Money, Housework, Sex, and Conflict: Same-Sex Couples in Civil unions, Those Not in Civil Unions, and Heterosexual Married Siblings. Sex Roles: A Journal of Research 52(9-10), 561–575.
- Stearns, J. (2018). The Long-Run Effects of Wage Replacement and Job Protection: Evidence from Two Maternity Leave Reforms in Great Britain. *Working Paper*.
- Steffens, M. C., S. Preuß, and C. Scheifele (2019). Work-related impression formation: Reviewing parenthood penalties and investigating a "fatherhood penalty" for single fathers. Basic and Applied Social Psychology 41(5), 287–304.
- Thaler, M. (2021). Gender differences in motivated reasoning. *Journal of Economic Behavior & Organization* 191, 501–518.
- Thaler, M. (2024). The Fake News Effect: Experimentally Identifying Motivated Reasoning Using Trust in News. *American Economic Journal: Microeconomics* 16(2), 1–38.
- Thébaud, S. and L. Halcomb (2019). One step forward? Advances and setbacks on the path toward gender equality in families and work. *Sociology Compass* 13(6), e12700.

- Thébaud, S. and D. S. Pedulla (2016). Masculinity and the Stalled Revolution: How Gender Ideologies and Norms Shape Young Men's Responses to Work–Family Policies. *Gender & Society* 30(4), 590–617.
- Thébaud, S. and D. S. Pedulla (2022). When Do Work-Family Policies Work? Unpacking the Effects of Stigma and Financial Costs for Men and Women. Work and Occupations 49(2), 229–263.
- Tô, L. T. (2018). The Signaling Role of Parental Leave. Working Paper.

A For Online Publication - Additional Tables

A.1 Summary statistics

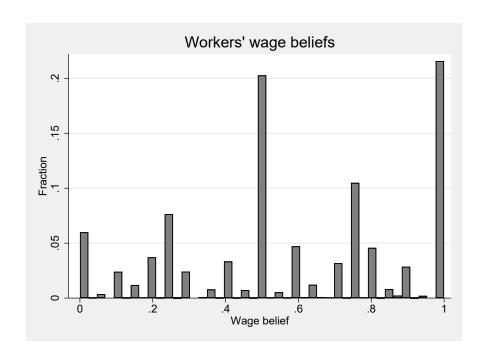
A.1.1 Wages

Table A1: Worker wage beliefs

	Male workers	Female workers	Difference
No information	0.61	0.52	0.08***
	(0.33)	(0.34)	(3.49)
Information	0.66	0.58	0.08***
	(0.30)	(0.31)	(4.46)
Difference	.05***	.06**	0
	(3.28)	(2.35)	(12)

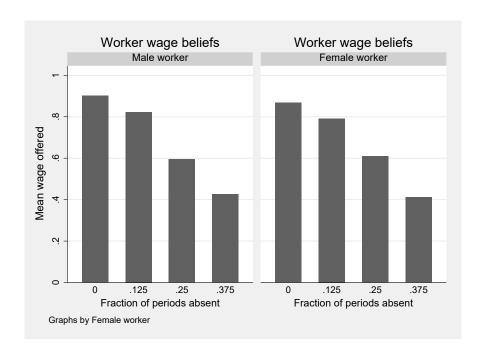
Notes: The central part of the table shown means and standard deviations (in parentheses) for male and female workers by condition, respectively. The last column shows the difference in means between male and female workers within each condition, along with the t-test of the difference (in parentheses). The last row of the table shows the difference in means between conditions within each gender, along with the t-test of the difference (in parentheses). The far bottom right cell shows the difference-in-differences (between genders and between conditions, along with the t-test of the difference-in-differences (in parentheses). For the last row and last column, * indicates p < 0.10, ** indicates p < 0.05, *** indicates p < 0.01.

Figure A1: Workers' wage beliefs



Notes: The figure shows a histogram of workers' wage beliefs in the $No\ Information$ and Information conditions.

Figure A2: Workers' wage beliefs in the *Information* condition by fraction of periods absent and gender



Notes: The figure shows the mean wage expected in the *Information* condition by the fraction of periods absent and by worker gender. Note that the worker survey was intentionally seeded with profiles that were restricted in the fraction of periods absent (either 0, 1, 2, or 3 periods absent of 8 possibly worked) to focus attention on the most commonly observed profiles and maximize statistical power in the workers' beliefs analysis.

Table A2: Employer wage offers

	Male workers	Female workers	Difference
No information	0.72	0.71	0.01
	(0.25)	(0.25)	(0.99)
Information	0.64	0.66	-0.02*
	(0.28)	(0.26)	(-1.68)
Difference	08***	04***	03***
	(-6.16)	(-3.5)	(-2.77)

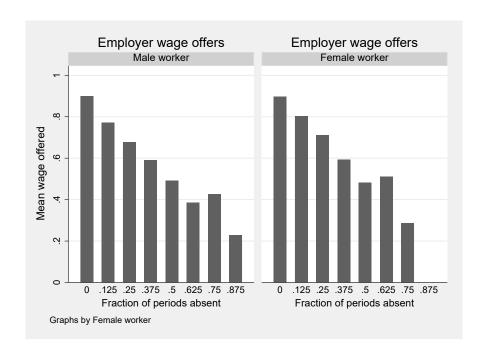
Notes: The central part of the table shown means and standard deviations (in parentheses) for male and female workers by condition, respectively. The last column shows the difference in means between male and female workers within each condition, along with the t-test of the difference (in parentheses). The last row of the table shows the difference in means between conditions within each gender, along with the t-test of the difference (in parentheses). The far bottom right cell shows the difference-in-differences (between genders and between conditions, along with the t-test of the difference-in-differences (in parentheses). For the last row and last column, * indicates p < 0.10, ** indicates p < 0.05, *** indicates p < 0.01.

Figure A3: Employers' wage offers



Notes: The figure shows a histogram of employers' wage offers in the *No Information* and *Information* conditions.

Figure A4: Employers' wage offers in the *Information* condition by fraction of periods absent and gender



Notes: The figure shows the mean wage offered in the *Information* condition by the fraction of periods absent and by worker gender. Note that employers made offers to the full range of worker profiles (0-8 periods absent of 8 possibly worked) because workers were truthfully told that their payment would be based on what employers actually offered them.

A.2 Wages: Robustness checks

Table A3: OLS - Employer wage offers and workers' beliefs: No Information condition

	(1)	(2)	(3)
	Worker wage beliefs	Vorker wage beliefs Employer wage offers p-value $Test(1)=(2)$	p-value $Test(1)=(2)$
Female worker	-0.083***	-0.007	0.003
	(0.023)	(0.012)	
Number of observations	1044	2071	
Number of individuals	174	116	
Mean male wage	0.606	0.716	

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show OLS regressions of worker wage beliefs and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs or making the wage offer. Standard errors are clustered at the individual level. The omitted category is male revealed. The last row of the table shows the mean male wage, which is the mean of the dependent variable for the omitted category (male workers). The third column shows tests of differences between coefficients using seemingly unrelated regressions.

Table A4: OLS - Employer wage offers and workers' beliefs: Information condition

	(1)	(2)	(3)
	Worker wage beliefs	Employer wage offers	p-value $Test(1)=(2)$
Female worker	-0.044**	0.026	0.018
	(0.022)	(0.020)	
Fraction periods unworked	-1.473***	***22.0-	0.000
	(0.091)	(0.060)	
Female worker x Fraction periods unworked	0.109	-0.062	0.076
	(0.082)	(0.053)	
Number of observations	1095	1543	
Number of individuals	188	87	
Mean male wage, unworked=0	0.901	0.899	
Mean male unworked	0.217	0.293	
Mean female unworked	0.259	0.284	

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show OLS regressions of worker wage beliefs for the person reporting their wage beliefs or making the wage offer. Standard errors are clustered at the individual level. The omitted category is and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics male workers with zero periods of work missed. The row titled "Mean male wage, absent=0" shows the mean male wage when no periods are absent; this is the mean of the dependent variable. The row titled "Mean male absent" shows the mean fraction of periods absent for male workers, while the row titled "Mean female absent" shows the mean fraction of periods absent for female workers. The third column shows tests of differences between coefficients using seemingly unrelated regressions.

Table A5: Tobit without demographic controls - Wages: Workers' beliefs and Employers' offers: No Information condition

	(1)	(2)	(3)
	Worker wage beliefs	Norker wage beliefs Employer wage offers p-value Test(1)=(2)	p-value $Test(1)=(2)$
Female worker	-0.131***	-0.008	0.003
	(0.036)	(0.019)	
Number of observations	1056	2071	
Number of individuals	176	116	
Mean male wage	0.606	0.716	

and 1 of worker wage beliefs and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile. Standard errors are clustered at the individual level. The omitted category is male revealed. The last row of the table shows the mean male wage, which is the mean of the dependent variable for the omitted category (male workers). The third column shows tests of differences between coefficients Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show Tobit regressions censored between 0 using seemingly unrelated regressions.

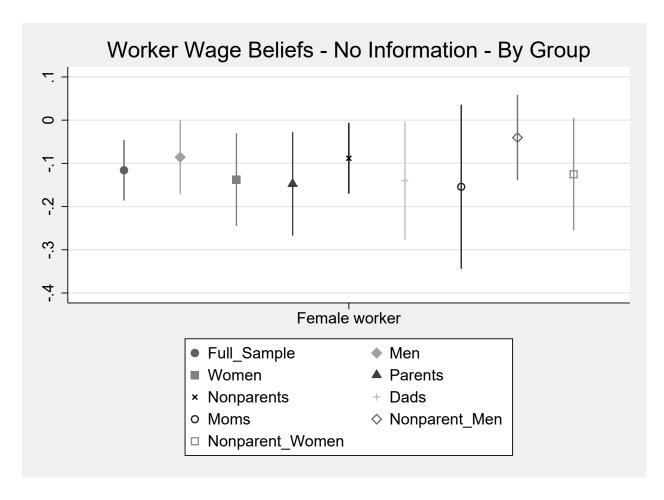
Table A6: Tobit without demographic controls - Wages: Workers' beliefs and Employers' offers: Information condition

	(1)	(2)	(3)
	Worker wage beliefs	Worker wage beliefs Employer wage offers p-value $Test(1)=(2)$	p-value Test $(1)=(2)$
Female worker	-0.078**	0.053*	0.004
	(0.037)	(0.028)	
Fraction periods unworked	-2.019***	-0.853***	0.000
	(0.139)	(0.067)	
Female worker x Fraction periods unworked	0.248^{*}	-0.130^{**}	0.008
	(0.128)	(0.065)	
Number of observations	1095	1543	
Number of individuals	188	87	
Mean male wage, unworked=0	0.901	0.899	
Mean male unworked	0.217	0.293	
Mean female unworked	0.259	0.284	

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show Tobit regressions censored between 0 Standard errors are clustered at the individual level. The omitted category is male workers with zero periods of work missed. The row titled "Mean male wage, absent=0" shows the mean male wage when no periods are absent; this is the mean of the dependent variable. The row titled "Mean male and 1 of worker wage beliefs and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile. absent" shows the mean fraction of periods absent for male workers, while the row titled "Mean female absent" shows the mean fraction of periods absent for female workers. The third column shows tests of differences between coefficients using seemingly unrelated regressions.

A.3 Worker wage beliefs by sub-group

Figure A5: Worker wage beliefs: No Information condition - by group



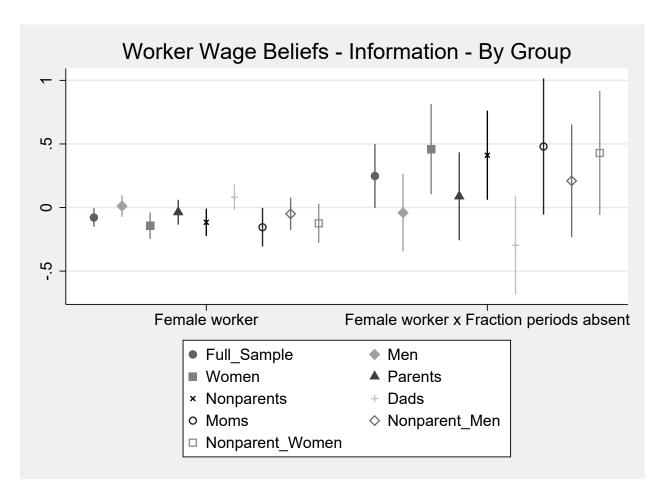
Notes: The figure plots the coefficient estimates on "Female worker" by different demographic sub-groups. The underlying estimates (shown in Table A7) are from Tobit regressions censored between 0 and 1 of worker wage beliefs on this coefficient with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs.

Table A7: Worker wage beliefs: No Information - by group

	(1)	(2)	(3)	(4)	(5)	(9)		(8)	(6)
	Full Sample	Men	Women	Parents	Non-parents	Dads		M NP	W NP
Female worker	-0.116***	**980.0-	-0.138**	-0.148**	-0.088**	-0.140**		-0.040	-0.125*
	(0.036)	(0.044)	(0.055)	(0.061)	(0.042)	(0.069)		(0.050)	(990.0)
Number of observations	1044	492	552	492	552	240		252	300
Number of individuals	174	85	92	82	92	40	42	42	20
Mean male wage	909.0	0.561	0.647	0.581	0.628	0.559		0.563	0.681

non-parents. Standard errors are clustered at the individual level. The last row of the table shows the mean male wage, which is the mean of the beliefs on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs or making the wage offer. Each column shows results for a different sub-group. M (W) NP refers to men (women) Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The table shows Tobit regressions censored between 0 and 1 of worker wage dependent variable for the omitted category (male workers).

Figure A6: Worker wage beliefs: Information condition - by group



Notes: The figure plots the coefficient estimates on "Female worker" and "Female worker x Fraction periods absent" by different demographic sub-groups. The underlying estimates (shown in Table A8) are from Tobit regressions censored between 0 and 1 of worker wage beliefs on these coefficients with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs.

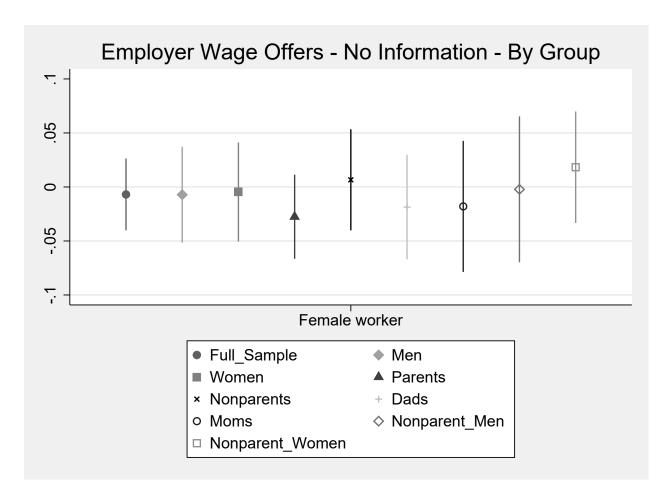
Table A8: Worker wage beliefs: Information condition - by group

	(1)	(2)	(3)		(2)	(9)	(7)	(8)	(6)
	Full Sample	Men	Women		Non-parents	Dads	Moms	$_{ m M}$ $_{ m NP}$	$_{ m W}$ NP
Female worker	-0.078**	0.011	-0.144***		-0.116**	0.081	-0.155**	-0.050	-0.124
	(0.037)	(0.043)	(0.053)		(0.054)	(0.050)	(0.077)	(0.065)	(0.078)
Fraction periods absent	-2.019***	-1.842***	-2.136***		-1.976***	-1.848***	-2.184***	-1.760***	-2.104***
	(0.139)	(0.196)	(0.177)		(0.214)	(0.235)	(0.274)	(0.330)	(0.212)
Female worker x Fraction periods absent	0.248*	-0.041	0.459**		0.411**	-0.297	0.480*	0.210	0.429*
	(0.128)	(0.155)	(0.181)	(0.176)	(0.178)	(0.196)	(0.272)	(0.225)	(0.248)
Number of observations	1095	539	556		466	339	290	200	266
Number of individuals	188	92	96		80	58	50	34	46
Mean male wage, unworked=0	0.901	0.873	0.922		0.875	0.932	0.905	0.713	0.940
Mean male unworked	0.217	0.221	0.212		0.213	0.220	0.219	0.224	0.204
Mean female unworked	0.259	0.261	0.258		0.266	0.252	0.257	0.275	0.259

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The table shows Tobit regressions censored between 0 and 1 of worker wage beliefs on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs or making the wage offer. Each column shows results for a different sub-group. M (W) NP refers to men (women) titled "Mean male wage, absent=0" shows the mean male wage when no periods are absent; this is the mean of the dependent variable. The row titled "Mean male absent" shows the mean fraction of periods absent for male workers, while the row titled "Mean female absent" shows the mean non-parents. Standard errors are clustered at the individual level. The omitted category is male workers with zero periods of work missed. fraction of periods absent for female workers.

A.4 Employer wage offers by sub-group

Figure A7: Employer wage offers: No Information condition - by group



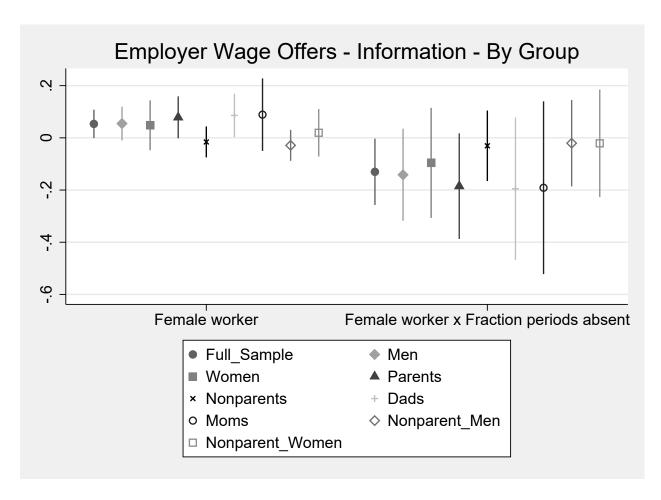
Notes: The figure plots the coefficient estimates on "Female worker" by different demographic sub-groups. The underlying estimates (shown in Table A9) are from Tobit regressions censored between 0 and 1 of employer wage offers on this coefficient with controls for age and favorite color of the profile and demographic characteristics for the person making the wage offer.

Table A9: Employer wage offers: No Information condition - by group

	(1)	(2)	ll	11	(5)	(9)	(7)	(8)	(6)
	Full Sample	Men			Non-parents	Dads	Moms	M NP	W NP
Female worker	-0.007	-0.007			0.007	-0.019	-0.018	-0.002	0.018
	(0.017)	(0.023)	(0.023)	(0.020)	(0.024)	(0.025)	(0.031)	(0.034)	(0.026)
Number of observations	2071	1124			1121	464	486	099	461
Number of individuals	116	63			63	26	27	37	26
Mean male wage	0.716	0.711			0.705	0.703	0.757	0.717	0.686

non-parents. Standard errors are clustered at the individual level. The last row of the table shows the mean male wage, which is the mean of the Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The table shows Tobit regressions censored between 0 and 1 of employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs or making the wage offer. Each column shows results for a different sub-group. M (W) NP refers to men (women) dependent variable for the omitted category (male workers).

Figure A8: Employer wage offers: Information condition - by group



Notes: The figure plots the coefficient estimates on "Female worker" and "Female worker x Fraction periods absent" by different demographic sub-groups. The underlying estimates (shown in Table A10) are from Tobit regressions censored between 0 and 1 of employer wage offers on these coefficients with controls for age and favorite color of the profile and demographic characteristics for the person making the wage offer.

Table A10: Employer wage offers: Information condition - by group

	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
	Full Sample	Men	Women	Parents	Non-parents	$_{ m Dads}$	Moms	$_{ m M}$ $_{ m NP}$	$_{ m W}$ NP
Female worker	0.053*	0.055*	0.048	0.078*	-0.016	0.086**	0.089	-0.029	0.019
	(0.028)	(0.033)	(0.049)	(0.041)	(0.030)	(0.042)	(0.071)	(0.030)	(0.046)
Fraction periods absent	-0.853***	-0.811***	-0.932***	-0.815***	-0.947***	-0.728***	-0.929***	-0.943***	-0.945***
	(0.067)	(0.074)	(0.111)	(0.099)	(0.067)	(0.106)	(0.182)	(0.071)	(0.089)
Female worker x Fraction periods absent	-0.130**	-0.142	-0.096	-0.185*	-0.030	-0.195	-0.191	-0.021	-0.021
	(0.065)	(0.000)	(0.107)	(0.103)	(0.069)	(0.139)	(0.168)	(0.084)	(0.105)
Number of observations	1543	853	069	835	402	462	373	391	317
Number of individuals	87	48	39	47	40	26	21	22	18
Mean male wage, unworked=0	0.899	0.870	0.950	0.909	0.881	0.900	0.925	0.812	0.990
Mean male unworked	0.293	0.287	0.301	0.295	0.290	0.282	0.314	0.293	0.287
Mean female unworked	0.284	0.282	0.287	0.280	0.290	0.273	0.287	0.291	0.287

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The table shows Tobit regressions censored between 0 and 1 of employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person titled "Mean male wage, absent=0" shows the mean male wage when no periods are absent; this is the mean of the dependent variable. The row titled "Mean male absent" shows the mean fraction of periods absent for male workers, while the row titled "Mean female absent" shows the mean reporting their wage beliefs or making the wage offer. Each column shows results for a different sub-group. M (W) NP refers to men (women) non-parents. Standard errors are clustered at the individual level. The omitted category is male workers with zero periods of work missed. fraction of periods absent for female workers.

B For Online Publication - Outsourcing: Employers' beliefs and Workers' behavior

We can also examine employers' beliefs about workers' outsourcing decisions, as well as the actual outsourcing decisions that workers make. We do not include these results in the main text for two reasons.

First, both the outsourcing analyses and employers' beliefs about workers' outsourcing decisions have smaller sample sizes and are under-powered compared to the wage results presented in the main text. Workers made an average of 3.75 outsourcing decisions (12) periods x 30% chance of a childcare shock in expectation), which were collapsed into a single fractional observation per individual.²⁹ Some workers experienced zero childcare shocks by chance, and thus are excluded from this analysis. The total sample size for worker outsourcing decisions in the No Information condition was thus 169, while in the Information condition it was 183. Employers each stated their beliefs about three worker profiles, but some profiles had zero worked periods and thus were degenerate in that no childcare shocks could be believed to have been outsourced. In the No Information condition, this led to a total sample size of 255 worker profiles evaluated by 109 employers, while in the *Information* condition, 82 employers formed beliefs about the outsourcing decisions behind 204 worker profiles. By contrast, in the wage analysis, workers stated their wage beliefs about six employer offers (for total sample sizes of 1044 in the No Information condition and 1095 in the *Information* condition) while employers made offers to 18 worker profiles (for total sample sizes of 2071 in the No Information condition and 1543 in the Information condition); statistical power is higher and thus we are powered to detect significant effects in the wage analysis but not in the behaviors analysis.

Second, while examining employer beliefs about workers' behaviors is informative (and we discuss it in some depth below), we view an examination of worker outsourcing behavior in this context as less clear cut. Workers in our experiment could decide to outsource

²⁹Results are qualitatively similar when each outsourcing decision is considered individually; these results are available on request.

childcare shocks for many reasons. If workers only consider the financial incentives within the experiment (employers' wage offers, cost of "hiring a babysitter" and earnings per period of work), they should never "hire a babysitter" or outsource in the *No Information* condition. In practice, workers' may choose to "hire a babysitter" due to other considerations. If our framing successfully activates social norms around illness, childcare, and work, we would expect to see that workers may hire babysitters due to their internalized preferences. In addition, workers may outsource if they receive intrinsic joy in completing the real-effort task (or want to avoid boredom). Some of our pilot participants said that they occasionally chose to outsource a childcare shock because they enjoyed counting the grids of Os and As.³⁰ Workers also may have gained utility from either adhering to or defying gender norms outside of the effects on their wages; people like when their behaviors match their self-conceptions of identity and values. Workers also may have been concerned about their Prolific reputation score, and have incorporated their beliefs about what the researchers would reward outside of the experimental context into their choices.

For these reasons, we relegate the analysis and discussion of worker outsourcing behaviors and employers' beliefs about workers' behaviors to this appendix as they are less informative than the analogous examination of wages.

On the worker outsourcing decision side, we focus on OLS regressions of the fraction of childcare shocks that worker i has outsourced, while controlling for information shown on all worker profiles (profile worker i's age and favorite color), as well as the demographic characteristics of the worker i. Workers experienced an average of 3.75 childcare shocks.

On the employer beliefs side, we show OLS regressions of employer i's belief about the fraction of childcare shocks that worker w has outsourced, while controlling for information shown on all worker profiles (profile worker w's age and favorite color), as well as the demographic characteristics of the employer i and cluster the standard errors at the individual i level. Employers each evaluated three worker profiles.

³⁰In the design phase, we attempted to choose a task that was not too onerous to avoid learning effects, and was gender neutral in its (perceived) ease of execution; we did not consider that some participants might find the task "soothing" or less boring than proceeding with the study.

Table B11 shows worker behavior (column 1) and employers beliefs (column 2) in the *No Information* condition, as well as a seemingly unrelated regression comparison that tests the equality of the coefficient across column 1 and column 2 (column 3). The omitted category is outsourcing decisions by male workers, while the coefficient on "Female workers" shows the difference in women's outsourcing rates as expected by employers (column 1) or chosen by workers (column 2).^{31,32}

In the *No Information* condition, employers expect women to be less likely than men to outsource childcare shocks. Employers expect that female workers outsource childcare shocks 9.3 percentage points (26.4%) less than male workers, a difference that is marginally statistically significant at the 10% level.

In the *No Information* condition, female workers actually outsource 5.1 percentage points (10.7%) more often than male workers, a difference that is not statistically distinguishable from zero. The fact that workers outsource in the *No Information* condition suggests that the framing may have successfully activated social norms and/or preferences around childcare.

Table B12 shows results for the *Information* condition, in which employers additionally know the fraction of periods that workers were absent from their selected work history. The omitted category is male workers who missed zero periods of work.

Employer wage offers in the *Information* condition are consistent with their beliefs about outsourcing. Employers state that women who did not have any work absences are more likely to have outsourced a childcare shock and they pay them more than men with no absences. When a woman is absent from work, employers believe that she outsourced fewer childcare shocks and pay her less than men with similar work histories. These beliefs are consistent with their wage offers.

One explanation for why employer beliefs are consistent with employer wage offers in the *Information* condition, but inconsistent in the *No Information* condition, is that discrimina-

 $^{^{31}}$ Regressions that alternately do not include demographic controls are qualitatively similar and available on request.

 $^{^{32}}$ Raw differences in mean worker outsourcing decisions and mean employer outsourcing beliefs are shown in Tables B13 and B14.

tory behavior in the No Information condition is more transparent than in the Information condition. Since an employer has only the worker's gender and filler information to base their decision on, treating men and women differently in the No Information condition clearly reveals (both to others and the employer themself) that the employer's decision was based on gender. Providing the employer with limited information about the worker's history provides the employer with some degree of cover to act on their beliefs and treat men and women differently. These results are consistent with Barron et al. (2024), which finds that employers discriminate against women when they are provided with ambiguous information about worker qualifications.

Looking at employer beliefs may also help rationalize worker beliefs that women will be paid less in the *No Information* condition. Employers believe that women are less likely to outsource childcare shocks, so if workers believe that employers will account for this when making wage offers, this would explain their belief that employers will pay women less.

Turning to worker decisions in the *Information* condition, we find no statistically significant differences between the genders in their outsourcing behaviors.

Table B11: Outsourcing: Employers' beliefs and Workers' behaviors: No Information condition

	(1)	(2)	(3)
	Worker outsourcing behavior	Norker outsourcing behavior Employer outsourcing beliefs p-value $Test(1)=(2)$	p-value $Test(1)=(2)$
Female worker	0.051	-0.093*	0.076
	(0.070)	(0.048)	
Number of observations	169	255	
Number of individuals	169	109	
Mean male outsourced	0.478	0.352	

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show OLS regressions of worker outsourcing behaviors and employer outsourcing beliefs on the coefficients the person making the outsourcing decision or reporting their beliefs about workers' outsourcing choices. The outcome variable is the fraction of childcare shocks that worker i has outsourced or that employer i believes shown in the table, with controls for age and favorite color of the profile and demographic characteristics for regressions. The last row of the table shows the mean fraction of periods a male worker outsourced (out that worker w has outsourced. Standard errors are clustered at the individual level. The omitted category is male workers. The third column shows tests of differences between coefficients using seemingly unrelated of their total periods with a childcare shock), which is the mean of the dependent variable for the omitted category (male workers).

Table B12: Outsourcing: Employers' beliefs and Workers' behaviors: Information condition

	(1)	(2)	(3)
	Worker outsourcing behavior	Employer on	p-value Test $(1)=(2)$
Female worker	-0.056	0.285**	0.017
	(0.076)	(0.129)	
Fraction periods unworked	-1.511***	-0.817***	0.001
	(0.142)	(0.174)	
Female worker x Fraction periods unworked	0.128	-0.794***	0.008
	(0.231)	(0.279)	
Number of observations	183	204	
Number of individuals	183	82	
Mean male outsourced, unworked=0	1.000	1.000	
Mean male unworked	0.310	0.323	
Mean female unworked	0.314	0.304	

OLS regressions of worker outsourcing behaviors and employer outsourcing beliefs on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person making the outsourcing decision or reporting their beliefs about workers' outsourcing choices. The outcome variable is the Standard errors are clustered at the individual level. The omitted category is male workers with zero periods of work of their total periods with a childcare shock) when no periods are absent; this is the mean of the dependent variable and 1 by construction. The row titled "Mean male absent" shows the mean fraction of periods outsourced (out of their total periods with a childcare shock) for male workers, while the row titled "Mean female absent" shows the Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show mean fraction of periods outsourced (out of their total periods with a childcare shock) for female workers. The third fraction of childcare shocks that worker i has outsourced or that employer i believes that worker w has outsourced. missed. The row titled "Mean male outsourced, absent=0" shows the mean male fraction of periods outsourced (out column shows tests of differences between coefficients using seemingly unrelated regressions.

Table B13: Worker behavior: Fraction of childcare shocks outsourced

	Male workers	Female workers	Difference
No information	0.48	0.56	-0.08
	(0.42)	(0.39)	(-1.34)
Information	0.72	0.68	0.04
	(0.38)	(0.35)	(0.67)
Difference	.24***	.12**	.12**
	(3.97)	(2.18)	(2.06)

Notes: The central part of the table shown means and standard deviations (in parentheses) for male and female workers by condition, respectively. The last column shows the difference in means between male and female workers within each condition, along with the t-test of the difference (in parentheses). The last row of the table shows the difference in means between conditions within each gender, along with the t-test of the difference (in parentheses). The far bottom right cell shows the difference-in-differences (between genders and between conditions, along with the t-test of the difference-in-differences (in parentheses). For the last row and last column, * indicates p < 0.10, ** indicates p < 0.05, *** indicates p < 0.01.

Table B14: Employer beliefs: Fraction of childcare shocks outsourced

	Male workers	Female workers	Difference
No information	0.35	0.28	0.08*
	(0.40)	(0.32)	(1.68)
Information	0.33	0.31	0.02
	(0.39)	(0.40)	(0.28)
Difference	03	.03	06
	(46)	(.75)	(-1.19)

Notes: The central part of the table shown means and standard deviations (in parentheses) for male and female workers by condition, respectively. The last column shows the difference in means between male and female workers within each condition, along with the t-test of the difference (in parentheses). The last row of the table shows the difference in means between conditions within each gender, along with the t-test of the difference (in parentheses). The far bottom right cell shows the difference-in-differences (between genders and between conditions, along with the t-test of the difference-in-differences (in parentheses). For the last row and last column, * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01.

C For Online Publication - More Information condition

In addition to the No Information and Information conditions discussed in the main text, we also ran a condition we call the More Information condition. In that condition, employers are shown worker profiles that include their age, favorite color, and gender (as in the No Information and Information conditions), how many periods they were absent (as in the Information condition), but also how many periods they were absent due to a sick child (unique to the More Information condition). We intended to use this condition to test the effects of more complete knowledge about the choice to miss work to take care of children. We decided not to include an analysis of this condition in the main text for two reasons: 1) experimental execution errors; 2) difficulty in empirical estimation and interpretation.

First, we discovered ex post that we made an error in how we executed the More Information condition. We had intended to balance the fraction of periods absent and the fraction of periods absent due to childcare across the male and female profiles shown to employers when making their wage bids and workers when eliciting their wage beliefs. Unfortunately, this did not happen in practice. Female profiles in the More Information condition showed a higher fraction of periods absent than male profiles (difference=0.047, p-value=0.00), and of those periods absent, female profiles showed a higher fraction of those absences were due to childcare than male profiles (difference=0.155, p-value=0.00). We worry that showing this skewed balance of absences and reasons for absence across genders may have influenced employers' beliefs about workers by gender, and affected their wage bids. Analogously, the same portfolio of profiles was shown to workers when eliciting their beliefs about employer wage offers, and thus those beliefs are subject to the same concerns.

Second, ex post we found it difficult to estimate and interpret the intended treatment effects in the More Information condition. The fraction of periods absent and the fraction of periods absent due to childcare are not orthogonal (correlation coefficient=0.289, p-value=0.00), and as just discussed, fraction of periods absent and absent due to childcare are additionally not orthogonal to the gender of the worker. These collinearities make

interpretation difficult.

For completeness, we show results for the *More Information* condition in Table C15. The table shows regressions of the wages workers believe will be offered and the wages employers actually offer on a dummy variable indicating the worker is female, the fraction of periods the worker didn't work, an interaction between female and the fraction of periods absent, the fraction of absent periods that the worker took care of a sick child, and an interaction between female and the fraction of absent periods spent taking care of a sick child. The results show that in this condition too, employers offer lower wages to workers who are absent more often, but the penalties to absence are not as harsh as workers expect. There are no significant gender differences in the penalties that workers expect due to work absences or reason for absence, nor gender differences in the penalties that employers impose; however, this result should be interpreted with caution because the profiles shown to workers and employers were not balanced in the fraction of periods absent nor was the reason for absence across the genders shown in the profiles.

Table C15: Wages: Workers' beliefs and Employers' offers: More Information condition

	(1)	(2)	(3)
	Worker wage beliefs	Employer wage offers	p-value $\text{Test}(1)=(2)$
Female worker	0.172**	-0.034	0.008
	(0.067)	(0.040)	
Fraction periods unworked	-1.003***	***065.0-	0.024
	(0.148)	(0.109)	
Female worker x Fraction periods unworked	-0.263	-0.051	0.343
	(0.190)	(0.118)	
Fraction periods unworked in childcare	-0.146	-0.014	0.215
	(0.095)	(0.048)	
Female worker x Fraction periods childcare	-0.033	0.079	0.287
	(0.091)	(0.054)	
Number of observations	962	1492	
Number of individuals	192	89	
Mean male wage, unworked=0	0.863	0.838	
Mean male unworked	0.234	0.282	
Mean female unworked	0.341	0.330	
Mean male childcare	0.254	0.218	
Mean female childcare	0.484	0.373	

regressions censored between 0 and 1 of worker wage beliefs and employer wage offers on the coefficients shown in the category is male workers with zero periods of work missed. The row titled "Mean male wage, absent=0" shows the shows the mean fraction of periods absent for female workers. The rows titled "Mean male childcare" ("Mean female table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting mean male wage when no periods are absent; this is the mean of the dependent variable. The row titled "Mean male absent" shows the mean fraction of periods absent for male workers, while the row titled "Mean female absent" childcare") refers to the fraction of periods in which a male (female) workers was absent due to childcare. The third their wage beliefs or making the wage offer. Standard errors are clustered at the individual level. The omitted Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show Tobit column shows tests of differences between coefficients using seemingly unrelated regressions.

D For Online Publication - "No Gender" conditions

In addition to conditions that showed the worker's gender (discussed in the main text), we also ran analogous conditions that did not reveal the worker's gender (No Gender Revealed conditions). In those conditions, employers were shown worker profiles that include their age and favorite color (as in the No Information and Information conditions) and the fraction of periods absent (as in the Information condition), but the worker's gender was not revealed or discussed. The analysis of these conditions ultimately did not contribute to the overall interpretation of the results, so we omit them from the main text. We provide them here for completeness.

Table D16 shows workers' average wage beliefs in these conditions, while Table D17 shows employers' wage offers. The wages workers expect when the gender of the worker is not revealed are similar in magnitude to the wages the workers expect for female workers. The wages employers offer to workers when gender is not revealed are similar in the *No Information* condition, and higher in the *Information* condition.

Table D16: Worker wage beliefs

	No gender revealed
No information	0.51
	(0.30)
Information	0.60
	(0.30)
Difference	09***
	(-7.04)

Notes: The table shown means and standard deviations (in parentheses) by condition. The last row of the table shows the difference in means between conditions, along with the t-test of the difference (in parentheses). For the last row, * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01.

Table D18 shows a regression of wages expected and offered on fraction of periods absent in the *Information* condition when gender is not revealed. As when gender is revealed, workers expect much harsher penalties to absence than employers impose.

Table D17: Employer wage offers

	No gender revealed
No information	0.71
	(0.25)
Information	0.70
	(0.27)
Difference	0
	(.41)

Notes: The table shown means and standard deviations (in parentheses) by condition. The last row of the table shows the difference in means between conditions, along with the t-test of the difference (in parentheses). For the last row, * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01.

Table D18: Wages: Workers' beliefs and Employers' offers: Information - No Gender Revealed condition

	(1)	(2)	(3)
	Worker wage beliefs	Employer wage offers	p-value $Test(1)=(2)$
Fraction periods absent	-1.504***	-0.843***	0.000
	(0.112)	(0.062)	
Number of observations	1230	1926	
Number of individuals	205	107	

Notes: * indicates p<0.10, ** indicates p<0.05, *** indicates p<0.01. The first two columns of the table show Tobit regressions censored between 0 and 1 of worker wage beliefs and employer wage offers on the coefficients shown in the table, with controls for age and favorite color of the profile and demographic characteristics for the person reporting their wage beliefs of making the wage offer. Standard errors are clustered at the individual level. The omitted category is a worker with zero periods of work missed. The third column shows tests of differences between coefficients using seemingly unrelated regressions.

- E For Online Publication Experimental protocols
- E.1 Worker experiment

Who pays for the snow day? Worker Experiment Instructions + Survey

[Info to fill out on Prolific:]

Title of study: Study on decision-making - (up to \$5.80 bonus!)

Internal name: Parent Penalty - Worker study

Describe what participations will be doing in this study:

In this study, you will be presented with various situations and asked to make decisions. You will also fill out a brief survey about yourself. We will not ask any personally identifiable questions about you.

You must be 18 years or older and live in the United States to participate. The study should take you at most 20 minutes to finish. You will earn \$2.25 for completing the study and can earn up to \$8.05 based on your choices in the study.

What devices can participants use to take your study? Mobile/<u>Tablet/Desktop</u> Does your study require any of the following? Audio/Camera/Microphone/Download Software/<u>None</u>

Who will see your study? <u>Representative sample/Prescreen participants/Everyone</u> Criteria? Gender balance, living in the U.S., aged 25-55 (maybe parental status depending on how pilot goes)

How many participants are you looking to recruit? 1200

How long will your study take to complete? 20 minutes

How much do you want to pay them? \$2.25 show-up fee, plus up to a \$5.80 bonus depending on their choices.

Thank you for participating in this study. Before you start, please switch off your phone, email, etc so that you can focus.

Thank you!

[Next screen]

What is your Prolific ID?

Please note that this response should auto-fill with the correct ID

[Next screen]

Experimental Subjects Bill of Rights

Pursuant to California Health and Safety Code §24172, I understand that I have the following rights as a participant in a research study:

- 1. I will be informed of the nature and purpose of the experiment.
- 2. I will be given a description of any attendant discomforts and risks to be reasonably expected from the study.
- 3. I will be given an explanation of any benefits to be expected from the study, if applicable.
- 4. I can contact the investigators using the Prolific interface to ask any questions concerning the study or the procedures involved.
- 5. I will be instructed that consent to participate in the research study may be withdrawn at any time and that I may discontinue participation in the study without prejudice to me.
- 6. I will be given the opportunity to print a copy of the consent form.
- 7. I will be given the opportunity to decide to consent or not to consent to the study without the intervention of any element of force, fraud, deceit, duress, coercion, or undue influence on my decision.

[Next screen]

Consent Form

TITLE: An experiment in economic decision-making

INVESTIGATORS: Dr. Erin Giffin, Department of Economics, Colby College,

207-859-5241, egiffin@colby.edu

Dr. Jessica B. Hoel, Department of Economics and

Business, Colorado College, 719-389-6822,

jhoel@coloradocollege.edu

Dr. Prachi Jain, Department of Economics, Loyola

Marymount University, 310-338-7803, prachi.jain@lmu.edu

PURPOSE: You are being asked to participate in a research project that seeks to investigate economic decision-making. You will be asked to complete surveys and tasks online that will last at most 20 minutes.

RISKS: There are no risks and discomforts involved with participating in this study beyond what you would experience in everyday life.

BENEFITS: I understand that the possible benefits of this study are that I will earn money and that exposure to economic principles may inspire further interest in the field.

INCENTIVES: Participation in the project will require no monetary cost to you. You will earn a show-up fee of \$2.25 for participating in the study and can earn additional money (up to \$5.80 extra) based on your decisions in the study.

CONFIDENTIALITY: We will collect subjects' demographic information in connection with the data. If there were a small number of participants in the study, it may be possible for your identity to be deduced from your answers to demographic and other personal questions.

However, we hope to enroll 600-1500 subjects in the study, so the chance that your answers to demographic and other personal questions would uniquely identify you is very small.

We will share a subset of the data from this study to other users on Prolific for a second part of the study, that we will describe in more detail during the study. We will not share any data that could be used to identify you.

De-identified data will be kept by investigators indefinitely. We may share the de-identified with others without asking for your consent again, but it will not contain information that could directly identify you. Similarly, the subset of the data needed to replicate the analysis may be required to be published along with the academic journal article or made available on an open repository; we will remove all information that could identify you as well as your Prolific ID.

All research materials, data, and consent forms will be stored on Dropbox, which is encrypted and suitable for storing confidential data, with user permissions restricted solely to the investigators. Any research reports will only present aggregate statistics without any personally identifying information.

RIGHT TO WITHDRAW: Your participation in this study is *voluntary*. You may withdraw your consent to participate at any time, but if you withdraw you will not be paid.

After the study's purpose and procedure have been fully explained, you may, for any reason, choose to withhold use of any data provided by your participation.

SUMMARY OF RESULTS: A summary of the results of this research will be supplied to you, at no cost, upon request. The summary should be available approximately 12 months from now.

VOLUNTARY CONSENT: I have read the above statements and understand what is being asked of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. If the study design or use of the information is changed I will be informed and my consent reobtained. On these terms, I certify that I am willing to participate in this research project.

I understand that if I have any further questions, comments or concerns about the study or the informed consent process, I may contact one of the following Chairs of the Institutional Review Board:

Dr. David Moffet, Loyola Marymount University, email: David.Moffet@lmu.edu

Dr. Amanda Udis-Kessler, Colorado College, email: audiskessler@coloradocollege.edu

Dr. Tarja Raag, Colby College, email: institutionalreviewboard@colby.edu

I understand that I may print or save a copy of this screen to keep for my records.

I verify that I am 18 years or older.

I agree to participate in the study.

[Note: If boxes are not checked then participants will see a screen: "Thank you for your time. Unfortunately, you cannot participate in the study." If both boxes are checked then participants will proceed with the study.]

[Next screen] {TIMESTAMP}

This is a study about decision-making. In this study, you will earn some money. You will receive \$2.25 for participating. You also have the opportunity to earn additional money (up to \$5.80 extra) during the study based partly on your decisions.

This study has two parts and will be followed by a brief survey. You will be paid for your decisions in both parts of the study.

[Next screen]

Please pay close attention to these instructions. You will be asked questions to make sure you understand these instructions. There are also several attention check questions. If you do not answer two or more attention check questions correctly, you will not be paid.

[Next screen]

In this study, participants are assigned to one of two roles: workers and employers. **You are going to be a worker.** Your payment will depend on choices you make as well as the choices of employers. We will tell you about the tasks you will complete as a worker as well as the employers' tasks.

For your role as a worker, the first part of the study has 12 periods.

In each period, you may have the opportunity to complete a task. You will be shown two 3x3 grids containing two letters: O and A. Your task is to count the number of O's in each grid. An example is shown below.

How many O's are in the grid below?

AAA

AAA

OAO

You will have 30 seconds to count the number of O's in the grids and enter your answers in the spaces provided. If at least one of the answers you submit is correct, then you will receive credit for working that period and will be paid \$0.20 (20 cents). There is no penalty for incorrect answers.

[Next screen]

Let's try a practice period. You will not be paid for this practice period.

[Next screen]

[Workers see two example grids.]

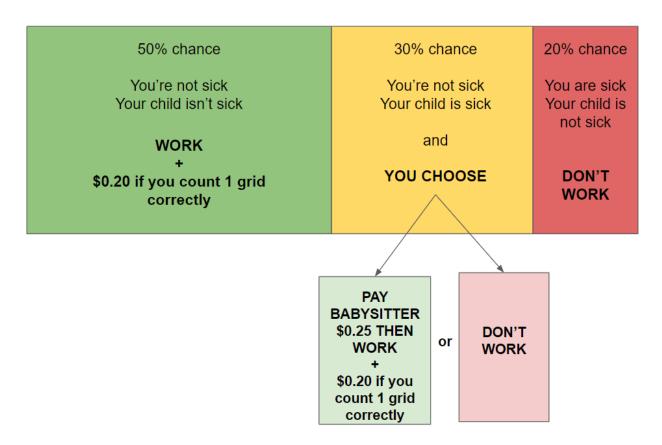
[Next screen]

[If at least one grid counted correctly:] You correctly counted at least one grid. If this had been a real work period, you would earn \$0.20 for working this round.

[If neither grid was counted correctly:] You did not count at least one grid correctly. If this had been a real work period, you would not earn money this round.

[Next screen] <u>{TIMESTAMP}</u>

However, you may not be able to work in every period, because you or your child may get sick. At the start of each period, the computer will draw a random number to decide whether you and your child are both healthy, whether you get sick, or whether your child gets sick.



There is a 50% (5 out of 10) chance that you are not sick and your child is not sick. If this happens, you can work.

There is a 20% (2 out of 10) chance that you get sick and your child is not sick. If this happens, you will not be able to work.

There is a 30% (3 out of 10) chance that your child gets sick and you are not sick. If this happens, someone must care for them. You can choose to stay home and take care of your child *or* you can pay \$0.25 to hire a babysitter to take care of your child. If you choose to stay home, then you cannot work and cannot earn money in that period. If you choose to hire a babysitter, then you can work.

[Next screen]

This means that workers have different work histories, in part due to chance and in part due to their own choices.

For example, a worker could have a work history like this:

A sample worker's work history



Out of 12 periods, this worker got sick 3 times and couldn't work.

Their child never got sick so they didn't have to decide whether to hire a babysitter and work or stay home and not work.

They will be paid \$0.20 for the 9 periods that they worked (\$1.80).

[Next screen]

To check that you are fully paying attention to the instructions for this part of the study, we will ask you a few questions. When participants do not carefully read the instructions and quickly click through the survey, it compromises the results of the research. To show that you are reading our instructions carefully, please answer the below question by entering the number 4.

Question: If you work, how many Os will you count in each grid?

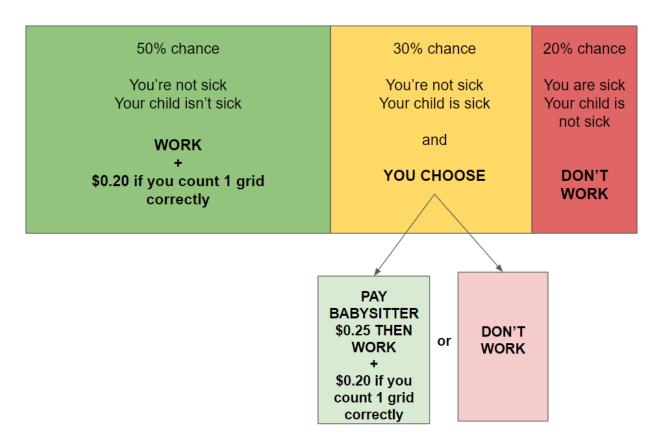
[Next screen:]

[If attention check answered correctly:] Great job! Thank you for paying attention. Now we will ask you questions to confirm that you understand the instructions. You will have two chances to answer these questions correctly.

[If attention check was not answered correctly:] You did not answer the attention check question correctly. Please pay close attention in the future.

Now we will ask you questions to confirm that you understand the instructions. You will have two chances to answer these questions correctly.

[Next screen] {TIMESTAMP} (Separate stamps for each attempt)



Question 1: In each round, what is the likelihood that you will get sick? (Choices: 50/30/20%)

Question 2: If you get sick, what will happen? (You will definitely work/You will definitely not abe able to work/You can choose to hire a babysitter so that you can work or you can choose not hire a babysitter and not work.)

Question 3: If your child gets sick, what will happen? (You will definitely work/You definitely will not be able to work/You can choose to hire a babysitter so that you can work or you can choose not hire a babysitter and not work.)

Question 4: Will you be paid \$0.20 per period you are able to work and complete the task correctly in the experiment? (Yes/No)

[Next screen]

[If all comprehension checks answered correctly:] Great job! You answered the comprehension questions correctly. You can move on.

[If not all comprehension checks answered correctly, first attempt:] You did not answer all the comprehension questions correctly. Since it is important that you understand the instructions, you must read the instructions again and then try again to answer the comprehension questions.

[If not all comprehension checks answered correctly, second attempt:] You did not answer all the comprehension questions correctly. Please pay careful attention to the next instructions.

[Next screen] {TIMESTAMP}

Remember that while you are a worker in this study, there are some other participants who are employers. For their task, employers will decide how much they would like to pay workers. In addition to the payments already described, you can earn a bonus based on employers' choices.

[Next screen]

[No info treatments: with and without gender revealed]

Each employer will see six workers' resumes at a time. For each set of six resumes, they will see each workers' age, [gender], and favorite color.

One of these resumes will be based on your information. Employers are told that workers knew that the employers would see these resumes when making their decisions.

Now please tell us the information that will be used to create your resume now.

How old are you in years?
[What is your gender? (Male, Female, Other)]
What is your favorite color? (Red, Orange, Yellow, Green, Blue)

Each employer can then pay a bonus to each worker. The employer will be paid \$0.25 per task the worker completes in four randomly selected periods, minus the bonus they offer to that worker. Employers can give a bonus between \$0 and \$1. This means that an employer earns more money if the worker works more periods.

Which periods the employer will be paid for will be chosen by the computer randomly, so it's not necessarily the first 4 periods or the last 4 periods, but rather a random selection.

[Next screen]

For example, given the example worker's history from before, the employer would be paid for 4 randomly selected periods. In this case, they would be paid \$0.25 each for the three randomly selected periods that this worker worked.

A sample worker's work history



The employers will be paid based on whether the worker worked in 4 randomly selected periods. In this example, they would be paid \$0.25 for the 3 periods that the worker worked.

The employer will earn more money when the worker works more.

The employers can offer up to \$1.00 to each worker.

[Next screen]

We will calculate the average bonus from the group of employers for your resume, and this amount will be added to your payment. This means that you can increase your payment if you get offered higher bonuses from the employers.

This is how your resume will appear to employers.

Age: [inserted based on previous response]
[Gender: [inserted based on previous response]]
Favorite color: [inserted based on previous response]

[Partial info treatments: with and without gender revealed]

Each employer will see six resumes at a time. For each set of six resumes, they will see each workers' age, [gender], favorite color, and some information about their work history.

Of the 12 periods, employers will learn about whether the worker worked in 8 of them. Which periods they learn about will be chosen by the computer randomly, so it's not necessarily the first 8 periods or the last 8 periods, but rather a random selection.

[Next screen]

For example, given the example worker's history from before, the employer would learn about whether the worker worked in 8 randomly selected periods, the ones not blacked out in the graphic below.

A sample worker's work history

The employers will be paid based on whether the worker worked in the blacked out periods. In this example, they would be paid \$0.25 for 3 periods that the worker worked.

The employer will earn more money when the worker works more.

The employers can offer up to \$1.00 to each worker.

Importantly, the employers will see the number of periods that the worker worked (out of 8) but will not know the reason for any unworked periods (so employers won't know if it was because they got sick or chose to stay home to care for a sick child).

A sample worker's work history



The computer will select 8 of 12 periods at random and the employers will learn whether the worker worked in those periods before making their bonus offers.

In this example, they will not find out information about the blacked out squares.

This example worker's resume will look like this:

Age: 35
Gender: Male
Favorite Color: Green

Worked: 6 of 8 periods
Did not work: 2 of 8 periods

[Next screen]

One of these resumes will be based on your information and choices. Employers are told that workers knew that the employers would see these resumes when making their decisions.

Now please tell us some of the information that will be used to create your resume now.

How old are you in years?

[What is your gender? (Male, Female, Other)]

What is your favorite color? (Red, Orange, Yellow, Green, Blue)

[Next screen]

Each employer will then pay a bonus to each worker. The employer will be paid \$0.25 per task the worker completes in four randomly selected periods, minus the bonus they offer to that worker. Employers can give a bonus between \$0 and \$1. This means that an employer earns more money if the worker works more periods.

Which periods the employer will be paid for will be chosen by the computer randomly, so it's not necessarily the first 4 periods or the last 4 periods, but rather a random selection.

For example, given the example worker's history from before, the employer would be paid for 4 randomly selected periods that were blacked out and they didn't have information about. In this case, they would be paid \$0.25 each for the three randomly selected periods that this worker worked.

A sample worker's work history



The employers will be paid based on whether the worker worked in the blacked out periods. In this example, they would be paid \$0.25 for 3 periods that the worker worked.

The employer will earn more money when the worker works more.

The employers can offer up to \$1.00 to each worker.

[Next screen]

We will calculate the average bonus from the group of employers for your resume, and this amount will be added to your payment. This means that you can increase your payment if you get offered higher bonuses from the employers.

This is how your resume will appear to employers, but with information about your work history filled in

Age: [inserted based on previous response]

[Gender: [inserted based on previous response]]
Favorite color: [inserted based on previous response]

Worked: X of 8 periods Did not work: X of 8 periods

[Full info treatments: with and without gender revealed]

Each employer will see six resumes at a time. For each set of six resumes, they will see each workers' age, favorite color, [gender] and some information about their work history.

Of the 12 periods, employers will learn about whether the worker worked in 8 of them. Which periods they learn about will be chosen by the computer randomly, so it's not necessarily the first 8 periods or the last 8 periods, but rather a random selection.

[Next screen]

For example, given the example worker's history from before, the employer would learn about whether the worker worked in 8 randomly selected periods, the ones not blacked out in the graphic below.

Importantly, they will see the number of periods that the worker worked (out of 8) and also the number of periods they didn't work because they were sick and the number of periods that they didn't work to take care of a child who was sick. They will not know how many times the worker chose to hire a babysitter.

A sample worker's work history



The computer will select 8 of 12 periods at random and the employers will learn whether the worker worked in those periods before making their bonus offers.

In this example, they will not find out information about the blacked out squares.

This example worker's resume will look like this:

Age: 35
Favorite Color: Green
Worked: 6 of 8 periods
Sick: 2 of 8 periods
Childcare: 0 of 8 periods

[Next screen]

One of these resumes will be based on your information and choices. Employers are told that workers knew that the employers would see these resumes when making their decisions.

Now please tell us some of the information that will be used to create your resume now.

How old are you in years?
[What is your gender? (Male, Female, Other)]
What is your favorite color? (Red, Orange, Yellow, Green, Blue)

[Next screen]

Each employer will then pay a bonus to each worker. The employer will be paid \$0.25 per task the worker completes, minus the bonus they offer to that worker. Employers can give a bonus between \$0 and \$1. This means that an employer earns more money if the worker works more periods.

Which periods the employer will be paid for will be chosen by the computer randomly, so it's not necessarily the first 4 periods or the last 4 periods, but rather a random selection.

[Next screen]

For example, given the example worker's history from before, the employer would be paid for 4 randomly selected periods that were blacked out and they didn't have information about. In this case, they would be paid \$0.25 each for the three randomly selected periods that this worker worked.

A sample worker's work history



The employers will be paid based on whether the worker worked in the blacked out periods. In this example, they would be paid \$0.25 for 3 periods that the worker worked.

The employer will earn more money when the worker works more.

The employers can offer up to \$1.00 to each worker.

We will calculate the average bonus from the group of employers for your resume, and this amount will be added to your payment. This means that you can increase your payment if you get offered higher bonuses from the employers.

This is how your resume will appear to employers, but with information about your work history filled in.

Age: [inserted based on previous response]

[Gender: [inserted based on previous response]]

Favorite color: [inserted based on previous response]

Worked: X of 8 periods Sick: X of 8 periods

Childcare: X of 8 periods

[All treatments:] [Next screen] {TIMESTAMP} (Separate stamps for each attempt)

To check that you are fully paying attention to the instructions for this part of the study, we will ask you a few questions. When participants do not carefully read the instructions and quickly click through the survey, it compromises the results of the research.

41 . 4	urteen, fifteen,	• ,	• 1 4	nineteen
thirteen to	iirteen titteen	SIXTEEN	eignteen	nineteen
	ur toon, mitoon,	SIA COLI,	, orginicon,	

Which number belongs in the blank space? Please type the number in numerical form. So if the answer is one, please enter 1.

[Next screen]

[If attention check answered correctly:] Great job! Thank you for paying attention. Now we will ask you questions to confirm that you understand the instructions. You will have two chances to answer these questions correctly.

[If attention check was not answered correctly:] You did not answer the attention check question correctly. Please pay close attention in the future.

Now we will ask you questions to confirm that you understand the instructions. You will have two chances to answer these questions correctly.

[Next screen]

Remember that this is how your resume will appear to employers: [Show worker's resume]

Employers can offer you a bonus between \$0.00 and \$1.00.

Question 5: Will the bonus chosen by employers affect your payment? (Yes/No)

Question 6: What is the maximum amount you can earn from the employers? (\$0, \$0.25, \$0.50, \$1.00, \$2.00)

Question 7: Will employers know your gender when they are deciding how much to offer you? (Yes/No) [Answer depends on gender treatment]

Question 8: Will employers know your age when they are deciding how much to offer you? (Yes/No)

No Info gets questions 9 and 10 Partial Info gets questions 10 and 11 Full Info gets questions 11 and 12

Question 9: Will employers know how many periods you worked? (Yes/No) [Answer depends on info treatment]

Question 10: [In partial info treatment: For 8 randomly selected periods,]Will employers know how many times you didn't work? (Yes/No) [Answer depends on info treatment]

Question 11: For 8 randomly selected periods, will employers know how many times you didn't work because you were sick? Yes/No [Answer depends on info treatment]

Question 12: For 8 randomly selected periods, will employers know how many times you hired a babysitter? Yes/No

[If did not answer comprehension questions correctly:] You did not answer all the comprehension questions correctly. Since it is important that you understand the instructions, you must read the instructions again and then try again to answer the comprehension questions.

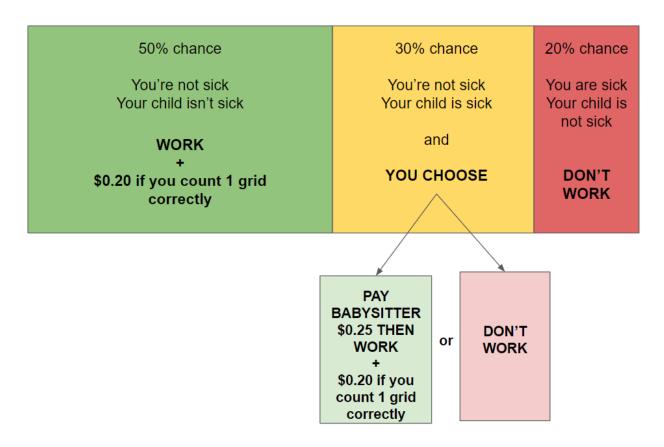
[Next screen] {TIMESTAMP}

Let's begin work. Remember, this is the information the employers will see about you when making their choices. You can earn up to an additional \$1 based on the average bonus from employers.

[Show worker's resume]

*[Next screen]

This is period [insert number] of 12.



[Next screen]

[Depending on realized outcome, if sick:] You are sick during this period. You cannot work in this period.

[Depending on realized outcome, if child is sick:] Your child is sick during this round. You can decide whether or not to hire a babysitter in order to work. What would you like to do? (Pay \$0.25 to hire a babysitter so that I can work, Do not hire a babysitter and do not work.)

[Depending on realized outcome, if child and individual is not sick:] You and your child are not sick. You can work in this period.

[Next screen]

[If child is not sick and individual not sick OR if child is sick and chose to hire a babysitter]: How many O's are in the grid below? [images of 2 grids and 2 chances to answer]

[Next screen]

[If correctly counted at least one grid:] You correctly counted at least one grid. You earned \$0.20 for working this period.

[If did not correctly count at least one grid:] You did not count at least one grid correctly. You do not earn money for working during this period.

[repeat starting from * until 12 periods have passed]

[Next screen] {TIMESTAMP}

Now you have completed the first part of the study. In this second part, we will ask you some questions about what you think the employers will do.

[Next screen]

We would like you to think about how employers will pay different workers in the study. You have an opportunity to earn a bonus if your guesses are correct. Remember that each employer saw a screen with six worker profiles. Workers knew that the employers would see these resumes when making their decisions, and that employers would be paid more if the worker worked more periods. The employers could pay between \$0.00 and \$1.00 to each worker. Next we will ask how much you think the employers paid each worker.

[Next screen]

You will have the chance to earn a significant bonus (\$2) if you answer these or the next set of questions correctly. The computer will randomly choose one of the resumes to check. The payment rule for this task is designed so that you will earn the largest bonus by reporting your most-accurate guess. The precise payment rule details are available by request at the end of the study.

[Next screen]

[One panel with 6 profiles, same information shown on the resumes as the treatment that the worker is in. For each panel we ask (for each worker profile):] How much do you think the employers offered this worker?

Different employers were shown more or less information about workers when making their wage offers. Workers knew what information the employers would see.

Next we will ask how much you think the employers offered to each worker given the information they could see.

You will have the chance to earn a bonus (\$2) if you answer these or the previous set of questions correctly. The computer will randomly choose one of the resumes to check. The payment rule is designed so that you will earn the largest bonus by reporting your most-accurate guess. The precise payment rule details are available by request at the end of the study.

[Two sets of panels with 6 profiles each, different information shown on the resumes as the treatment that the worker is in. For each panel we ask (for each worker profile)] How much do you think the employers offered this worker?

[Next screen] {TIMESTAMP}

You have completed the second part of the study. Now we will ask you to fill out a brief survey.

How difficult was it for you to understand the tasks today? (Easy, neutral, difficult)

How difficult was it for you to make choices in the study today? (Easy, neutral, difficult)

[Next screen]

What is your gender? (Male, Female, Other)

What is your marital status? (Single, Partnered, Married, Divorced, Widowed)

What best describes your sexual orientation? (Heterosexual, Homosexual, Bisexual, Other)

Do you have children? (Yes, No)

What best describes your race and ethnicity? Please check all that apply to you. (White or Caucasian, Black or African American, Asian or Asian American, Native Hawaiian or other Pacific Islander, Hispanic/Latinx)

What is your highest level of education? (Less than high school graduate, High school graduate, Some college/vocational training, Associate's degree, Bachelor's degree, Master's degree/Professional degree (M.A., J.D., M.D., M.B.A., etc.), PhD)

In the past month did you primarily: (Work for somebody else, not including a member of your family; Work for a family member; Work for yourself; Had the opportunity to work but did not work; Wanted to work but could not find work; Did not work and did not try to find work)

[Next screen]

[If the respondent said they worked in the previous question]: In the last month, did you work full time or part time? (Part-time, Full-time)

[If the respondent said they worked in the previous question]: What is your job title? Please briefly describe your job.

[If the respondent said they worked in the previous question]: Are you able to control which hours and/or days that you work? (Never, Sometimes, About half the time, Most of the time, Always)

Approximately how much money do you earn in a typical month? Please include only your own income.

Have you ever been involved in hiring workers? (Yes, No)

[Next screen]

To what extent do you agree with the following statement: Relative to other people in my community, I am willing to take risks in my life. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

To what extent do you agree with the following statement: It disturbs me when I am uncertain of the effects of my actions.(Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

To what extent do you agree with the following statement: Please select disagree from the answer choices to demonstrate that you are paying attention. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

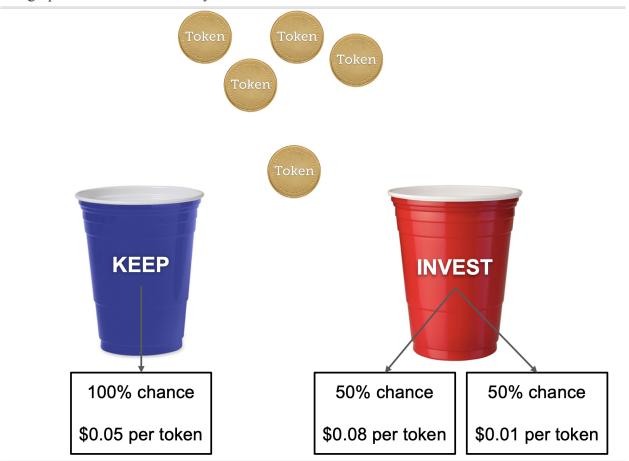
To what extent do you agree with the following statement: I am comfortable in situations in which I do not know the likelihood of different outcomes. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

[Next screen]

Now you have a chance to earn an additional bonus.

You have 5 tokens. Any token you keep is worth an additional \$0.05 to you for sure.

However, you could choose to invest some or all of your tokens. If you invest, there is a 50% chance that the investment will pay off and you will earn \$0.08 per token you invest. However, there is also a 50% chance that the investment will not pay off and you will keep \$0.01 per token. The graphic below summarizes your choice.



How many tokens would you like to invest? [Slider: 0-5]

[Next screen]

[If the respondent indicated they have children, they'll see the following questions:]

How many children do you have?

How old is your oldest child in years?

How old is your youngest child in years?

Are you raising/did you raise your children alone or do you have a co-parent? (I am raising/did raise my kids alone, I am raising/did raise my kids with at least one co-parent, Someone else is raising/raised my children)

[Next screen]

[If the respondent indicated they have co-parented, they'll see the following questions:]

Do you live with your co-parent? (Yes, No)

What is your co-parent's highest level of education? (Less than high school graduate, High school graduate, Some college/vocational training, Associate's degree, Bachelor's degree, Master's degree/Professional degree (M.A., J.D., M.D., M.B.A., etc.), PhD)

In the past month did your co-parent primarily: (Work for somebody else, not including a member of their family; Work for a family member; Work for themself; Had the opportunity to work but did not work; Wanted to work but could not find work; Did not work and did not try to find work)

[Next screen]

[If the respondent indicated they have co-parented *and* that their co-parent works, they'll see the following questions:]

Did your co-parent work full time or part time? (Part-time, Full-time)

What is your co-parent's job title? Please describe their work briefly.

Is your co-parent able to control which hours and/or days that they work? (Never, Sometimes, About half the time, Most of the time, Always)

Approximately how much money does your co-parent earn in a typical month?

When your children were born, did you take a parental leave or quit your job? (Took a leave, Quit my job, Did not take a leave or quit my job)

[If the respondent indicated they have co-parented *and* they have a child]: When your children were born, did your co-parent take time a parental leave or quit their job? (Took a leave, Quit their job, Did not take a leave or quit their job, They were not my co-parent when my children were born)

[Next screen]

[If respondent indicated that they had taken parental leave, they will see the following questions:]

Was your parental leave paid or unpaid? (Fully paid, Partially paid, Unpaid)

How long did you take off in months (both paid and unpaid time off)?

Do you think your parental leave affected your career? How?

[If respondent indicated that they did not take parental leave:] Why didn't you take a parental leave after the birth of your child?

[If respondent indicated that their co-parent had taken parental leave, they will see the following questions:]

Was your co-parent's parental leave paid or unpaid? (Fully paid, Partially paid, Unpaid)

How long did they take off in months (both paid and unpaid time off)?

Do you think their parental leave affected their career? How?

[If respondent indicated that their co-parent had not taken parental leave:] Why didn't your co-parent take a parental leave after the birth of your child?

[Next screen]

[If the respondent indicated that they had children:] Have you switched/did you switch jobs or cut back on your hours because you are a parent? (Quit working, Switched jobs, Cut hours, Switched jobs and cut hours, did not switch jobs or cut hours)

[If the respondent indicated that they had children and did co-parent:] Has your co-parent switched/did your co-parent switch jobs or cut back on your hours because you are a parent? (Switched jobs, Cut hours, Switched jobs and cut hours, did not switch jobs or cut hours)

[If the respondent indicated that they had children:] How often do/did you take care of your children when they cannot go to school or daycare, for example due to illness or weather? (Never, Rarely, About half the time, Most of the time, Always)

[If the respondent indicated that they had children:] When you do/did not take care of your children when they cannot go to school or daycare, who does/did? (You may select more than one) (My co-parent, Another family member, A friend, Another parent with children of similar age, An unpaid babysitter, A paid babysitter)

[If the respondent indicated that they had children:] Do you think taking time off work to care for children when they are sick or have a snow day has affected your career? How?

[Next screen]

Below are a number of tasks. If a man and a woman in a heterosexual couple are facing these tasks, please indicate the extent to which you believe each task should be primarily done by the man, should be primarily done by the woman, or should be shared equally between them: (Should always be done by the man, Should usually be done by the man, Equal responsibility, Should usually be done by the woman, Should always be done by the woman)

- Mow the lawn
- Prepare meals
- Handle financial matters, such as paying bills
- Stay home with a child who is sick
- Do the laundry
- Earn most of the money to support the family
- Shovel snow
- Clean the house

[Next screen] {TIMESTAMP}

Would you like more detail about how your bonus will be calculated based on your guesses about how much the employers will pay workers based on their resumes? (Yes, No)

[If they say they want to know details about the bonuses:] We randomly pick one question and pay you \$(0.20 minus your deviation from the correct answer) x 10. For example, if your answer

for the randomly picked question is 1 and the truth is 0.90, then you get $(\$(0.20 - |1 - 0.90|) \times 10$ equals a \$1 bonus. You cannot receive a negative bonus.

[Next screen] {TIMESTAMP}

We would like to know what you were thinking about while you were completing the tasks and survey. These answers will not affect your payment. We are just curious about your thoughts and experiences.

What were you thinking about when you gave your guesses about how much the employers would pay the workers based on their resumes?

What do you think this study is about?

Were you multi-tasking and/or interrupted while you were doing the survey?

What times of the day and week is it easiest for you to focus on a longer survey like this one? Please select all that apply.

Weekdays, Weekends x choices (Early morning (5am-8am), Morning (8am-12pm), Early afternoon (12pm-3pm), Late afternoon (3pm-5pm), Early evening (5pm-8pm), Late evening (8pm-11pm))

[Next screen] {TIMESTAMP}

Thank you for your participation in our survey!

[Next screen]

Please click the button below to be redirected to Prolific and register your submission.

E.2 Employer experiment

Who pays for the snow day? **Employer Survey Outline**

[Info to fill out on Prolific:]

Title of study: Study on decision-making - (up to \$4.40 bonus!)

Internal name: Parent Penalty - Employer study

Describe what participations will be doing in this study:

In this study, you will be presented with various situations and asked to make decisions. You will also fill out a brief survey about yourself. We will not ask any personally identifiable questions about you.

You must be 18 years or older and live in the United States to participate. The study should take you at most 30 minutes to finish. You will earn \$3.25 for completing the study and can earn up to \$7.65 based on your choices in the study.

What devices can participants use to take your study? Mobile/<u>Tablet/Desktop</u>

Does your study require any of the following? Audio/Camera/Microphone/Download Software/None

Who will see your study? Representative sample/Prescreen participants/Everyone

Criteria? Gender balance, living in the U.S., aged 25-55 (maybe parental status depending on how pilot goes)

How many participants are you looking to recruit? 300

How long will your study take to complete? 30 minutes

How much do you want to pay them? \$3.25 show-up fee, plus up to a \$4.40 bonus depending on

their choices.
[Next screen]
Thank you for participating in this study. Before you start, please switch off your phone, email, etc so that you can focus.
Thank you!
[Next screen]
What is your Prolific ID?

Please note that this response should auto-fill with the correct ID

[Next screen]

Experimental Subjects Bill of Rights

Pursuant to California Health and Safety Code §24172, I understand that I have the following rights as a participant in a research study:

- 1. I will be informed of the nature and purpose of the experiment.
- 2. I will be given a description of any attendant discomforts and risks to be reasonably expected from the study.
- 3. I will be given an explanation of any benefits to be expected from the study, if applicable.
- 4. I can contact the investigators using the Prolific interface to ask any questions concerning the study or the procedures involved.
- 5. I will be instructed that consent to participate in the research study may be withdrawn at any time and that I may discontinue participation in the study without prejudice to me.
- 6. I will be given the opportunity to print a copy of the consent form.
- 7. I will be given the opportunity to decide to consent or not to consent to the study without the intervention of any element of force, fraud, deceit, duress, coercion, or undue influence on my decision.

[Next screen]

Consent Form

TITLE: An experiment in economic decision-making

INVESTIGATORS: Dr. Prachi Jain, Department of Economics, Loyola

Marymount University, 310-338-7803, prachi.jain@lmu.edu

Dr. Jessica B. Hoel, Department of Economics and

Business, Colorado College, 719-389-6822,

jhoel@coloradocollege.edu

Dr. Erin Giffin, Department of Economics, Colby College, 207-859-5241, egiffin@colby.edu

PURPOSE: You are being asked to participate in a research project that seeks to investigate economic decision-making. You will be asked to complete surveys and tasks online that will last at most 30 minutes.

RISKS: There are no risks and discomforts involved with participating in this study beyond what you would experience in everyday life.

BENEFITS: I understand that the possible benefits of this study are that I will earn money and that exposure to economic principles may inspire further interest in the field.

INCENTIVES: Participation in the project will require no monetary cost to you. You will earn a show-up fee of \$3.25 for participating in the study and can earn additional money (up to \$4.40 extra) based on your decisions in the study.

CONFIDENTIALITY: We will collect subjects' demographic information in connection with the data. If there were a small number of participants in the study, it may be possible for your identity to be deduced from your answers to demographic and other personal questions.

However, we hope to enroll 600-1500 subjects in the study, so the chance that your answers to demographic and other personal questions would uniquely identify you is very small.

We will share a subset of the data from this study to other users on Prolific for a second part of the study, that we will describe in more detail during the study. We will not share any data that could be used to identify you.

De-identified data will be kept by investigators indefinitely. We may share the de-identified with others without asking for your consent again, but it will not contain information that could directly identify you. Similarly, the subset of the data needed to replicate the analysis may be required to be published along with the academic journal article or made available on an open repository; we will remove all information that could identify you as well as your Prolific ID.

All research materials, data, and consent forms will be stored on Dropbox, which is encrypted and suitable for storing confidential data, with user permissions restricted solely to the investigators. Any research reports will only present aggregate statistics without any personally identifying information.

RIGHT TO WITHDRAW: Your participation in this study is *voluntary*. You may withdraw your consent to participate at any time, but if you withdraw you will not be paid.

After the study's purpose and procedure have been fully explained, you may, for any reason, choose to withhold use of any data provided by your participation.

SUMMARY OF RESULTS: A summary of the results of this research will be supplied to you, at no cost, upon request. The summary should be available approximately 12 months from now.

VOLUNTARY CONSENT: I have read the above statements and understand what is being asked of me. I also understand that my participation is voluntary and that I am free to withdraw my consent at any time, for any reason. If the study design or use of the information is changed I will be informed and my consent reobtained. On these terms, I certify that I am willing to participate in this research project.

I understand that if I have any further questions, comments or concerns about the study or the informed consent process, I may contact one of the following Chairs of the Institutional Review Board:

- -Dr. David Moffet, Loyola Marymount University, email: David.Moffet@lmu.edu
- -Dr. Amanda Udis-Kessler, Colorado College, email: audiskessler@coloradocollege.edu
- -Dr. Tarja Raag, Colby College, email: institutionalreviewboard@colby.edu

I understand that I may print or save a copy of this screen to keep for my records.

I verify that I am 18 years or older. I agree to participate in the study.

[Note: If boxes are not checked then participants will see a screen: "Thank you for your time. Unfortunately, you cannot participate in the study." If both boxes are checked then participants will proceed with the study.]

[Next screen] <u>{TIMESTAMP}</u>

This is a study about decision-making. In this study, you will earn some money. You will receive \$3.25 for participating, approved within a week. You also have the opportunity to earn additional money (up to \$4.40 extra) during the study based on your decisions.

This study has two parts and will be followed by a brief survey.

[Next screen]

Please pay close attention to these instructions. You will be asked questions to make sure you understand these instructions. There are also several attention check questions. If you do not answer two or more attention check questions correctly, you will not be paid.

[Screen 5:]

In this study, participants are assigned to one of two roles: workers and employers. **You are going to be an employer.** Your payment will depend on choices you make as well as the choices that workers make. We will tell you about the tasks you will complete as an employer as well as the workers' task.

As an employer, you will have the option to hire one of the people who was a worker in the study. The workers will receive a bonus that depends on your choices and in return, if you hire a worker, you will receive money based on how many periods they worked.

[Next screen]

Over 12 periods, workers had the chance to earn \$0.20 for themselves in each period if they correctly completed a short task: counting the number of O's in a 3x3 grid containing O's and A's. An example grid is shown below.

The worker had 30 seconds to count the number of O's in the grids and enter their answers in the spaces provided. If at least one of the answers they submitted was correct, then they received credit for working that period and were paid \$0.20 (20 cents). There was no penalty for incorrect answers.

How many O's are in the grid below?

AAA

AAA

OAO

Let's try a practice period so you can try the worker's task for yourself. You will not be paid for this practice.

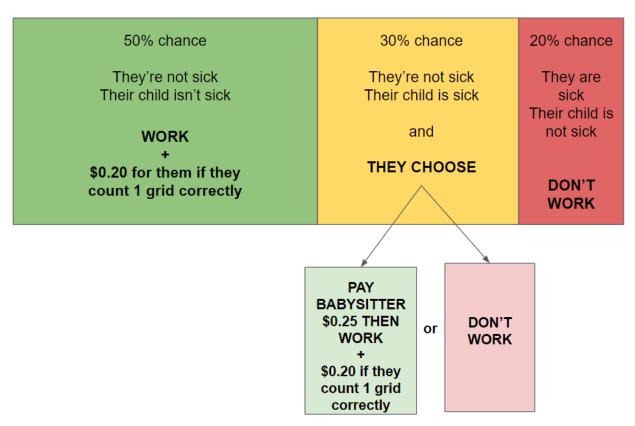
[Next screen]

[If at least one grid counted correctly:] You correctly counted at least one grid. If you had been a worker in a real work period, you would earn \$0.20 for working this round.

[If neither grid was counted correctly:] You did not count at least one grid correctly. If you had been a worker in a real work period, you would not earn money this round.

[Next screen] {TIMESTAMP}

However, the worker may not have been able to work in every period, because they or their child may have gotten sick. At the start of each period for each worker, the computer drew a random number to decide whether the worker got sick, whether their child got sick, or whether the worker and their child were both healthy.



There is a 50% (5 out of 10) chance that the worker was not sick and their child was not sick. If this happens, they could work for sure.

There was a 20% (2 out of 10) chance that they were sick and their child was not sick. If this happened, they were not be able to work.

There is a 30% (3 out of 10) chance that their child was sick and they were not sick. If this happened, someone had to care for them. The worker could choose to stay home themselves and take care of their child or they could pay \$0.25 to hire a babysitter to take care of their child. If they chose to stay home, then they could not work in that period. If they chose to hire a babysitter to take care of their child, then they could work.

This means that workers have different work histories, in part due to chance and in part due to their own choices

[Next screen]

For example, a worker could have a work history like this:

A sample worker's work history



Out of 12 periods, this worker got sick 3 times and couldn't work.

Their child never got sick so they didn't have to decide whether to hire a babysitter and work or stay home and not work.

They will be paid \$0.20 for the 9 periods that they worked (\$1.80).

[Next screen] {TIMESTAMP}

To check that you are fully paying attention to the instructions for this part of the study, we will ask you a few questions. When participants do not carefully read the instructions and quickly click through the survey, it compromises the results of the research. To show that you are reading our instructions carefully, please answer the following question by entering the number 4.

Question: If the worker works, how many Os will they count in each grid?

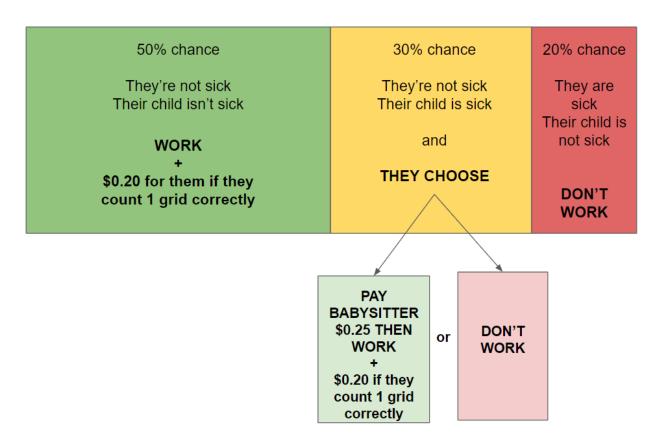
[Next screen:]

[If attention check answered correctly:] Great job! Thank you for paying attention. Now we will ask you questions to confirm that you understand the instructions. You will have two chances to answer these questions correctly.

[If attention check was not answered correctly:] You did not answer the attention check question correctly. Please pay close attention in the future.

Now we will ask you questions to confirm that you understand the instructions. You will have two chances to answer these questions correctly.

[Next screen] {TIMESTAMP} (Separate stamps for each attempt)



Question 1: In each period, what is the chance that the worker will get sick? (50/30/20%)

Question 2: If the worker got sick, what happens? (They will definitely work/<u>They definitely will not be able to work</u>/They could choose to hire a babysitter so that they could work or they could choose not to hire a babysitter and not work.)

Question 3: If the worker's child got sick, what happens? (They will definitely work/They definitely will not be able to work/<u>They could choose to hire a babysitter so that they could work or they could choose not to hire a babysitter and not work.</u>)

Question 4: Are the workers paid \$0.20 per period if they correctly count at least one grid? (Yes/No)

[Next screen]

[If all comprehension checks answered correctly:] Great job! You answered the comprehension questions correctly. You can move on.

[If not all comprehension checks answered correctly, first attempt:] You did not answer all the comprehension questions correctly. Since it is important that you understand the instructions, you must read the instructions again and then try again to answer the comprehension questions.

[If not all comprehension checks answered correctly, second attempt:] You did not answer all the comprehension questions correctly. Please pay careful attention to the next instructions.

[Next screen :] {TIMESTAMP}

[No info treatments: with and without gender revealed]

We will show you profiles of 18 workers in total. You will see profiles of six workers at a time. You will see the workers' age, [gender], and favorite color.

For each of the workers you see, we will ask you what is the highest wage (between \$0.00 and \$1.00) you would pay that worker. If that worker is hired, you will be paid \$0.25 for each period that the worker works in 4 of the 12 periods. Which periods you will be paid for will be chosen by the computer randomly, so it's not necessarily the first 4 periods or the last 4 periods, but rather a random selection.

[Next screen:]

For example, given the example worker's history from before, you would be paid for 4 randomly selected periods. In this case, you would be paid \$0.25 each for the three randomly selected periods that this worker worked.

A sample worker's work history



You will be paid based on whether the worker worked in 4 randomly selected periods. In this example, you would be paid \$0.25 for the 3 periods that the worker worked.

You will earn more money when the worker works more.

You can offer up to \$1.00 to each worker.

However, you will not know anything about their work history. An example profile of what you will learn is shown below.

Age:	35
[Gender:]	[Male]
Favorite Color:	Green

[Partial info treatments: with and without gender revealed]

We will show you profiles of 18 workers in total. You will see profiles of six workers at a time. You will see the workers' age, [gender,] favorite color, and some information about their work history.

Of the 12 periods, you will learn about whether the worker worked in 8 of them. Which periods you learn about will be chosen by the computer randomly, so it's not necessarily the first 8 periods or the last 8 periods, but rather a random selection.

[Next screen:]

For example, given the example worker's history from before, you would learn about whether they worked in 8 randomly selected periods, the ones not blacked out in the graphic below.

Importantly, you will see the number of periods that the worker worked (out of 8) but will not know the reason for any unworked periods (so you won't know if it was because they got sick or chose to stay home to care for a sick child).

A sample worker's work history



This worker might earn additional money from the employers.

The computer will select 8 of 12 periods at random and you will learn whether the worker worked in those periods before making your wage offers.

In this example, you will not find out information about the blacked out squares.

This example worker's resume will look like this:

Age: 35 Favorite Color: Green

Worked: 6 of 8 periods
Did not work: 2 of 8 periods

[Next screen:]

For each of the workers you see, we will ask you what is the highest wage (between \$0.00 and \$1.00) you would pay that worker. If that worker is hired, you will be paid \$0.25 for each period that the worker works in the other 4 periods that you do not know if the worker worked or not.

A sample worker's work history



You will be paid based on whether the worker worked in 4 randomly selected periods. In this example, you would be paid \$0.25 for the 3 periods that the worker worked.

You will earn more money when the worker works more.

You can offer up to \$1.00 to each worker.

[Full info treatments: with and without gender revealed]

We will show you profiles of 18 workers in total. You will see profiles of six workers at a time. You will see the workers' age, [gender,] favorite color, and some information about their work history.

Of the 12 periods, you will learn about whether the worker worked in 8 of them. Which periods you learn about will be chosen by the computer randomly, so it's not necessarily the first 8 periods or the last 8 periods, but rather a random selection.

[Next screen:]

For example, given the example worker's history from before, you would learn about whether they worked in 8 randomly selected periods, the ones not blacked out in the graphic below.

Importantly, you will see the number of periods that the worker worked (out of 8) and also the number of periods they didn't work because they were sick and the number of periods they didn't work to take care of a child who was sick. You will not know how many times they chose to hire a babysitter.

A sample worker's work history



This worker might earn additional money from the employers.

The computer will select 8 of 12 periods at random and you will learn whether the worker worked in those periods before making your wage offers.

In this example, you will not find out information about the blacked out squares.

This example worker's resume will look like this:

Age: 35 Favorite Color: Green

Worked: 6 of 8 periods Sick: 2 of 8 periods Childcare: 0 of 8 periods

For each of the workers you see, we will ask you what is the highest wage (between \$0.00 and \$1.00) you would pay that worker. If that worker is hired, you will be paid \$0.25 for each period that the worker works in the other 4 periods that you do not know if the worker worked or not.

A sample worker's work history



You will be paid based on whether the worker worked in 4 randomly selected periods. In this example, you would be paid \$0.25 for the 3 periods that the worker worked.

You will earn more money when the worker works more.

You can offer up to \$1.00 to each worker.

[All treatments:] [Next screen]

After you indicate the highest wage you would be willing to give to each employee, we will randomly draw a number between \$0.00 and \$1.00.

If the wage you chose for the worker is equal to or higher than the randomly-drawn number, then you have hired that worker and you will receive a bonus equal to \$0.25 times the number of periods worked by that worker in 4 randomly selected periods minus the random number that was drawn

If the highest wage you were willing to pay the worker is lower than the random number, you will not hire the worker and you will not receive a bonus.

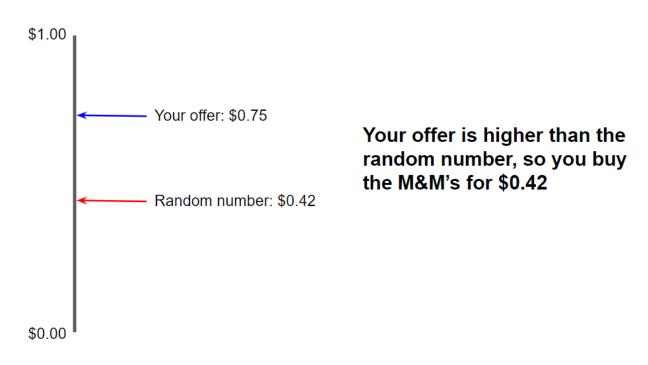
[Next screen] {TIMESTAMP}

Let's go through a silly example to practice how this works. Suppose I offered you the chance to buy a 1.69 oz bag of M&Ms.

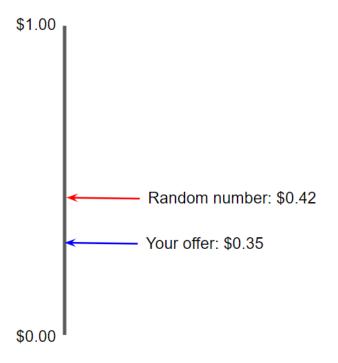


[Next screen]

If you offered \$0.75 and the random number were \$0.42, you would buy the bag for \$0.42.



However, if you offered \$0.35 and the random number were \$0.42, you would not buy the bag of M&Ms.



Your offer is lower than the random number, so you do not buy the M&Ms.

[Next screen]

Let's try an example. How much (between \$0.00 and \$1.00) would you be willing to pay for a 1.69 oz bag of M&Ms?

[Next screen]

[If offer more than random number:] You offered [\$0.XX] for the bag of M&Ms. The computer drew a random number of [\$0.XX]. Because your offer was higher than the randomly drawn number, you bought the bag of M&Ms and you paid [\$0.XX] for it.

[If offer less than random number:] You offered [\$0.XX] for the bag of M&Ms. The computer drew a random number of [\$0.XX]. Because your offer was lower than the randomly drawn number, you did not buy the bag of M&Ms.

While this process may sound complicated, what it means for you is simple: The best thing for you to do is to offer the highest wage you are willing to pay each worker.

[Next screen]

In today's task, we will automatically give you \$1 to start with (so there's no way you end up owing us money) and you will actually only hire 1 person. After you decide the most you would be willing to pay to each of the workers we present, we will randomly select one profile to use as the actual hiring decision.

Your decision will also affect the workers' payments. The workers know what information you will see and that they will be paid based on the employers' decisions when they make their choices.

[Next screen] \(\frac{\text{TIMESTAMP}}{\text{}} \)

To check that you are fully paying attention to the instructions for this part of the study, we will ask you a few questions. When participants do not carefully read the instructions and quickly click through the survey, it compromises the results of the research.

...thirteen, fourteen, fifteen, sixteen, , eighteen, nineteen...

Which number belongs in the blank space? Please type the number in numerical form. So if the answer is one, please enter 1.

[Next screen] {TIMESTAMP}(Separate stamps for each attempt)

Remember that this is the profile that you will see for each worker:

[inserts relevant example profile]

Question 5: Will the wage you offer each worker affect their bonus? (Yes/No)

No Info gets questions 6 Partial Info gets questions 7 and 8 Full Info gets questions 8 and 9 Question 6: Were the workers told that you will know how many periods they worked when making their decisions? (Yes/No)

Question 7: Were the workers told that you will know how many periods they worked for 8 randomly selected periods when making their decisions? (Yes/No) [Answer depends on info treatment]

Question 8: Were the workers told that you will know how many periods they didn't work because they were sick for 8 randomly selected periods when making their decisions? (Yes/No) [Answer depends on info treatment]

Question 9: Were the workers told that you will know how many periods they didn't work because they took care of children for 8 randomly selected periods when making their decisions? [Answer depends on info treatment]

[If did not answer comprehension questions correctly:] You did not answer all the comprehension questions correctly. Since it is important that you understand the instructions, you must read the instructions again and then try again to answer the comprehension questions.

[Next screen] {TIMESTAMP}

Now we will ask you to make your wage bids and potentially hire one of the workers.

[Next screen]

*Below you will see the profiles of six workers. What is the highest wage you would pay each of them? Remember that if your bid is higher than the randomly drawn wage, you will hire that worker and you will be paid \$0.25 for every period they work in a randomly selected 4 periods of 12.

[repeat to * for a total of 3 sets of 6 randomly selected sets of profiles]

[Next screen] {TIMESTAMP}

You have now completed the first part of the study.

In this second part, we will ask you some questions about what you think workers did. You have an opportunity to earn a bonus if your guesses are correct. Workers knew that the employers would see these resumes when making their decisions.

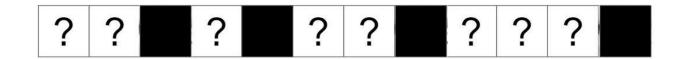
We will ask how many times you think the worker worked, how many times they did not work because they were sick, how many times you think they did not work because they stayed home to care for a child who was sick, and how many times they hired a babysitter to care for a sick child so they could work.

You will have the chance to earn a significant bonus (up to \$2) if you answer these questions correctly. The computer will randomly choose one of the resumes to check. The payment rule for this task is designed so that you will earn the largest bonus by reporting your most-accurate guess. The precise payment rule details are available by request at the end of the study.

[Next screen]

Please think about what the workers may have done in their work history.

Instead of thinking about what they did in all 12 periods, please think about what they did in a randomly selected 8 periods. It's not the first 8 or the last 8 but rather a random selection.



[Next screen]

How many periods do you think this worker did the following things?

•Worker

[Info on profiles match the employers' own treatment status]

[Questions for No Info treatments:]

They worked

They didn't work because they were sick

They didn't work because they took care of a sick child

Their child was sick, but they hired a babysitter so they could work

[options were restricted so that the choices added up to 8, the total number of periods asked about in the question]

[Questions for Partial Info treatments:]

They didn't work because they were sick

They didn't work because they took care of a sick child

Their child was sick, but they hired a babysitter so they could work [options were restricted so didn't work options were required to add up to the number of periods that the worker did not work *and* the number of periods in which babysitter was hired was less than or equal to the number of periods worked on the profile]

[Questions for Full Info treatments:]

Their child was sick, but they hired a babysitter so they could work [option was restricted so choice was required to be less than or equal to the number of periods worked on the profiles]

[repeat to • for a total of 3 randomly selected sets of profiles]

[Next screen]

Different workers were told that employers would see more or less information about them and their work histories when making their wage offers. Workers knew what information the employers would see. What do you think these workers did?

[Next screen]

^ç Worker #

[repeats to ^c for a total of 6 randomly selected profiles where info on profiles do NOT match the employers' own treatment status: three with the same gender but different information treatment, and three with a different gender but same information treatment]
[Questions will be based on the information shown on the resumes, as above]

[Next screen] \(\frac{\tangle TIMESTAMP}{\tangle} \)

You have completed the second part of the study. Now we will ask you to fill out a brief survey.

How difficult was it for you to understand the tasks today? (Easy, neutral, difficult)

How difficult was it for you to make choices in the study today? (Easy, neutral, difficult)

[Next screen]

How old are you in years?

What is your gender? (Male, Female, Other)

What is your marital status? (Single, Partnered, Married, Divorced, Widowed)

What best describes your sexual orientation? (Heterosexual, Homosexual, Bisexual, Other)

Do you have children? (Yes, No)

What best describes your race and ethnicity? Please check all that apply to you. (White or Caucasian, Black or African American, Asian or Asian American, Native Hawaiian or other Pacific Islander, Hispanic/Latinx)

What is your highest level of education? (Less than high school graduate, High school graduate, Some college/vocational training, Associate's degree, Bachelor's degree, Master's degree/Professional degree (M.A., J.D., M.D., M.B.A., etc.), PhD)

In the past month did you primarily: (Work for somebody else, not including a member of your family; Work for a family member; Work for yourself; Had the opportunity to work but did not work; Wanted to work but could not find work; Did not work and did not try to find work)

[Next screen]

[If the respondent said they worked in the previous question]: In the last month, did you work full time or part time? (Part-time, Full-time)

[If the respondent said they worked in the previous question]: What is your job title? Please briefly describe your job.

[If the respondent said they worked in the previous question]: Are you able to control which hours and/or days that you work? (Never, Sometimes, About half the time, Most of the time, Always)

Approximately how much money do you earn in a typical month? Please include only your own income.

Have you ever been involved in hiring workers? (Yes, No)

To what extent do you agree with the following statement: Relative to other people in my community, I am willing to take risks in my life. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

To what extent do you agree with the following statement: It disturbs me when I am uncertain of the effects of my actions.(Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

To what extent do you agree with the following statement: Please select disagree from the answer choices to demonstrate that you are paying attention. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

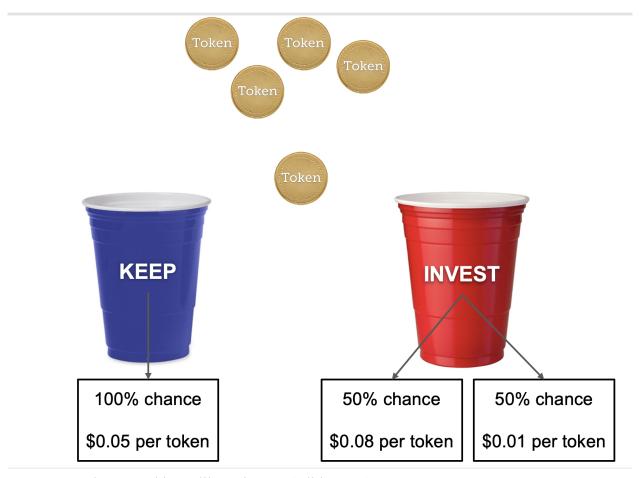
To what extent do you agree with the following statement: I am comfortable in situations in which I do not know the likelihood of different outcomes. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)

[Next screen]

Now you have a chance to earn an additional bonus.

You have 5 tokens. Any token you keep is worth an additional \$0.05 to you for sure.

However, you could choose to invest some or all of your tokens. If you invest, there is a 50% chance that the investment will pay off and you will earn \$0.08 per token you invest. However, there is also a 50% chance that the investment will not pay off and you will keep \$0.01 per token. The graphic below summarizes your choice.



How many tokens would you like to invest? [Slider: 0-5]

[Next screen]

[If the respondent indicated they have children, they'll see the following questions:]

How many children do you have?

How old is your oldest child in years?

How old is your youngest child in years?

Are you raising/did you raise your children alone or do you have a co-parent? (I am raising/did raise my kids alone, I am raising/did raise my kids with at least one co-parent, Someone else is raising/raised my children)

[Next screen]

[If the respondent indicated they have co-parented, they'll see the following questions:]

Do you live with your co-parent? (Yes, No)

What is your co-parent's highest level of education? (Less than high school graduate, High school graduate, Some college/vocational training, Associate's degree, Bachelor's degree, Master's degree/Professional degree (M.A., J.D., M.D., M.B.A., etc.), PhD)

In the past month did your co-parent primarily: (Work for somebody else, not including a member of their family; Work for a family member; Work for themself; Had the opportunity to work but did not work; Wanted to work but could not find work; Did not work and did not try to find work)

[Next screen]

[If the respondent indicated they have co-parented *and* that their co-parent works, they'll see the following questions:]

Did your co-parent work full time or part time? (Part-time, Full-time)

What is your co-parent's job title? Please describe their work briefly.

Is your co-parent able to control which hours and/or days that they work? (Never, Sometimes, About half the time, Most of the time, Always)

Approximately how much money does your co-parent earn in a typical month?

[Next screen]

When your children were born, did you take a parental leave or quit your job? (Took a leave, Quit my job, Did not take a leave or quit my job)

[If the respondent indicated they have co-parented *and* they have a child]: When your children were born, did your co-parent take time a parental leave or quit their job? (Took a leave, Quit their job, Did not take a leave or quit their job, They were not my co-parent when my children were born)

[Next screen]

[If respondent indicated that they had taken parental leave, they will see the following questions:]

Was your parental leave paid or unpaid? (Fully paid, Partially paid, Unpaid)

How long did you take off in months (both paid and unpaid time off)?

Do you think your parental leave affected your career? How?

[If respondent indicated that they did not take parental leave:] Why didn't you take a parental leave after the birth of your child?

[If respondent indicated that their co-parent had taken parental leave, they will see the following questions:]

Was your co-parent's parental leave paid or unpaid? (Fully paid, Partially paid, Unpaid)

How long did they take off in months (both paid and unpaid time off)?

Do you think their parental leave affected their career? How?

[If respondent indicated that their co-parent had not taken parental leave:] Why didn't your co-parent take a parental leave after the birth of your child?

[Next screen]

[If the respondent indicated that they had children:] Have you switched/did you switch jobs or cut back on your hours because you are a parent? (Quit working, Switched jobs, Cut hours, Switched jobs and cut hours, did not switch jobs or cut hours)

[If the respondent indicated that they had children and did co-parent:] Has your co-parent switched/did your co-parent switch jobs or cut back on your hours because you are a parent? (Switched jobs, Cut hours, Switched jobs and cut hours, did not switch jobs or cut hours)

[If the respondent indicated that they had children:] How often do/did you take care of your children when they cannot go to school or daycare, for example due to illness or weather? (Never, Rarely, About half the time, Most of the time, Always)

[If the respondent indicated that they had children:] When you do/did not take care of your children when they cannot go to school or daycare, who does/did? (You may select more than one) (My co-parent, Another family member, A friend, Another parent with children of similar age, An unpaid babysitter, A paid babysitter)

[If the respondent indicated that they had children:] Do you think taking time off work to care for children when they are sick or have a snow day has affected your career? How?

Below are a number of tasks. If a man and a woman in a heterosexual couple are facing these tasks, please indicate the extent to which you believe each task should be primarily done by the man, should be primarily done by the woman, or should be shared equally between them: (Should always be done by the man, Should usually be done by the man, Equal responsibility, Should usually be done by the woman, Should always be done by the woman)

- Mow the lawn
- Prepare meals
- Handle financial matters, such as paying bills
- Stay home with a child who is sick
- Earn most of the money to support the family
- Do the laundry
- Shovel snow
- Clean the house

[Next screen] {TIMESTAMP}

Would you like more detail about how your bonus will be calculated from based on your guesses about how many times a worker worked, was sick, or spent a period taking care of children? (Yes, No)

[Next screen]

[If they say they want to know details about the bonuses:] We randomly pick one question and pay you $(0.20 \text{ minus your deviation from the correct answer}) \times 10$. For example, if your answer for the randomly picked question is 1 and the truth is 0.90, then you get $((0.20 - |1 - 0.90|) \times 10 + 0.90)$ equals a \$1 bonus. You cannot receive a negative bonus.

[Next screen] {TIMESTAMP}

We would like to know what you were thinking about while you were completing the tasks and survey. These answers will not affect your payment. We are just curious about your thoughts and experiences.

What were you thinking about when you gave your guesses about how many times a worker worked, was sick, or spent a period taking care of children?

What do you think this study is about?

Were you multi-tasking and/or interrupted while you were doing the survey?

What times of the day and week is it easiest for you to focus on a longer survey like this one? Please select all that apply.

Weekdays, Weekends x choices (Early morning (5am-8am), Morning (8am-12pm), Early afternoon (12pm-3pm), Late afternoon (3pm-5pm), Early evening (5pm-8pm), Late evening (8pm-11pm))

[Next screen] {TIMESTAMP}

Thank you for your participation in our survey!

Please click the button below to be redirected to Prolific and register your submission.