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IZA DP No. 18302

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Manuela R. Collis
University of Toronto

Clémentine Van Effenterre
University of Toronto and IZA

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ISSN: 2365-9793

IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Workplace Hostility*

We investigate how much individuals value a workplace that doesn't tolerate hostility, and how these preferences affect sorting in the labor market. We conduct a choice experiment involving 2,048 participants recruited from recent graduates and alumni from a large public university. Our results show that individuals are willing to forgo a significant portion of their earnings—between 12 and 36 percent of their wage—to avoid hostile work environments, valuations substantially exceeding those for remote work (7 percent). Women exhibit a stronger aversion to exclusionary workplaces and environments with sexual harassment. Combining survey evidence, experimental variations of workplace environments, and individual labor market outcomes, we show that both disutility from workplace hostility and perceptions of risk contribute to gender gaps in early-career choices and in pay. To quantify equilibrium implications, we develop a model of compensating differentials calibrated to our experimental estimates. Using counterfactual exercises, we find that gender differences in risk of workplace hostility drive both the remote pay penalty and office workers' rents.

JEL Classification: J16, J24, J31

Keywords: workplace hostility, compensating differentials, gender

Corresponding author:
Clémentine Van Effenterre
University of Toronto
150 St. George Street
Toronto M5S3G7, ON
Canada

E-mail: c.vaneffenterre@utoronto.ca

* We thank Abdelrahman Amer, Stephanie Chan-Ahuja, Katherine Coffman, Rahul Deb, Andy Garin, Jiaying Gu, Emma Harrington, Mitchell Hoffman, Kory Kroft, Brian Kovak, Nicola Lacetera, Pamela Medina-Quispe, Ismael Mourifie, Frank Schilbach, Ricardo Perez-Truglia, Johanna Rickne, Avner Seror, Eduardo Souza-Rodrigues, Melanie Wasserman, Basit Zafar and participants of the SOLE meetings, the Economics of Working Environment Conference, the SMS special conference, EGOS, Stanford SITE Experimental Economics Conference, the Empirical Management Conference, the Strategy and Field Experiment Conference, the AFE, EALE, and ZEW conferences for helpful discussions and comments. We are grateful to Ettore Damiano, Robert Gazzale, Mark Green, Jordi Mondria, John Veugelers, Heather Yearwood and Suzanne Wood for their support. Paul Grewar, Aisha Philippe, Matthew Jarvis-Cross, Xiaoxi Joyce Wang, Sabrina Wong, Adam Khallaf and Sam Hoogsteen provided outstanding research assistance. This project benefited from the support of the SSHRC Insight Development Grant. IRB clearance was obtained from the University of Toronto (RIS Human Protocol Number 42878). The survey experiment was pre-registered on August 22, 2023, ID: AEARCTR-0011438, a pre-analysis plan was uploaded on the AEA RCT Registry website on August 22, 2023.

Introduction

Hostile work environments are workplaces that put employees at risk of unwelcome or offensive behaviors, causing them to feel uncomfortable, scared, or intimidated in their place of employment. Globally, nearly one in five people in employment has experienced physical or psychological violence and harassment at work in their working life (ILO, 2022), and 15 percent of Americans report a toxic workplace (APA, 2024). Among job switchers, hostility at work is ranked as the second most important reason for leaving the position, surpassed only by compensation concerns (Parker and Horowitz, 2022). Recent studies have shown that in its most extreme forms—such as physical violence or sexual harassment, its prevalence is associated with higher turnover rates, lower hiring rates for women (Batut et al., 2021; Adams-Prassl et al., 2023), and lower wages (Folke and Rickne, 2022), which further exacerbates labor market disparities between men and women.

The consequences of workplace hostility, including in its less severe forms, might extend beyond effects on victims, as perceptions of work climate may affect workers' sorting across industries and jobs—particularly among labor market entrants, for whom limited firsthand experience and the long-term implications of initial job placements make such perceptions especially consequential. However this remains largely unexplored. Understanding how diverse forms of hostility affect workers' initial labor market sorting is crucial to assess their overall impact on aggregate surplus and labor market inequality.

This paper investigates how much individuals value a workplace that doesn't tolerate hostility, and how preferences and beliefs about individual risk of hostility affect sorting in the labor market. We define workplace hostility in terms of three attributes: aggression, exclusion, and sexual harassment. We conduct a large choice experiment with college graduates to measure their valuations for hostility-free environments, and collect rich measures of beliefs about individual risk, job search strategies and individual labor market outcomes. We show that both disutility from working in hostile environments and perceptions of individual risk of hostility upon entering the labor market play a significant role in explaining gender gaps in actual career choices and earnings.

Studying how workplace hostility affects labor market sorting poses significant empirical challenges. First, workplace hostility, including in its less severe forms, is severely underre-

ported (Dahl and Knepper, 2021; Adams-Prassl et al., 2023; Boudreau et al., 2023). Accounting for potential search frictions is critical, as this amenity is difficult to observe by workers *ex-ante*: potential informants often fear intimidation or retaliation (Cheng and Hsiaw, 2022), and the widespread use of non-disclosure agreements (NDAs) can further deter employees from sharing negative experiences in online reviews (Sockin et al., 2023). These information frictions might be particularly salient for early-career job seekers who have limited access to professional networks and are less likely to find jobs through referrals (Topa, 2019). While social connections could, in principle, help mitigate information frictions regarding workplace culture (Hampole et al., 2021), empirical evidence suggests that working professionals rarely mention hostile environments when advising college students (Gallen and Wasserman, 2021). Finally, while there is a positive correlation between the share of women in an occupation and the importance of constructive workplace dynamics (Figure 1),[1] the prevalence of hostility might correlate with other—possibly unobserved—workplace characteristics (Sockin, 2022).

To overcome these challenges, we adopt an experimental approach. Using our three hostility attributes and workplace engagement as a benchmark, we designed and conducted a pre-registered hypothetical job choice experiment based on hypothetical job reviews to measure demand for hostility-free workplaces and the substitution across different attributes of workplace hostility and workplace arrangements.

We conducted the experiment with a sample of 2,048 participants consisting of recent graduates, job-seeking upper-year undergraduate students and alumni from diverse majors at a large public university in Canada. Participants in our sample vary in the amount of work experience, industry, and sociodemographic characteristics, have limited experience with research surveys, and are comparable to a representative sample of Canadian college graduates in terms of labor market outcomes.

We presented respondents with a series of pairs of hypothetical job scenarios. Each job in the pair varied exogenously in wage, opportunities for professional growth, and in one of the three workplace hostility attributes—exclusion, aggression, and sexual harassment. We introduced variation in hostility attributes and opportunities professional growth through positive or negative hypothetical job reviews describing the work environment. Finally, we vary workplace arrangements across jobs (hybrid versus on-site and teamwork versus solo).

[1] See Appendix A for details.

Because a substantial share of respondents contacted perceive their choices as consequential since they may influence the design of future program offerings, it is reasonable to assume that their responses reflect their true preferences (Carson and Groves, 2007; Carson et al., 2014). Finally, we surveyed respondents about their past experience with hostile workplace cultures and their perceived risk of experiencing hostility at work in the next two years.

We find that individuals place substantial value on workplaces that actively do not tolerate hostility across any of the three dimensions. The willingness-to-pay (WTP) for inclusion is equivalent to 14 percent of the wage, comparable to a workplace that provides professional growth (15 percent of the wage). An aggression-free workplace is valued by respondents at 19 percent of their wage. Workers are willing to forgo roughly 30 percent of their wage for a workplace that enforces a zero-tolerance policy for sexual harassment. These WTP estimates for hostile-free environments are substantially larger than the corresponding estimates for hybrid work, which correspond to 7 percent of the wage.

We then focus on differences between genders, in accordance with our pre-analysis plan, as gender differences in preferences for specific job attributes are known to play a critical role in explaining differences in labor market decisions (Wiswall and Zafar, 2018). We find that while both men and women value a workplace free of hostility, women are willing to forego a higher percentage of their wage for inclusive workplaces and work environments free of sexual harassment. Men value an inclusive workplace at the equivalent of 12 percent of their wage and a workplace with a zero-tolerance policy for sexual harassment is valued at 20 percent. Women value these attributes at 15 percent and 34 percent, respectively, with the gender differences statistically significant across specifications. Besides these differences in willingness-to-pay, gender differences in perceived individual risk of hostility are even larger. For the student sample, we find that female respondent enrolled in male-dominated majors (STEM, business, and economics) report the highest perceived risk of experiencing hostility for all hostility attributes, and that past experiences of hostility is a major driver of these perceived individual risks.

The theory of compensating differentials predicts that there is sorting between workers and jobs based on their respective preferences and costs, and that wages should compensate workers for undesirable characteristics (Rosen, 1974, 1986). However, imperfect sorting can arise if workers face informational frictions (Manning, 2011), for example about the quality

of the work environment. Two years after the experiment was conducted, we collected information about student participants' labor market outcomes, workplace characteristics, and job search strategies. Our results suggest that both preference heterogeneity about the work environment and beliefs about individual risk of workplace hostility—particularly of sexual harassment—influence sorting in the labor market, and contribute to gender gaps in sorting across industries and in pay. Using publicly available data on job titles and industries, we find that participants who are currently employed in female-dominated roles exhibited significantly higher WTP to avoid workplaces that tolerate sexual harassment in the experiment conducted two years earlier, compared to those now working in male-dominated roles. This difference holds conditional on prior major choice. Additionally, we find that student participants' individual perceived risk of sexual harassment measured at graduation is negatively correlated with their salary two years later, consistent with sorting away from higher-paying jobs. This relationship remains significant after controlling for major, GPA, and other measures of perceived risk, and suggests that perceived risk of workplace hostility contributes to the gender gap in early-career pay. Our analysis of survey data provides direct evidence that women are significantly more likely to report strategies aimed at avoiding workplace hostility during their job search, and adopt avoidance strategies which may lead them to miss professional opportunity once they are employed.

With limited information on an important but imperfectly observable determinant of job quality such as workplace hostility, individuals may form perceptions about its prevalence, and engage in both substitution based on other job attributes and sorting based on observable job characteristics, such as availability of solo work (versus teamwork) and hybrid work (versus onsite work). We provide evidence that remote work may serve as a substitute for avoiding hostile environments, particularly for women. To do so, we turn back to our experimental data and use exogenous variation in amenities across job scenarios. It allows us to measure the causal effect of the quality of workplace environments on valuations for working arrangements. We find that women value hybrid work twice as much in scenarios where sexual harassment is tolerated at the workplace, while men's valuations remain comparable across working environments.

To explore the aggregate consequences of workplace hostility on sorting across jobs, we then study the equilibrium effects of exogenous changes of the characteristics of the work environments on workers' sorting, pay differentials across jobs, and rents. To do so, we take

the WTP and individual perceived risk estimates from our experiment, and pair them with a benchmark model of compensating differentials (Rosen, 1974, 1986). We assume that workers have distaste for two amenities—office work and sexual harassment—where the latter is *ex-ante* unobservable to both workers and firms. Our model predicts that the risk of workplace hostility impacts workers' selection across remote and office jobs, resulting in increased gender segregation of the labor market and gender pay gaps. We then present three counterfactual experiments to put the impact of the risk of workplace hostility on the remote pay gap and on workers' and firms' rents in context. First, we exogenously decrease the risk of workplace hostility. We compare this to two alternative cases: an exogenous technological shock on the cost of remote work experienced by firms, and a shock on the gender gap in preferences for hostility-free environments. Our decomposition shows that gender differences in the risk of hostility at work are an important driver of the remote pay penalty and office workers' rents, with an impact comparable to that of a large technological shock facilitating the provision of remote work by firms. Finally, we use our model to examine how a social planner's mandate requiring firms to reduce the probability of harassment impacts sorting patterns and rents. We find that when firms are bearing the preventing cost of harassment, workers' selection in office jobs based on distaste for sexual harassment is attenuated. However, the impact on workers' rents is ambiguous, as firms are unable to screen workers based on their preferences and to compensate them differentially. Taken together, our results suggest that if firms cannot screen workers by their tolerance for harassment, compensating for harassment risks simply increases workers' average rents.

This paper contributes to several strands of the literature. Non-wage job amenities have long been understood as an important component of job quality shaping labor market outcomes and explaining wage disparities.[2] Caldwell et al. (2025) documented large switching cost limiting workers' mobility, even accounting for observable non-wage amenities, suggesting a large role for residual firm-specific factors, such as culture. Two important contributions provide direct evidence that violence at work is associated with worth economic outcomes, in

[2]See Rosen (1974), Rosen (1986), Mas and Pallais (2017), Kaplan and Schulhofer-Wohl (2018), Wiswall and Zafar (2018), Dube et al. (2022), Lamadon et al. (2022), Drake et al. (2022), Maestas et al. (2023), Sockin (2022), Sockin and Sojourner (2023), Morchio and Moser (2023), Roussille and Scuderi (2025), Caldwell et al. (2025), Mas (2025), Humlum et al. (2025). Recent articles measured specifically the value of commuting time (Le Barbanchon et al., 2021; Bergemann et al., 2024), safety (Anelli and Koenig, 2021), temporal flexibility (Mas and Pallais, 2017), and meaningful work (Hu and Hirsh, 2017; Cassar and Meier, 2018; Burbano et al., 2020, 2022).

particular for women. Folke and Rickne (2022) use representative survey data from Sweden to estimate individuals' WTP to avoid workplaces where sexual harassment has occurred, and shows that high risk workplaces are associated with lower pay. Using police reports and administrative data in Finland, Adams-Prassl et al. (2023) find that the share of women among new hires falls after an incident of violence at work.

We expand this literature in several ways. First, we conceptualize hostility as a broad phenomenon, encompassing less severe forms of unwelcome behaviors that are typically unreported, but may nonetheless shape individuals' employment decisions. Next, we provide direct evidence that hostility affects young workers' search behaviors and job choices, in particular for women (Cortés et al., 2023). Moreover, our results also suggest that improving workplace climate can generate positive spillovers that extend beyond direct benefits on already employed workers (Alan et al., 2023). Finally, we analyze the behaviors of recent graduates who face more informational frictions and whose initial conditions in the labor market are known to have long-lasting effects (Oreopoulos et al., 2012).

We also contribute to the literature on the causes of occupational sorting by gender. Gender segregation of the labor market contributes to the persistence of the gender pay gap (Blau and Kahn, 2017) and affects aggregate productivity (Hsieh et al., 2019). Studies have highlighted the role of temporal flexibility of jobs, which tend to make certain occupations less attractive to women (Bertrand et al., 2010; Goldin, 2014; Wiswall and Zafar, 2018; Cortés and Pan, 2019; Wasserman, 2023), the lack of role models (Porter and Serra, 2020; Breda et al., 2023) that could reduce informational barriers and social identity constraints (Akerlof and Kranton, 2000; Del Carpio and Guadalupe, 2022; Delfino, 2024; Schuh, 2024), or the role played by gender differences in psychological attributes (Niederle and Vesterlund, 2007; Flory et al., 2015; Wiswall and Zafar, 2021). Gender differences in preferences may affect human capital investments, even prior to job market entry. Recently, Lepage et al. (2025) and Cohodes and Leu (2025) have investigated the role of, respectively, anticipated gender discrimination and faculty sexual misconduct on college major choice and degree completion. By directly linking individual-level measures of disutility for hostile workplaces and perceived risk to real labor market outcomes two years after graduation, our results highlight one of the potential factors behind the "leaky pipeline" (Buckles, 2019), which could explain women's underrepresentation in high-paying jobs even after graduating with a degree from male-dominated majors. Our

results also help reconcile the mixed evidence on the effects of school gender composition on women's entry into and retention within male-dominated fields,[3] as exposure to hostility during university shapes perceptions of risk, thereby affecting long-term sorting decisions.

Finally, a growing body of literature documents inter-personal dynamics and their implications in terms of labor market inequality (Burbano et al., 2022; Linos et al., 2023; Folke and Rickne, 2022; Alan et al., 2023; Cullen and Perez-Truglia, 2023). To the best of our knowledge, we are the first to use an experimental design to investigate the substitution between workplace arrangements and inter-personal dynamics. Sockin and Sojourner (2023) find that while workers seek out information about these experience goods that hard to observe, they struggle to get accurate, relevant information about prospective jobs. Our paper suggests that workers' expectations about the prevalence of experience goods such as workplace hostility shape the demand for substituting workplace amenities. This dimension is particularly relevant in the context of the rise in remote work that has surged since the Covid-19 pandemic (Barrero et al., 2021, 2023; Emanuel and Harrington, 2023; Cullen et al., 2025). A handful of papers have started to look at the potential benefits and costs of remote or hybrid work on inequality (Sherman, 2020; Emanuel et al., 2023; Doering and Tilcsik, 2024). We address the trade-offs identified in this body of work by showing that the demand for hybrid jobs can be driven by amenities, either present or expected at the office.

The remainder of this paper is structured as follows. We work towards a tractable and empirically validated definition of workplace hostility in Section 1. Section 2 offers a description of the experimental procedures of our choice experiment and presents the identification strategy. Section 3 presents the overall results and delves into the differences across gender. Section 4 explores how workplace hostility risk affects sorting in the labor market. Section 5 presents the model, simulations, and counterfactual experiments. Section 6 concludes.

1 Hostile Work Environments

We develop a tractable definition of workplace hostility by performing a thorough review of the literature on workplace hostility and incivility across several fields, including economics, organizational behavior, psychology, and sociology.[4] We recorded each definition and extract

[3] See Brenøe and Zölitz (2020), Hampole et al. (2021), Bostwick and Weinberg (2022).

[4] See Simmel 1904; Buss and Durkee 1957; Buss and Perry 1992; Ferris et al. 2008; Akella and Lewis 2019; Folke and Rickne 2022; Alan et al. 2023, to name a few.

the adjectives or terms used. Then, through numerous iterations of linguistic clustering, we reduced them to three core attributes: Exclusion, Aggression, and Sexual Harassment. What follows is a description of each workplace hostility attribute, in order of average perceived severity, along with our empirical verification exercise.

1. Exclusion Ostracism is a distinct form of workplace hostility (Williams, 2007). It is characterized by "inaction", as it measures the extent to which an individual or group ignores, excludes, or omits socially appropriate actions towards others (Ferris et al., 2008; Robinson et al., 2013). Such behaviors of exclusion or ignorance have the same effect regardless of whether they were intentional or not; in fact, it is oftentimes the case, that the intention is ambiguous to the affected (Williams, 2007).

2. Aggression Any form of undermining, bullying, or aggression is an explicit form of workplace hostility. Duffy et al. (2002) define undermining as harm-inflicting interpersonal behaviors aimed to hinder relationships, work success, and favorable reputation. Bullying or aggression usually take on a more persistent form and involve humiliation or intimidation (Einarsen, 2000; Hershcovis, 2011; Hershcovis et al., 2017).[5] The scenarios in our job choice experiment reflect the fact that interactions at work can be "friendly" or "cutthroat".[6]

3. Sexual harassment "Unwelcome conduct that is based on sex" defines our third attribute of workplace hostility (U.S. Equal Employment Opportunity Commission, n.d.). Note that sexual harassment is an extreme form of hostility and can have severe negative psychological and career consequences (Schneider et al., 1997; Dionisi et al., 2012; Folke and Rickne, 2022). It is also the attribute we have most robust evidence that it is has important economic remedies and contributes to pay inequalities (Folke and Rickne, 2022).

Workplace engagement as a benchmark Workplace satisfaction significantly influences labor market mobility (Freeman, 1977; Akerlof et al., 1988) and serves as a key predictor of employee turnover. Organizations typically measure employee satisfaction and engagement through workplace climate or pulse surveys, assessing factors such as engagement, professional

[5]Guided by the "hostility inventory" from the psychology literature, first developed by Buss and Durkee (1957) and revised by Buss and Perry (1992), we characterized hostility as a nonphysical form of aggression. In contrast to physical and verbal aggressions—which represent the instrumental component of behavior—, hostility consists of "feelings of ill will and injustice" and represents the cognitive component of behavior (Buss and Perry, 1992).

[6]This attribute relates and enriches the "toxic relations" category used in Alan et al. (2023) that included hyper-competition, gossip, poor quality in human relations, and feeling unappreciated.

growth, and overall satisfaction. To benchmark our findings against these established measures in organizations, we include "Professional Growth" as an additional amenity in our experiment. This allows us to compare the relative importance of workplace hostility against a standard predictor of employee retention.

Empirical validation To validate that our three attributes of workplace hostility not only tightly correspond to the literature but also are recognized as a contributor of hostility by a wider sample, we recruited 200 individuals on *Prolific* and asked them about their impression. We included "professional growth" in this survey to obtain baseline measurements.[7] First, we ask participants to describe a hostile work environment in at least three full sentences. After the experiment, we went through the descriptions, each of them could be assigned to one or more attributes, confirming that our approach captures the core attributes of workplace hostility. Second, we asked participants to rate the hostility level of each attribute (see Figure B1).[8] Figure B2 shows the mean perception of each hostility attribute by gender. We document variations in how individuals rate each attribute: users rate sexual harassment as the most hostile attribute, followed by aggression, lack of inclusion, and lack of professional growth. We also document that female respondents are significantly more likely than male respondents to rate lack of inclusion as hostile (34 percent vs. 28 percent).[9] Overall, this impression survey empirically validates that the three hostility are perceived to be the main drivers of hostility. Moreover, they do so with a varying degree and capture different degrees and natures of hostility at work.

2 Hypothetical Choice Survey Experiment

2.1 Developing Realistic Job Reviews

This section presents a choice experiment to estimate workers' willingness-to-pay for avoiding hostile workplaces. We randomly vary hostility attributes and compensation levels across realistic job scenarios constructed from actual workplace reviews on Indeed and Glassdoor. We bundle hostility attributes to reflect their real-world correlations—for instance, work-

[7]Note that this survey is not pre-registered. IRB approval has been granted by University of Toronto.

[8]Attributes where shown separately and in random order. We asked participants "how likely is it that [aggression] contributes to a hostile work environment?" and provided a slider scale ranging from "extremely unlikely" to "extremely likely". In numerical terms, the slider scale ranged from -100 top 100.

[9]Details about the procedures and the results can be found in Appendix B.1.

places with tolerance for sexual harassment rarely exhibit otherwise inclusive cultures—which increases statistical power without sacrificing realism. By additionally randomizing the availability of remote work and teamwork arrangements within job offers, we can examine how workplace hostility interacts with alternative work arrangements.

We developed a realistic and standardized job review for each attribute. In our effort to closely resemble naturalistic language, we hand-collected two types of data on jobs: (1) job descriptions from job ads and (2) job reviews from current or past employees. We obtained these data by screening job ads on LinkedIn, Indeed.com, and Glassdoor. We recorded workplace environment specific sentences and meta-information for each job ad that contained workplace specific language. Job reviews were collected from Indeed.com, where we focused on descriptions of workplace cultures of major firms (such as Apple, Walmart, or Shoppers). From this collection of data, we selected the sentences which came closest to the workplace attributes and, in a last step, standardized them to ensure the statements read naturally.

Naturally, this raises the question about the type of workplace review that corresponds to the opposite of a hostile workplace and thus would comprise of our counterfactual. We do not aim to develop a definitive definition. Instead, our approach was to select the counterfactual of the workplace scenarios we developed. We do that by using antonyms of the language used for the hostile workplace reviews and as a final step, again made stylistic adjustments for the reviews to read naturally. The language for the full set of workplace reviews is presented in Table C2.

These hypothetical job reviews are then grouped together to create a variety of realistic workplace hostility scenarios. To make the workplace hostility scenarios more realistic and at the same time increase power, we excluded bundles which we predicted are highly unlikely to co-occur in the real world.[10] We are left with seven bundles of workplace hostility scenarios, which can be found under Figure C4, resulting in a total of 30 job offer pairs. Figure C3 Panel A presents descriptive statistics regarding the empirical composition of scenarios in the experiment.

These job offer pairs are enriched with additional job features. First, the job offer defines whether the job will consist of mostly team work or solo work. Second, the job offer defines whether the job location is such that the job is to be completed mostly at the office or mostly

[10]For example, it seems very unlikely that a workplace has a record of sexual harassment but that otherwise the workplace is inclusive, respectful, supportive, and friendly.

from home. Third, the job offer comes with a salary. This means that each job consists of six categories (lack of professional growth, lack of inclusion, aggression, sexual harassment, job location, amount of teamwork) where each category can take two values.

To make the wage level relevant for the respondent, we set a baseline salary in relation to their estimated or—when available—current wage.[11] To construct the job-specific wage, we follow Maestas et al. (2023) and use the baseline salary, and for each job we randomly vary the wage to lie between 0.75 and 1.25 times the baseline salary. Figure C3 Panel B presents the empirical distribution of hypothetical wages in the experiment. We restrict the random variation when one job offer was strictly better than the other. In 21 out of 30 scenarios, one job was strictly better than the other with regard to workplace culture. This is for example the case when one job was "friendly" on all dimensions and the other job was "hostile" on all dimensions. In that case, we did not allow for the strictly better job to pay more.[12]

2.2 Conducting the Experiment

From July to October 2023, we ran a choice experiment to estimate the disutility for each of our hostile workplace attributes.[13] This section details our full experimental design and randomization choices, sampling strategy and recruitment procedures.

Our subject population is comprised of job-seeking upper-year undergraduate students, recent graduates, and alumni from diverse majors, including psychology, sociology, business, economics, engineering, and computer science from a large public university. We recruited survey respondents through the university's undergraduate programs, office for career services,

[11]We use a benchmark annual salary for each participant, which by default is equal to the median annual full-time salary for workers employed with the relevant major, aged between 25 and 64 with a bachelor's degree or higher. For alumni and students who indicated that they have already accepted a job, we are able to update the benchmark annual salary by either using the median annual full-time salary for workers employed with their relevant major in their relevant sector, aged between 25 and 64 with a bachelor's degree or higher if the respondent provided us with the industry they work in. If the participant shares with us their current salary (or salary of their job which they have accepted but may not have started), their current salary will be used as their benchmark annual salary. Should the participant indicate that their annual salary is below CAD 10,000, we use the initial default salary. The median salary used as approximation is computed using employment income statistics by occupation, major field of study and highest level of education from Statistics Canada (2021 Census) for the population of full-time workers aged between 25-64 with a bachelor's degree or higher in each major (see Appendix Table C3).

[12]We did this by restricting the range within which the multiplier is randomly drawn from. The range would be restricted to lie between 0.75 and 1 for one job and 1 and 1.25 for the other job.

[13]Choice experiments (also known as conjoint analyses) are a well-established methodology in the field of marketing to study preferences for products before they enter the market, where sales data is unavailable. Choice experiments are a form of survey experiment. This method sees a surge in economics, in particular labor economics (Folke and Rickne, 2022; Eriksson and Kristensen, 2014; Mas and Pallais, 2017; Wiswall and Zafar, 2018; Maestas et al., 2023).

and university advancement office. Most correspondence occurred via email. To minimize selection on the outcome variable, our recruitment email disclosed that the purpose of the study is to better understand participants' job preferences, and truthfully, that this will help career offices to offer our students and alumni better guidance and job recommendations. We distributed our survey up to three times to potential participants.[14] The final respondent pool consists of 2,048 participants.[15]

The study was advertised as a 10-minute survey in exchange for a fixed completion fee of CAD 5. Additionally, we draw thirty respondents at random who will earn an additional cash prize of CAD 250 each. Moreover, two questions in the experiment are incentivized and provide the participants with a chance to earn an additional CAD 1 each. Specifically, in the main part of the experiment, participants are given a total of thirteen scenarios. Each of which contains a pair of jobs they have to choose from. That is, they have to indicate their preference for one or the other job (Job A versus Job B). For scenario twelve and thirteen, we ask each participant to guess the percentage of total respondents who choose Job A over Job B. If their guess is correct, they will earn an additional CAD 1.

With an expected hourly pay of CAD 30, we knew that it would be particularly hard to make this survey attractive for alumni. Thus, we try to activate pro-social incentives in our promotional materials to motivate their participation. We ask them to *help* researchers and highlight that their participation is *meaningful for both research and their alma mater*. Moreover, we offer to send participants the results of the research once completed. The intention of including non-monetary compensation is to motivate participation for potential participants for whom the monetary-incentives are not attractive enough.

The choices made in the experiment are consequential for 41 percent of respondents: one of our partners used the results from this experiment to inform their next-semester programming. We informed this sub-group of respondents as follows: "*Your participation will translate into next semester's programming and will help our career offices to offer our students and alumni*

[14]Our partners sent out an initial email and a reminder email to a total of 30,495 individuals, of which 2,755 (9.03 percent) responded. A breakdown of response rates by field of study can be found in Table C1.

[15]Following our pre-analysis plan, we only considered participants who have completed the entire experiment. We exclude duplicate responses, defined as responses with the same IP address and similar email. Note that we pre-registered that we will remove all individuals with duplicate IP address. In those cases, we keep the response that has been submitted first. However, we learned that same households could have the same IP address. Since many students share housing, we kept responses with same IP address but markedly different email address. We exclude responses who completed the study in three minutes or less which indicates speeding.

better guidance and job recommendations moving forward." As shown by Carson and Groves (2007) and Carson et al. (2014) consequential decisions represent an important mechanism for eliciting truthful responses from participants.

Participants are first provided with an overview of the study procedures, duration, and compensation. Once participants consent to participate in the study and selected their preferred currency for payment, they are asked to complete a short pre-questionnaire with socio-economic and career-related questions.

Next, we provide participants with an introduction to the decision-making task. We explain to them that we will provide them with a set of thirteen pairs of job offers and ask them to compare Job A with Job B.[16] The jobs may differ on three overall dimensions: workplace climate, amount of team-work, and location of the workplace. The participant is asked to select their preferred job under the assumption that they would start the job within 30 days and don't have any conflicting work, school, or personal commitments. We also explain to the participant that while the jobs are fictional, the description of the workplace culture has been obtained from real workplace reviews online (from Indeed and Glassdoor) and standardized for the purpose of this study. To ensure participants understand their task, they are asked to complete one understanding question before they begin with the series of job choices. Once they answered the understanding question correctly, they are forwarded to the first set of job offers. The last two of the thirteen sets of job offers are accompanied by one additional question. Once participants indicated their job preference, we ask them to guess the percentage of participants who selected Job A over Job B. That question appears on a separate page.

After participants have completed the main portion of the experiment, they are asked to complete a short survey. The survey asks participants about their past experience with hostile workplace cultures and their perceived risk of experiencing hostility at work in the next two years. Additionally, students are asked about their GPA and their student ID.

Several job offer elements in this study have been randomized. The bundle of workplace hostility attributes for the first 11 scenarios are drawn at random and without replacement from 28 unique job offer pairs which are described in Section 2.1. Note that we had constructed 30 unique job offer pairs. The remaining two scenarios are shown in scenario 12 and 13,

[16]Note that our approach assumes participants view opting into a job and opting out as symmetric decisions. This is equivalent to assuming no switching costs, no firm-specific human capital and no aversion to change. We discuss these assumptions in the robustness checks.

respectively, in the same order. Scenario 12 (Figure C5) in particular represents a strict trade-off between an aggressive workplace and a higher wage. We hold these scenarios constant because they are tied to a follow-up question to measure individual's perceptions about others.

Workplace location and amount of teamwork are randomized across respondents. For half of the respondents, workplace location and amount of teamwork are randomly determined at the beginning of the experiment and fixed for the entire duration of the study. For the other half of the respondents, workplace location and amount of teamwork is randomly determined for each job they see. Whether these workplace arrangements are stable or randomized is itself randomly determined. We do this across-respondent randomization, where we hold workplace location and amount of teamwork stable for half of the participants, to decrease noise for the measurement of our workplace hostility attributes.

2.3 Long-Term Outcomes and Follow-Up Survey

Two years after the experiment was conducted, we collected information about student participants. Labor market outcomes were collected using information on the internet. We matched information from public LinkedIn profiles to inputed wages from the Revelio Labs database. We completed this data collection with a follow-up survey to collect additional information not available online. We contacted student participants again between July 10 and July 24, 2025. We offered participants a financial incentive (5 CAD), 3 lottery prizes of 100 CAD, and the possibility to receive the research paper once completed.

2.4 Sample Statistics

We begin by describing the characteristics of the full sample of the experiment in Table 1. We received a total of 2,048 responses, of which 724 were upper-year enrolled students, 436 were just-graduated students, and 888 were alumni. 69 percent of the respondents were women, 29 percent were men, and 2 percent identified as non-binary.[17] With regard to the fields of study, we cover a wide range of majors.[18] Table C4 presents employment characteristics split for students (Panel A), alumni (Panel B). The student sample is in the process of entering the labor market: the vast majority of respondents are still enrolled, 12 percent are unemployed

[17]The slight overrepresentation of women in the experimental sample is a typical occurrence in survey experiments conducted at public universities (Wiswall and Zafar, 2018; Cortés et al., 2023). Besides this dimension, our sample is representative of the Canadian college graduate population, as we discuss in Section 3.1.1.

[18]36 percent of the sample majored in Psychology, 10 percent in Sociology, 8 percent in Computer Science or Engineering, 7 percent in Biology, 6 percent in both Economics and Business, and 33 percent in other fields.

and 33 percent have accepted a job. In contrast, most alumni respondents are employed full-time (66 percent).

Past experience and perceived risk of hostility. We also collected data on participants' past experience of hostility at work (or studies) and on their individual perceived risk of experiencing hostility at work (during coursework) in the future.[19] As Table C5 shows, respondents in the sample report high experience of professional growth (74 percent) and experience of inclusion at work (89 percent). However, 63 percent declare having experienced aggression at work or during their studies, and 16 percent of the sample's respondents report having experienced sexual harassment.[20]

Women are more likely than men to declare having experienced sexual harassment in the past (17 percent vs. 13 percent, p-value = 0.02), but don't report significantly different levels of prevalence of aggression and lack of inclusion. In terms of future risk, they are significantly more likely than men to feel at risk of experiencing in the next two years lack of inclusion (37 percent vs. 33 percent, p-value = 0.00) and sexual harassment (20 percent vs. 12 percent, p-value = 0.00). Non-white respondents report systematically lower experience of professional growth, inclusion and significantly more frequent experience of aggression and sexual harassment than white respondents. Students (both enrolled and just graduated) report higher levels of hostility compared to alumni. Respondents who are either enrolled or have graduated in male-dominated fields report significantly higher prevalence of aggression (73 percent) compared to current students or alumni of female-dominated fields (61 percent, p-value = 0.00).[21] At the same time, they report a lower perceived risk of experiencing sexual harassment in the future compared to respondents in female-dominated fields (15 percent compared to 18 percent, p-value =0.07). Zooming on heterogeneity by gender and major for the sample of students, Figure 2 shows that women in male-dominated majors report the highest perceived risk of experiencing hostility for all hostility attributes. These beliefs about the risk can in theory be shaped by individual's own experience with hostility, their peers' experience, or general risk aversion. In Table C6, we find that gender differences in perceived

[19]Note that we adjusted the wording of these questions to match the participant's circumstances. That is, we asked current students and just graduated students about their experience during coursework and alumni about their experience at the workplace.

[20]This is consistent with estimates from different contexts (Batut et al., 2021; Folke and Rickne, 2022).

[21]Male-dominated majors include computer science, physics, engineering and economics. See Figure C7 for the gender composition of majors using the university's administrative data.

risk of exclusion and sexual harassment remain when we control for past experience, which could reflect both objective unequal exposure to risk and gender norms shaping individuals' perceptions of workplace vulnerability. However, we find that individual's own past experience of hostility is a major driver of perceived risk, particularly in its most severe forms: controlling for major and seniority, past experience of aggression and sexual harassment are associated with an increase in the probability that the participant reports a higher-than-mean risk of 36 and 17 pp respectively, equivalent to 83 and 47 percent of the sample mean. This result suggests that biased beliefs—if they exist—are unlikely to be solely driving these perceptions; rather, perceived risks of hostility appear to be shaped by individuals' actual exposure to hostility.

2.5 Model and Specification

The choice experiment yields binary job choices where for each job a wage in dollar amount is attached. Following Maestas et al. (2023), we aggregate individual responses into a dichotomous variable which indicates the preference for Job A. Furthermore, the absence of any hostile attributes is indicated with a binary variable for each job, where 0 means the hostile attribute is present and 1 means it is absent. We chose this setup since it allows for a more intuitive reading of the coefficient. The coefficient will tell us how many wage percentages the respondent is willing to forego in order to avoid a given hostility attribute.

To estimate measures of willingness-to-pay for the workplace attributes as well as hybrid and solo work, we use a standard model of hypothetical job choices used in the willingness-to-pay literature (Wiswall and Zafar, 2018; Maestas et al., 2023). Jobs are indexed by j, presented by choice pair t =A,B. Each job is characterized by a vector of K non-wage attributes $X_j' = [X_{j1}, ..., X_{jK}]$. w_{ijt} is the wage associated to job j in choice pair t. Let $U_{ijt} \in \mathbb{R}$ be individual i's utility from job j within the choice pair t:

$$U_{ijt} = u_i(X_{jt}') + \delta_i \ln(w_{ijt}) + \varepsilon_{ijt} \tag{1}$$

$u_i(X') \in \mathbb{R}$ is the preference of individual i over the vector of characteristics X', $\varepsilon_{ijt} \in \mathbb{R}$ is the additional job-specific preference component for job j reflecting all remaining attributes of the job which affect utility, if any. Let ε_i be the vector of these components for individual i, $\varepsilon_i = \varepsilon_{i1}, ..., \varepsilon_{iJ}$. We assume that ε_i is an i.i.d. Extreme Value Type I random variable. After observing the attributes $X_1, ..., X_K$ and w for the two jobs and ε_i, individual i chooses the one

job with the highest utility: i chooses job j if $U_{ij} > U_{ij'}$ over $j' \neq j$ within the choice pair t.

Assumption for identification of preferences. We assume that the binary choices observed reflect a linear indirect utility function. The $\varepsilon_{i1}...,\varepsilon_{iK}$ job-specific terms are i.i.d. and independent of the experimentally manipulated job attributes $X_1,...X_K$. Our experimental design ensures that respondents are instructed that the jobs vary only in the listed characteristics and are otherwise identical. Under this assumption, and with

$$U_{ijt} = \alpha + \beta_i X'_{ijt} + \delta_i \ln(w_{ijt}) + \varepsilon_{ijt}$$

we write

$$p_{ij} = \mathbb{P}\left(U_{ijt} > U_{ij't}\right) = \frac{\exp\left[(X'_{ijt} - X'_{ij't})\beta_i + \delta_i(\ln(w_{ijt}) - \ln(w_{ij't}))\right]}{1 + \exp\left[(X'_{ijt} - X'_{ij't})\beta_i + \delta_i(\ln(w_{ijt}) - \ln(w_{ij't}))\right]}$$

The preferred specification is a mixed logit model, which allows for unobserved heterogeneity and unrestricted substitution patterns (Train, 2009). We aggregate individual responses into a dichotomous variable indicating preference for Job A.

Estimation of the willingness-to-pay to avoid hostile environments. The willingness-to-pay for each non-wage attributes is derived by equalizing the utility of an individual who is indifferent between working in a hostile environment according to the hostility attribute k, and working in a non-hostile environment:

$$\delta_i \ln(w_i) = \beta_i^k + \delta_i \ln(w_i - WTP_i^k)$$

where β_i^k is the individual i's marginal utility of attribute k, and δ_i is the marginal utility of the log wage. Hence:

$$WTP_i^k = w_i \left[1 - \exp\left(\frac{-\beta_i^k}{\delta_i}\right)\right] \tag{2}$$

We will present our estimates in terms of $1 - \exp\left(\frac{-\beta_i^k}{\delta_i}\right)$, meaning that, if the job offers attribute k, the increase in utility corresponds to a $100\left(\exp\left(\frac{-\beta_i^k}{\delta_i}\right)\right)$-percent wage change. Standard errors are calculated using the delta method and adjusted for clustering by respondent.

3 Preferences for Hostility-Free Environments

3.1 Willingness-to-Pay to Avoid Workplace Hostility

Table 2 presents our willingness-to-pay estimates and shows the percentage wage increase needed to switch from a non-hostile to a hostile environment. We find that respondents are willing to give up a substantial portion of their wage to avoid hostile workplaces. Table 2 col-

umn 1 shows that, on average, a work environment that offers inclusion is valued at a 14 percent wage increase. Absence of aggression at work is valued by respondents at 19.5 percent of their wage. Our estimates suggest that participants would be willing to give up 31 percent in wages to work in an environment that doesn't tolerate sexual harassment.

In comparison, professional growth is equivalent to a 15 percent wage increase. The estimated valuations of workplace arrangements were more modest. Our respondents value hybrid work on average 6.6 percentages of their current wage, when offered the choice between in-office and hybrid work. Our results suggest that respondents have a higher valuation of a non-hostile work environment than they value the option to work hybrid (between 15 and 30.9 percent versus 6.6 percent). Willingness-to-pay estimates for hybrid work align with those of previous studies (Mas and Pallais, 2017; Barrero et al., 2021), which report valuations ranging from 7 to 10 percent of the wage. More recently, Cullen et al. (2025) estimate a higher WTP (25 percent) for partly or fully remote roles for U.S. tech workers using real job offers. Our approach estimates valuations for hybrid work accounting for the role of workplace hostility, which may explain our smaller estimates.[22] The average valuation of teamwork relative to solo work is close to zero, indicating no significant preference.[23]

3.1.1 Robustness Checks

Correlation between valuations and labor market outcomes. We use our alumni sample to examine whether the respondent's revealed preferences are correlated with actual workplace characteristics. As part of our survey, we ask participants whether they currently have a hybrid workplace and work in teams. We correlate these last two factors with the respondent's willingness-to-pay for hybrid work and teamwork. We find that both willingness-to-pay estimates correlate with the respondents' working conditions. In Table D7 Panel A, the willingness-to-pay estimate to work hybrid is more than twice as large for respondents who currently work remotely compare to those who work mostly in office (11 percent versus 4.6 percent, p-value = 0.002). This difference is driven by female respondents as shown in

[22]We explore the idea of working arrangements and workplace hostility acting as substitutes further in Section 4 and in the model in Section 5.

[23]Note that in contrast to Maestas et al. (2023), in our setting teamwork didn't imply being evaluated as a team. Instead, respondents are given the choice between completing projects by themselves versus by themselves and sometimes in teams. The precise wording is as follows: "You complete projects by yourself" versus "You sometimes complete projects by yourself and sometimes in teams."

Panel C (11.3 percent versus 3.6 percent, p-value = 0.001). Similarly, Table D8 Panel C shows that female respondent who currently work mostly in team have a positive and statistically significant willingness-to-pay to work in team, compared to respondent working mostly autonomously who don't value this amenity (4.5 percent versus 0 percent, p-value = 0.033).

Alternative specifications. We explore the robustness of our results to alternative specifications in Table 3. The baseline specification (mixed logit) is presented in column 1. First, we test the robustness of our results using a standard logit model, relaxing the unobserved heterogeneity assumption. Results are presented in column 2. Second, we test the sensitivity of our results to the distribution of the error term, with a probit specification in column 3. The willingness-to-pay estimates are comparable across the standard logit and probit. They are slightly lower than when we allow for unobserved heterogeneity. To relax the assumptions of additive separability, we also estimate a model with two-way interactions between non-wage characteristics.[24] Results are presented in column 4. When compared to the linear model, these willingness-to-pay estimates are comparable in magnitude. We provide mean estimates of the mixed logit as an alternative to the median in column 5 and find consistent results across the different workplace attributes. We also present distributions of individual-level preference estimates in Figure 3 to compare the estimated population distribution with the sample average of the conditional distribution (Train, 2009).[25]

External validity. To confirm that our results are not driven by selection of respondents in the experimental sample, we compare the characteristics of the alumni subsample to the Canadian college graduate population (Appendix Table D9).[26] We then reweight our sample to match the joint distribution of gender, age and presence of children in the Canadian college-graduate population. Table D10 confirms that our findings are qualitatively similar in both the unweighted and reweighted alumni samples. Our sample is not fully balanced across sub-

[24]To obtain standard errors for the average willingness-to-pay estimates, we bootstrap over 500 simulations, clustering by respondent.

[25]The θ parameters can be estimated by maximizing the simulated log-likelihood function. We use the Stata command `mixlbeta` after the mixed logit estimation `mixlogit`. Consistent with results from Drake et al. (2022), we find that individual estimates of willingness-to-pay tend to be slightly larger than population-level averages.

[26]We use the public use microdata file of the October 2023 wave of the Canadian Labor Force Survey, restricting the sample to individuals older than 19, with a college degree or more. Our alumni sample is slightly younger and has more women than the college graduate population of Canada. Nonetheless, employment status, weekly hours, annual income and industry composition in our sample are highly comparable to those in a representative sample of college-educated Canadians.

fields (see Table 1) so we compare the main estimates of our sample of Psychology majors to the remaining sample. Psychology majors comprise of the largest group of respondents in our sample and thus, this comparison helps us understand to which extent respondents with Psychology majors drive any of our results. Results are presented in Table D11, columns 1 and 3. We find that respondents with a Psychology major have overall comparable levels of willingness-to-pay. However, they have a larger willingness-to-pay for inclusive and aggression-free environments, compared to respondents of all other majors.[27]

Social desirability bias. To mitigate concerns about potential social desirability bias (SDB) in survey-based discrete choice experiments, we investigate three ways to probe the robustness of our results. First, we examine responses of participants contacted by the office for career services. We informed this group that their responses will be used to design programming in the next semester, thereby increasing incentive-compatibility. Table D11, columns 3 and 4 compare their estimated willingness-to-pay of all workplace attributes with those of the other respondents. The results are very similar.[28] Second, we investigate how our results vary with participants' level of prosocial behavior. Table D11 columns 5 and 6 compare the estimated willingness-to-pay of all workplace attributes for respondents who asked for the research paper,[29] compared to those who didn't. Overall, we find really comparable results.[30] Lastly, we use third-person questions to address self-image concerns (Bursztyn et al., 2025), and use our incentivized measures of respondents' beliefs about how much others value a workplace free of hostility. After respondents made their job choice for scenario 12, we asked them to "provide [their] best guess to the following question: What percentage of respondents in this study will choose Job A over Job B?".[31] We compare the respondent's guess of what share among all respondents will accept Job A to the actual choice of all respondents.

[27]For those two hostility attributes, psychology-majors report a willingness-to-pay of 13.7 percent (compared to 10.9 percent, p-value = 0.008) and 20 percent (compared to 15.6 percent, p-value = 0.000).

[28]Respondents recruited through the office for career services have a significantly lower willingness-to-pay for hybrid work, compared to all other respondents (5.2 percent versus 8.2 percent, p-value = 0.030). This correlates with other sample differences. This group of respondents is on average younger and significantly less likely to have children. Apart from that, the estimates across the two sub-samples are indistinguishable.

[29]Respondents who ticked the box "Yes, please retain my email address and send me your research paper" represent 70 percent of the sample.

[30]Participants who didn't ask to receive the research paper have marginally significantly larger willingness-to-pay for harassment-free environments compared to those who did ask for the paper (28.2 percent versus 25.8 percent, p-value = 0.078).

[31]To motivate respondents to think carefully and report truthfully, we incentivized this question with a $1 in additional pay for correct guesses.

Scenario 12 was designed such that it represents a strict tradeoff between a workplace that can be described as aggressive and lower pay. Overall, we find that respondents believe that 62 percent of all respondents would accept a higher wage and an aggressive workplace, compare to an actual share of 55 percent who would be willing to accept that tradeoff, with similar numbers for students and alumni taken separately. This 7 percentage gap contrasts with the magnitude of SDB in attitudes towards to sexism and DEI policies in the workplace documented by Boring and Delfgaauw (2024) using list experiments, and suggest that our choice experiment is potentially less sensitive to SDB than traditional surveys.

Comparison with other estimates. We place our findings in the context of previous research on valuations for workplaces free of sexual harassment (see Appendix D.1 for details). Our estimates suggest that participants would be willing to give up 31 percent in wages to work in an environment that is free of sexual harassment. In comparison, Folke and Rickne (2022) find a willingness-to-pay of 10 percentage points. Our experimental design and econometric approach differ from those of Folke and Rickne (2022) in several key aspects which should (and does) result in a higher willingness-to-pay. Our scenario arguably illustrates a more severe scenario of sexual harassment and our counterfactual is a zero-tolerance scenario (contrasted to no information provided). Our design and modeling method (mixed logit contrasted with simple OLS) allows us to capture the willingness-to-pay estimate more precisely. To make our estimates comparable, we approximate our data to their design which yields comparable results (see Table D15).

3.2 Gender Differences in Willingness-to-Pay to Avoid Workplace Hostility

We investigate pre-registered differences in valuations by gender.[32] For the comparison between men and women, we will rely on the standard logit model since this approach will allow us to compute the p-value and thus evaluate statistical significance. While the estimates between the mixed logit and standard logit slightly differ, the gender differences are both quantitatively and qualitatively similar.

As illustrated in Table 2 column 2, women overall display a higher appreciation for a

[32]Respondents have the following options to choose from: "Man", "Non-binary", Trans man", "Trans woman", "Woman", "I prefer to write myself" with a text box added. Recall that only 2 percent of our sample identify as non-binary. This results in a sample size too small to allow for statistical tests across different gender identities. Therefore, this section will focus on the contrasting between respondents who identify as *Women* and *Men*.

workplace that is free of workplace hostility. This is most pronounced with respect to their tolerance for the occurrence of sexual harassment. While men are willing to give up 20 percent of their wage to work in an environment that is free of sexual harassment, women are willing to give up 34 percent of their wage. Figure 3 Panel D suggests that a fraction of respondents have negative valuations for harassment-free environments. We explore this further in Figure D8 by replicating the mixed logit estimation separately by gender. Panel D indicates that men are disproportionately represented in the lower end of the distribution regarding the value placed on a workplace free from sexual harassment. Furthermore, while men value an inclusive work environment at 12 percent of their wage, women value it 15 percent. There is also a difference in tolerance for aggression at the workplace, at least directionally. Women value a workplace free of aggression at 20 percent of their wage while men do so at 17 percent. We don't see any differences with respect to professional growth, the valuation of hybrid work, and teamwork. Using a standard logit, we test for the gender differences, and find significant differences in valuations for inclusive, aggression-free and harassment-free environments (Table D12).[33]

Tolerance for a hostile workplace environment may also depend on context. To explore that option, we compare the choices from respondents who study in or graduated from a female-dominant field.[34] We find and report in Table D12 columns 9 and 10 that respondents from a female-dominated field obtain a higher disutility from harassment than respondents from a male-dominated field. The willingness-to-pay estimates for the other three attributes (lack of professional growth, lack of inclusion, and aggression) are comparable across female- and male-dominated fields. The reported gender differences in sexual harassment is consistent with the story of selection. That is, while respondents from female-dominated fields value the absence of sexual harassment more, they also report a lower level of prevalence of sexual harassment.

In the next section, we explore how these differences in preferences and in the perceived

[33]Table D12 presents other heterogenous effects. Current or just graduated students value a harassment free workplace significantly higher than alumni do (28 percent vs. 24.7 percent, p-value = 0.007), and value hybrid work much less than alumni (5.5 percent percentages versus 8.6 percent, p-value = 0.004). White respondents and respondents without parents who have a college degree (first gen) value a workplace free of aggression 2 percent and 4.5 percent more, respectively, than their comparison group. Alumni and white respondents both value hybrid work more than students and non-white respondents (8.6 percent and 9.1 percent, respectively, versus 5.3 percent and 6.5 percent, respectively, p-value = 0.004 and 0.123, respectively).

[34]We define a field of study as female-dominated if it has a share of women students of 50 percent or higher and as male-dominated otherwise (i.e Computer Science, Economics, Engineering, Environmental Science and Physics). As shown in Figure C7, the gender makeup across majors at the university has been remarkably stable between 2013 and 2022.

risk of experiencing hostility might be consequential for career choices.

4 Workplace Hostility and Sorting in the Labor Market

In the previous section, we used a choice experiment to estimate individuals' preferences over workplace hostility. By tracking participants' career outcomes two years later, we can examine how these valuations manifest in the labor market. We next relate disutility from workplace hostility and perceived risk measures from our survey data to actual sorting in the labor market. Additionally, our experimental design allows us to exogenously vary the presence of amenities, which are usually correlated within jobs. This enables us to estimate the causal effects of working conditions on valuations for working arrangements. Combining these experimental variations and survey outcomes, we find that disutility from workplace hostility and perceptions of risk are consequential for gender gaps in early-career choices, and that working arrangements can act as substitute for workplace hostility.

4.1 Sorting Between Industries and Salary

Two years after the choice experiment was conducted, we collected information about students' current labor market outcomes. Our first outcome of interest is whether the participant works in a male-type role after graduation. To construct this variable, we classify industries using each student respondent's position and industry as reported on LinkedIn, and asked two LLMs to assess whether each role was male-typed or female-typed, with manual checks applied in cases of disagreement.[35] Using this method, we find that roughly 41 percent of our sample is currently employed in a male-type role. To investigate the relationship between preferences and sorting across work environments, we look at these participants' WTP for hostility attributes measured in the experiment two years before. Table 4 shows that aversion to sexual harassment is the main driver of sorting. Participants working in female-type roles exhibited significantly higher WTP to avoid workplaces who tolerate sexual harassment two years ago, compared to those currently working in male-type roles (32 vs. 22.4 percent of the wage, p-value=0.019). Importantly, this difference doesn't reflect pre-labor market sorting into different majors as it is robust to controlling for the participant's type of major (male- or female-dominated).

We next find that differences in individual perceived risk of sexual harassment translates

[35]We used Claude.ai, model Claude Opus 4.1 (powerful large model for complex challenges in research mode) and ChatGPT 5 Pro (research grade intelligence). For the few observations with missing LinkedIn information (67), we used the industry reported in our follow-up survey.

into wage differentials. Using respondents' salary information from Revelio Labs data and survey data, we show a robust negative relationship between participants' individual perceived risk of sexual harassment at graduation and their future salary once they enter the labor market.[36] Results are presented in Table 5. Participants who reported a higher-than-the-mean risk of sexual harassment at the time of the experiment have a 10-percent lower salary two years later (p-value=0.039, column 1). This compares to a 8-percent early-career gender pay gap (column 2). The negative relationship between perceived risk and salary is robust when we control for gender (p-value=0.067), with a 9-percent gap (column 3). Additionally, the gender gap shrinks by 2 percentage points, which further shows that part of the gender pay gap can be explained by differences in perceived risk. Importantly, we show in column 4 that this relationship isn't driven by pre-labor market sorting into specific major, as it is robust to controlling for graduating with a degree in male-dominated major (9-percent gap, p-value=0.065). To avoid confounding this relationship with underlying ability, we show in column 5 that it is robust to controlling for participants' GPA (10.5-percent gap, p-value=0.038). Finally, to account for the fact that the perceived risk of sexual harassment could reflect participants' overall risk aversion, in column 6 we use a specification controlling for other perceived risks of hostility attributes measured at the time of the experiment, and still find a negative relationship (9-percent gap, p-value=0.076). The magnitude of our estimates is remarkably stable across models. Taken together, our findings indicate that heterogeneity in preferences and beliefs about the risk of workplace hostility, particularly concerns about sexual harassment, are key drivers of sorting in the labor market and help explain gender disparities across industries and in pay.

4.2 Job Search and Avoidance Strategies at Work

The previous results on industry sorting and on wages reflect matching in the labor market, that arises both from workers' choices and demand-side forces, such as specific hiring practices or potential discrimination. To more directly assess whether perceptions of workplace environments influence early-career jobseekers' sorting decisions, we surveyed student partici-

[36] We used salary information inputed from Revelio Labs from respondents' position and industry as reported on LinkedIn, as it offers us the largest coverage. When individuals' position salary was not available in Revelio Labs data, we used the position average inputed salary. When the LinkedIn information was missing, we used reported salary from our follow-up survey. Reassuringly, the two measures of salary from Revelio Labs and from our survey—when available—are strongly correlated, as shown in Figure D9.

pants about their job search strategies two years after the experiment. Table D13 shows that the sociodemographic characteristics of the follow-up sample are comparable to the original experiment sample, with a slight overrepresentation of male-dominated majors. Overall, we find significant gender differences in reported search strategies, as reported in Figure 4. Female respondents are significantly more likely than male respondents to report that culture is important when applying to a job (82 percent vs. 70 percent). Additionally, we show that a significant fraction of female respondents develop strategies to manage workplace hostility beyond the job search stage: women are significantly more likely to report that they missed work opportunity to avoid hostility such as workshops or social events compare to men (22 vs. 6 percent), consistent with evidence by Cullen and Perez-Truglia (2023) showing the causal impact of social interactions on employees' careers. These gender gaps are robust to controlling for major and GPA. Overall, our findings provide direct evidence that hostility affects job search, particularly for female candidates, restricting their choice sets, and leads to avoidance strategies that may influence their long-term career trajectories.

4.3 Substitution Between Workplace Hostility and Working Arrangements

So far, we have shown that as workplace hostility is not easily observable *ex-ante*, individuals adopt various strategies, both when searching for jobs and once employed, to mitigate its risks. We next examine the hypothesis that working arrangements can act as a substitute against the risk of experiencing hostility at work.

Using the sample of alumni, we descriptively explore the relationship between the respondents' past experience with workplace hostility as well as predictions about future experiences with workplace hostility and their current workplace arrangement. We first compare the average percentage estimates between respondents who say their current work arrangement involves hybrid work versus not and also between respondents who say they work in teams versus solo. Figure 5 shows that reported past experience of aggression and sexual harassment and the reported risk of experiencing hostility are significantly higher for respondents who report working on-site and mostly in teams.

We then look at the interaction between respondent's willingness-to-pay for hybrid work and workplace hostility. To do so, we use the exogenous variation in the workplace's tolerance for sexual harassment introduced by the job scenarios presented to participants in the experi-

ment (see Figure C3). This allows us to measure the causal effect of the quality of workplace environments on valuations for working arrangements. Table D14 shows that respondents' WTP for hybrid is significantly larger for job scenarios with high tolerance for sexual harassment than without (Panel A, 10 percent vs. 6.5 percent, p-value diff.=0.079). Panel C shows that this effect is more pronounced for women: their WTP for hybrid work is twice as large in scenarios where the workplace has tolerance for sexual harassment than without (10 percent versus 5.7 percent, p-value diff.= 0.074). In contrast, men's WTP is virtually unchanged across scenarios (Panel B, 9 percent vs. 8.4 percent, p-value diff.=0.855).

Overall, we provide causal evidence that valuations for working arrangements vary substantially between hostile and non-hostile workplaces, as illustrated by the extreme case of tolerance for sexual harassment, particularly for women. We now turn to our model to examine the equilibrium effects of sorting into alternative working arrangements to mitigate the risk of workplace hostility on pay differentials and rents.

5 Conceptual Framework: Hostility and Hybrid Work

In this section, we propose a simple equilibrium model that organizes key empirical facts from our experiment and enables us to explore the equilibrium consequences of workplace hostility on sorting across jobs. Our goal is to study the effects of exogenous changes of the characteristics of the work environments on sorting, pay differentials, and rents. We focus on the case of sorting across remote and in-person jobs, as we collected preferences for hybrid work in the experiment and can calibrate the model and simulate pay differences. The model builds on two key modelling choices. First, workers have heterogeneous preferences over workplace hostility, measured in our experiment. Second, hostility is confined to office jobs, consistent with our survey evidence showing a significantly lower prevalence among hybrid workers. Importantly, and consistent with our experiment, our framework allows us to distinguish between distaste for workplace hostility and the individual risk of experiencing it, enabling us to vary these parameters independently in counterfactual exercises.

5.1 Overview of Assumptions, Mechanisms and Implications

We build on the discrete case of the standard compensating wage differential model (Rosen, 1974, 1986; Mas, 2025) in which we assume that the economy is composed of a unit mass of workers and of firms that sort in office or remote jobs. For simplicity, our model considers two

amenities: hybrid work (observable by the worker and by the firm) and sexual harassment (imperfectly observable). For simplicity, we assume that sexual harassment occurs only in "on-site" jobs. We assume a fixed amenity price for the observable amenity. Workers differ in their preferences for both amenities. Firms differ in their productivity costs associated with remote work.

We explore three cases: one benchmark case in which the second amenity (sexual harassment) is absent (Case 1), one case in which only workers internalize the risk of sexual harassment (Case 2), and Case 3 in which both firms and workers internalize the risk of sexual harassment. This case is equivalent to a situation in which a social planner mandates firms to reduce the probability of harassment. In the presence of workplace hostility, the pay differential between remote and office jobs increases sharply with rising risk, as firms must offer additional compensation to incentivize workers to take on-site positions. This pattern is starker when firms are mandated to internalize the risk, and compensate each worker accordingly. As a result, selection patterns shift based on workers' distaste for both forms of disamenities. Due to heterogeneity in workers' preferences, the average rents of office workers increase significantly with a positive probability of sexual harassment, especially when the firm internalizes this risk. This occurs because some workers receive high compensation for high risk, exceeding the amount needed to offset their distaste for sexual harassment and influence their decision to transition from remote to office jobs. Building on our empirical findings regarding gender differences in the valuation of safe work environments, the model predicts that men are more likely to be observed in office-based jobs—even though men and women place similar value on hybrid work arrangements—and are more likely to extract higher rents.

Our model also allows us to study firms' harassment prevention efforts and their impact on worker-job selection and the rents workers and firms extract. By uniformly increasing compensation, firms reduce sorting based on preferences for amenities, making the effects on worker rents in office jobs ambiguous despite reduced worker heterogeneity. If firms cannot screen workers by their tolerance for harassment, compensating for harassment risks simply increases workers' average rents.

5.2 Set-up

Workers. Workers are productively homogeneous. They select between two firms/jobs: $S = 1$ "on-site" jobs, $S = 0$ "remote jobs". We define the wages w_0 and w_1 that are paid to workers in each type of job. We write $\Delta_w = w_1 - w_0$ the wage differential between remote and on-site jobs.[37] We define $U(C_S, S)$ the utility function over consumption level C_S and job type S, with $U_{C_S} \geq 0$ and $U_S \leq 0$. Let C_0 denote market consumption when $S = 0$. Given C_0, let C^* denote the consumption level required to achieve the same utility with a $S = 1$ job as C_0 guarantees with a $S = 0$ job:

$$U(C_0, 0) = U(C^*, 1)$$

The standard compensating wage differential is defined as $Z = C^* - C_0$. Let $G(Z)$ denote the distribution and $g(.)$ the density of worker's preference for remote work Z. We assume that Z is normally distributed with mean μ_Z and variance σ_Z^2. Our empirical analysis provides us with estimates of these parameters, reported in Table E16.

Sexual harassment as unobserved disamenity. We introduce a second amenity: risk of sexual harassment. Risk of sexual harassment is unobserved *ex-ante* by the worker and by the firm. For simplicity, we assume that sexual harassment occurs only in "on-site" jobs. Let $p \in [0, 1]$ denote the worker's probability of sexual harassment.[38] $F(H)$ denotes the distribution and $f(.)$ the density function of worker's distaste for sexual harassment H. Workers choose job type to maximize utility: they choose

$$S = 1 \text{ if } \quad \Delta_w > Z + pH$$

$$S = 0 \text{ if } \quad \Delta_w \leq Z + pH$$

Labor supply. We define $Y = Z + pH$. Note that compare to Rosen's model, we assume that amenities are additive and separable.[39] Additionally, we make the following assumption about the distribution of preferences.

[37] In the model, Δ_w is typically assumed to be positive. This is consistent with recent empirical evidence from Emanuel et al. (2023) and De Fraja et al. (2022) that respectively highlight the role of productivity decline in remote work and of the complementarities between remote and in-person work. Note that empirically, observed wage differences are neither necessary nor sufficient for the existence of utility differences. The competitive environment determines the extent to which amenities are priced into wages. Consequently, remote pay penalty in the data may either understate or overstate inequality in utility.

[38] For our simulations we will use estimates of the perceived probability of sexual harassment derived from our survey. However, the model itself does not distinguish between perceived and actual probabilities.

[39] See Appendix E.1 for micro-foundations of the utility function.

Assumption 1. *Z and H are jointly distributed according to a bivariate normal distribution*

$$\begin{pmatrix} Z \\ H \end{pmatrix} \sim \mathcal{N}\left[\begin{pmatrix} \mu_Z \\ \mu_H \end{pmatrix}, \begin{pmatrix} \sigma_Z^2 & \sigma_{Z,H} \\ \sigma_{Z,H} & \sigma_H^2 \end{pmatrix} \right]$$

where $\sigma_{Z,H} = Cov(Z, H)$

We further explore in Appendix E.4 the case in which is Z and H are independent. We can rewrite $Y = \mu_Y + \sigma_Y X$ with $X \sim \mathcal{N}(0, 1)$. Informally, our empirical analysis highlighted large gender differences in WTP for work environments free of sexual harassment, which suggests that women will be overrepresented in the upper tail of the distribution of Y.[40]

Firms. Firms sell an homogenous good x for price 1 with labor L. The production technology has the following linear form:

$$\begin{aligned} x &= a_0 L \text{ if } S = 0 \\ x &= a_1 L \text{ if } S = 1 \end{aligned}$$

The disamenity is productive ($a_0 < a_1$): firms are more productive when workers are in the office.[41] Define $B = a_1 - a_0$, $B \sim \Psi(B)$ with $\psi(.)$ the density function. In this simple version, firms choose to produce on site $S = 1$ if $B > \Delta_w$, and to produce remote $S = 0$ if $B \leq \Delta_w$. We derive the labor demand equations making the following assumption about the distribution of the technology parameters.

Assumption 2. *$B \sim \Psi(B)$ normally distributed with mean μ_B and variance σ_B^2.*

In Case 3, we also consider the scenario in which p is endogenous and can be affected by firm's policy. The firm spends a_2 to decrease the risk of sexual harassment p, for instance by implementing HR policies or better management practices.[42] In our simple framework with homogenous productivity of workers and perfect competition, firms have no incentives to increase their production cost, as it would be the case if for instance they were trying to attract the most qualified workers. Hence we see Case 3 as modeling the action of firms if a social planner imposed a cost on firms through mandatory regulations to mitigate the risk of sexual harassment p.[43]

[40] Emanuel and Harrington (2023) explore selection patterns into remote work based on unobservable ability. In our framework, we assume that sorting decisions into remote or office jobs are solely driven by preferences over disamenities.

[41] Note that this assumption could be micro-founded by assuming peer effects or firm's better monitoring of workers' productivity in office.

[42] While there are still scarce evidence of appropriate interventions to reduce the risk of sexual harassment at work, Alan et al. (2023) provides evidence of the effectiveness of an intervention in Turkey to mitigate toxic relations in the workplace, with monetary cost of about 5,000 Euros per firm.

[43] Note that in a frictionless competitive market, all workers employed by a given firm will share identical

Assumption 3. *p can be affected by firm's prevention policy, that has a per-worker cost a_2.*

$$p = p(a_2) \text{ with } \frac{\partial p}{\partial a_2} < 0$$

The production function becomes:

$$x = a_0 L \text{ if } S = 0$$

$$x = (a_1 - a_2) L \text{ if } S = 1$$

Firms choose $S = 1$ if $B > \Delta_w + a_2$ and choose $S = 0$ if $B \leq \Delta_w + a_2$. For our simulations, we consider a linear case in which $p = -a_2 \times K$ with $K > 0$. We later explore the policy counterfactuals varying the values of K.[44]

Equilibrium. In a perfect-sorting equilibrium, amenity prices satisfy a market-clearing condition: the supply of remote jobs coincides with the demand for remote jobs. We compare the benchmark case with no sexual harassment in which $p = 0$ for all workers (Case 1) to the case where there is $p > 0$ in which the risk of harassment is only internalized by the workers (Case 2), and by workers and firms (Case 3). We solve for equilibrium wages in Appendix E.2. In Appendix E.3, we derive expressions to characterize selection into office jobs, and compute workers' and firms' rents in each scenario that we use for the empirical simulation of the model.

5.3 Simulations and Policy Counterfactuals

We use our expressions of equilibrium wages and rents to explore how equilibrium outcomes vary under different preference parameters and workplace characteristics. We use empirical parameters from our experiment, with the exception of firms' technology, the correlation of taste, and the policy parameter, which we simulate under different values of μ_B, σ_B, $\sigma_{Z,H}$ and K, respectively the mean and standard deviation of firms' productivity cost of remote work B, the covariance between preferences over disamenities, and the policy parameter (see Table E16).[45] These simulations allow us to explore some policy counterfactuals. We first characterize selection patterns under these assumptions.

preferences over the amenity bundle. However, if the distribution of preferences facing the firm is sufficiently thin, monopsony can arise (Card et al., 2018).

[44]Our model does not incorporate strategic interactions between firms as they are assumed to be price takers in the competitive market. However firms could theoretically set the prevention policy and compete à la Bertrand.

[45]Our baseline value of the policy parameter is $K = 0.5$ but we explore sensitivity to alternative values in Section 5.3.3.

5.3.1 Risk of Workplace Hostility

We first show how pay differentials and sorting patterns are affected by the risk of workplace hostility p. To proxy for the probability of sexual harassment p, we use our survey estimates of individuals' perceived risk of sexual harassment in the next two years. Figure 6 Panel A presents the wage differentials Δ_w for each scenario as a function of p. By construction, Δ_w doesn't vary with p in Case 1 as we set the risk of sexual harassment to zero. For Case 2 and 3, when p is strictly positive, the pay differential between remote and office jobs increases sharply as p increases, as firms have to pay an additional compensation to encourage workers to work on-site. This pattern is starker in Case 3 when firms are mandated to internalize the risk, and compensate each worker accordingly.

We next explore selection patterns based on workers' distaste for both disamenities. Figure 6 Panels B and C show that following an increase in p, selection on H in office jobs ($\mathbb{E}[H|S=1]$) increases relative to selection on Z ($\mathbb{E}[Z|S=1]$): the inframarginal worker in office jobs is characterized by a low disutility for sexual harassment when the probability is high (Panel C, Case 2), but this pattern is attenuated when the firm internalizes the risk (Case 3). In contrast, there is less sorting of workers into office jobs based on their taste for remote work (Panel B). Because of workers' preference heterogeneity, Panel E shows that workers' average rents in office increases sharply with positive probability of sexual harassment, in particular if the risk is internalized by the firm (Case 3). This is explained by the fact that some workers will benefit from high compensation for high p relative to what would be required to change their decision to move from remote to office jobs based solely on their distaste for sexual harassment. Because of the increase in workers' compensation, Panel F shows that firms' rents decrease.

Building upon our empirical results on gender differences in valuations for a safe work environment, the model predicts that in the presence of workplace hostility, men are more likely to be observed in office jobs—even though men and women have similar valuations for hybrid work—and are more likely to extract higher rents. This implies that the risk of hostility not only influences job selection and contributes to gender segregation in the labor market but also has broader implications for gender pay gaps.

5.3.2 Counterfactual Experiments

To quantify the impact of the risk of workplace hostility on pay differentials and on workers' and firms' rents in office jobs, we explore three counterfactual experiments, keeping all other structural parameters unchanged (μ_Z, σ_Z, σ_H, $\sigma_{Z,H}$ and σ_B).[46] Results are presented in Table 6. First, we shock the gender gap in perceived probability of sexual harassment p, such that the sample's perceived risk is aligned with men's perceptions (17.3 percent vs. 11.7 percent). We find that this leads to a reduction by 15 percent and 18 percent of Δ_w, the baseline wage differentials between office and remote jobs, for Case 2 and 3 respectively (Column 1). This translates into a comparable decrease for workers' rents in office jobs (-15 percent and -20 percent for Case 2 and 3 respectively, see Column 2), and into an increase in firms' rents in office jobs between 4 percent and 7 percent (Column 3).

We compare this with an experiment in which we reduce the average productivity cost of remote work in the economy μ_B by one third.[47] To provide some intuition behind the magnitude of such shock, we use data from Barrero et al. (2023) on the prevalence of work-from-home over time. We compute the average fraction of the week worked from home each year and in each industry, and then compute the difference between the value at the peak of the Covid-19 pandemic in 2020 to the value in 2023 for each industry, $\Delta WFH_{2020-2023}$. Our goal is to capture cross-industry variations in the technological innovations implemented to facilitate remote work during the Covid-19 pandemic. Decreasing μ_B by one third is equivalent to moving from the median industry in terms of return to office to the industry in the 75^{th} percentile.[48] As expected, this shock on μ_B has large negative effects on firms' rents in office jobs, with a decrease ranging from 10 to 23 percent. Interestingly, for Case 2 and 3, we find

[46] In Appendix E.5, we also present simulations varying the covariance of preferences over disamenities $\sigma_{Z,H}$ (Figure E14), and show that the selection patterns are minimized when preferences over remote work and hostility are independent. We also explore the sensitivity of the results to the variance in firms' productivity cost of remote work σ_B (Figure E15), and show that firms' heterogeneity is mechanically associated with greater worker sorting and associated rents.

[47] See Figure E11 for the graphical simulations. Δ_w is an increasing function of μ_B, as firms are willing to pay an additional compensation to workers for working on-site. In terms of selection into office jobs, as μ_B decreases, the inframarginal worker's preference for remote work in office job decreases (Panel B), however this pattern is less pronounced with positive probability of sexual harassment (Cases 2 and 3). Similarly, we observe greater sorting across remote and office jobs based on disutility for sexual harassment (Panel C). The model predicts that with a decrease in the productivity cost of remote work for firms, men are more likely to be observed in office jobs—despite men and women having comparable valuations for hybrid work.

[48] The median industry in terms of return to office is characterized by a $\Delta WFH_{2020-2023}$ = -45 percent and the industry in the 75^{th} percentile is characterized by a $\Delta WFH_{2020-2023}$ = -30 percent.

that the effects on pay differentials (-20 to -23 percent respectively) and workers' rents in office (-28 to -35 percent respectively) are only marginally higher compared to the effect of the shock on perceived probability of sexual harassment p.

Finally, we explore the counterfactual experiment in which we shock the gender gap in preferences for sexual harassment μ_H, such that the sample's preferences are aligned with men's preferences (moving from a WTP of 36.94 percent to 22.59 percent of the wage).[49] We find that this leads to a reduction of the pay differential between remote and office jobs Δ_w by 5 to 6 percent for Case 2 and 3, and translates into much modest changes in workers' and firms' rents. Overall, these decomposition results rank gender differences in the risk of hostility at work as an important driver of the remote pay penalty, with an impact comparable to that of a large technological shock facilitating the provision of remote work by firms.

5.3.3 Firms' Prevention Policy

We finally explore how selection patterns and pay differentials evolve when we vary firms' prevention policy parameter. Figure E13 presents simulations varying K, i.e the inverse of the cost parameter that the social planner imposes on firms to mitigate the risk of sexual harassment. As K increases, the economy converges to Case 2 in which the risk of harassment is only internalized by workers. Panel A illustrates that as K decreases, meaning firms are bearing the preventing cost of harassment, the pay differential between remote and office jobs increases. Selection in office jobs both in terms of Z and H decreases (Panels B and C), to a point where selection on these amenities is virtually eliminated. Workers' excess rent increases slightly (Panel E), but this is driven solely by the effect on wage differentials Δ_w, rather than by workers' heterogeneity, as selection patterns are less pronounced for both amenities. Firms' average productivity cost of remote work B in office jobs decreases (Panel D) and so does their excess rents (Panel F).[50]

These simple policy simulations provide some insights on the impact of firms' policies on

[49] See Figure E12 for the graphical simulations.

[50] While our model is static, a long-run model with worker mobility, firms free-entry and a zero-profit condition should in theory lead to the exit of firms with high productivity cost of remote work (B). Since the rents to be extracted by workers are higher in low-B firms, workers will decide to switch to these firms, and in the long-run, only one type of firms survives (Mas, 2025). As the social planner's mandate strengthens, firms' profit constraint shifts upward, which leads to faster exit of high-B firms. However, the risk of sexual harassment decreases in office jobs which leads to lower sorting of workers in office jobs based on their preference for H. Which effect would prevail will depend on the prevention technology, which is set by the elasticity of p with respect to a_2.

the selection of workers across jobs, and on the excess rents the average worker and firm can extract in each job. By bearing the preventing cost of harassment, firms limit sorting into office jobs based on preferences for amenities because workers' compensation increases uniformly. As a consequence, the effects on workers' rents in office jobs are ambiguous, despite a decreasing role for workers' heterogeneity. If firms are not able to differentially screen workers based on their disutility for sexual harassment, compensating the average worker for a risk of sexual harassment in office jobs could theoretically translate into higher average rents. Given the legal and technological constraints on firms' ability to screen and adjust wages based on workers' preferences for amenities, future research should focus on cost-effective interventions to reduce workplace hostility, as it has meaningful effects on sorting across jobs and occupations.

6 Conclusion

This paper provides experimental evidence on the value individuals place on avoiding hostile workplaces and documents how these preferences shape labor market sorting. Using a pre-registered choice experiment with alumni, recent graduates, and upper-year students from a large public university in Canada, we find that respondents are willing to forgo 12-36 percent of their wages to avoid hostile work environments. While both men and women exhibit substantial willingness-to-pay for hostility-free workplaces, women have significantly stronger preferences for inclusive environments and workplaces with no tolerance for sexual harassment.

Leveraging rich individual data on real labor market outcomes collected two years after the experiment, we show that students' preferences for environments that do not tolerate sexual harassment help explain their patterns of industry sorting. Additionally, individual perceived risk of experiencing sexual harassment measured at graduation is negatively associated with salary two years after, controlling for ability and college majors, and explains a share of the early-career gender pay gap. We further show that women are more likely to report job search strategies aimed at avoiding hostility at work. They are also significantly more likely to report that they missed work opportunity, such as workshops or social events, to avoid hostility. This last result shows that hostility affects labor market outcomes beyond job search and suggests, in line with Cullen and Perez-Truglia (2023), that part of the gender gap in promotion could be explained by strategies to avoid hostility at work. Taken together, our results suggest that workplace hostility shapes career outcomes and is consequential for gender gaps pay.

We further document important interactions between workplace hostility and alternative work arrangements. Women value hybrid work twice as much when sexual harassment is tolerated, suggesting that remote work may serve as a substitute for avoiding hostile environments. To explore the equilibrium implications of these patterns, we develop a model of compensating differentials where firms offer jobs that vary in both observable amenities (remote work) and unobservable ones (risk of hostility). The model demonstrates that gender differences in perceived risk of workplace hostility are a significant driver of both the remote work pay penalty and office workers' rents, with effects comparable to major technological shocks facilitating remote work provision.

Our model also explores what happens when firms are required to invest in preventing workplace harassment. We find that such requirements reduces the extent to which workers sort themselves based on their tolerance for hostile environments. However, firms must offer uniform compensation to all workers, leading to some workers receiving more compensation than needed to accept office work. Our results suggest that return-to-office policies may introduce a new dimension to the gender pay gap. Voluntary returns to in-person work may draw a disproportionate share of workers who are less sensitive to workplace hostility. If promotions depend on in-office presence, this dynamic can produce in the long-run an additional component of the gender pay gap—the sorting effect between in-person and remote workers.

Lastly, our findings raise new questions about the economic impacts of workplace hostility. While workers clearly prefer hostility-free environments, the effects on motivation, productivity, and work quality remain unclear. Future research should investigate whether the prevalence of hostility stems primarily from coordination failures, or from heterogeneous productivity effects.

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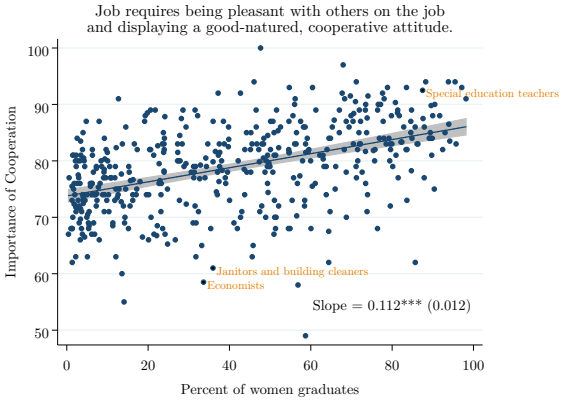
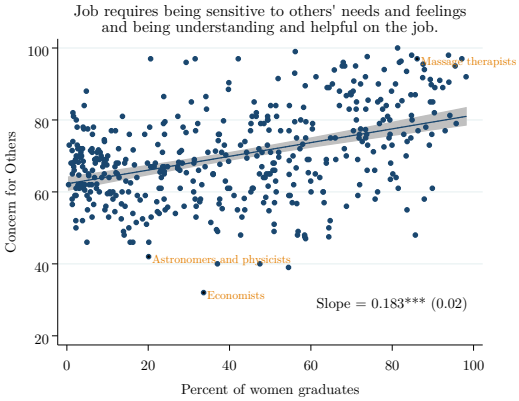
Tables and Figures

FIGURE 1. Cooperation, Concern for Others, and Occupational Segregation by Gender

(A) Cooperation — Occupation

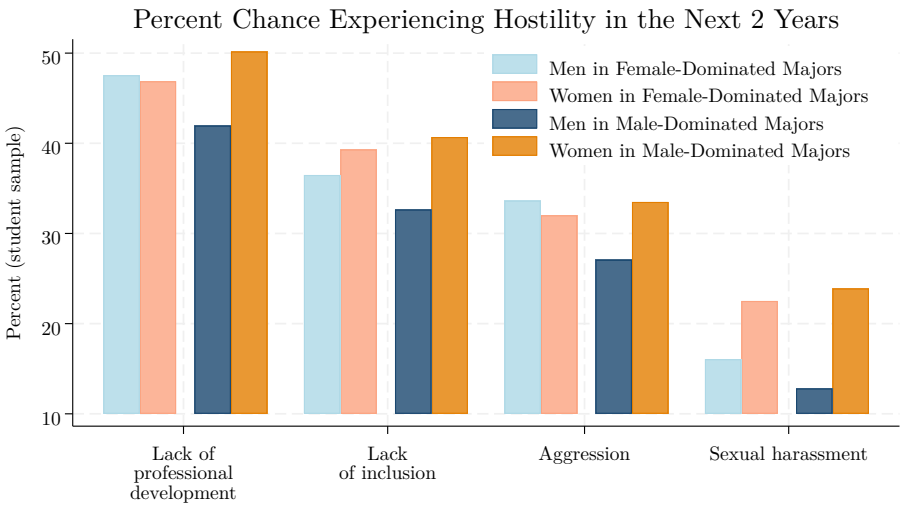


(B) Concern for Others — Occupation



Notes: This figure shows the correlation at the occupation-level between the percentage of women graduates computed from the CPS 2018-2019 and, the importance of cooperation (Panel A) and concern for others (Panel B) computed from the O*NET classification. The importance of cooperation is computed from the question "Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude". Concern for others is computed from the question "Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job".

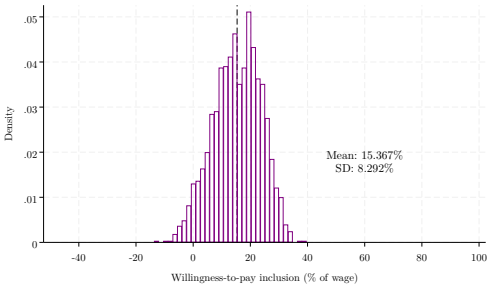
FIGURE 2. Perceived Risk of Hostility by Gender and Fields



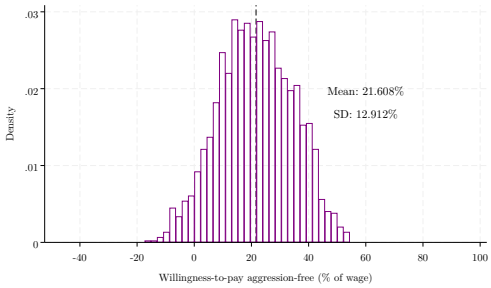
Notes: This figure shows the average reported perceived risk of experiencing hostility in the next two years, by gender and major (male or female-dominated) for the sample of student participants.

FIGURE 3. Individual WTP Distributions for Hostility Attributes and Work Environments

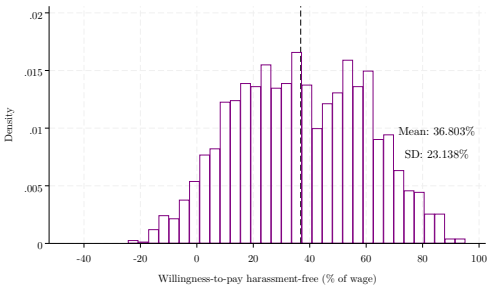
(A) Inclusion



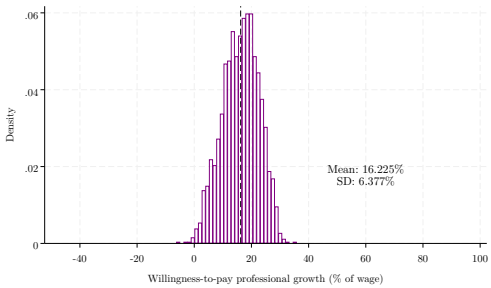
(B) Aggression-Free Environments



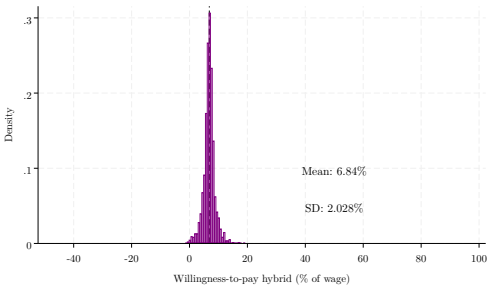
(C) Sexual Harassment-Free Environments



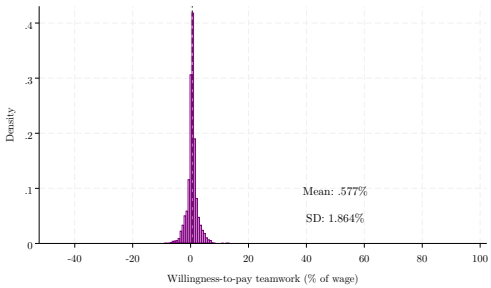
(D) Professional Growth



(E) Hybrid Work

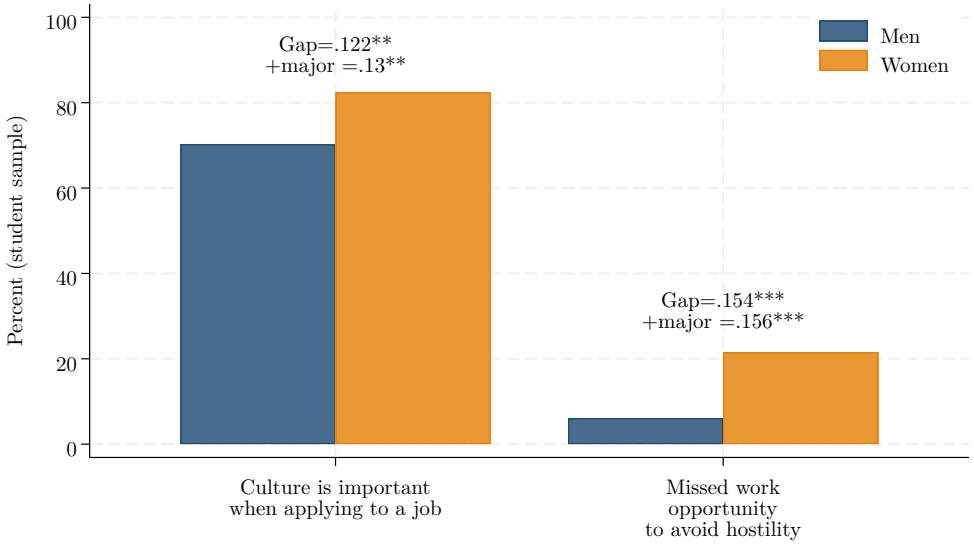


(F) Teamwork



Notes: This figure shows individual WTP distributions for each hostility amenities (inclusion, aggression-free and sexual harassment-free environments), professional growth, and working arrangements (hybrid, teamwork).

FIGURE 4. Gender Differences in Search Strategies and Workplace Behaviors Two Years After Graduation

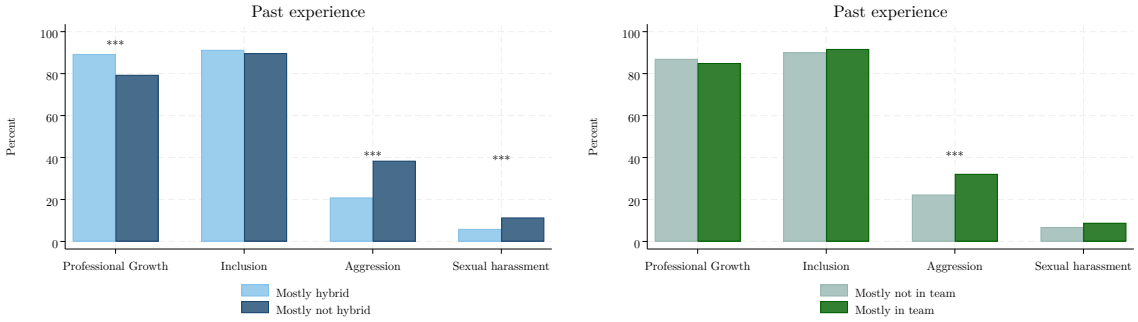


Notes: This figure shows gender gaps in search strategies and workplace behaviors for the sample of student participants surveyed two years after graduation. Estimates of the raw gaps are reported at the top and are obtained from separate linear regressions of each outcome on the gender of the participant, with standard errors clustered at the participant level. For the second estimates, we also control for the major of graduation (male- or female-dominated).

FIGURE 5. Past Experience and Perceived Risk of Hostility by Working Arrangements

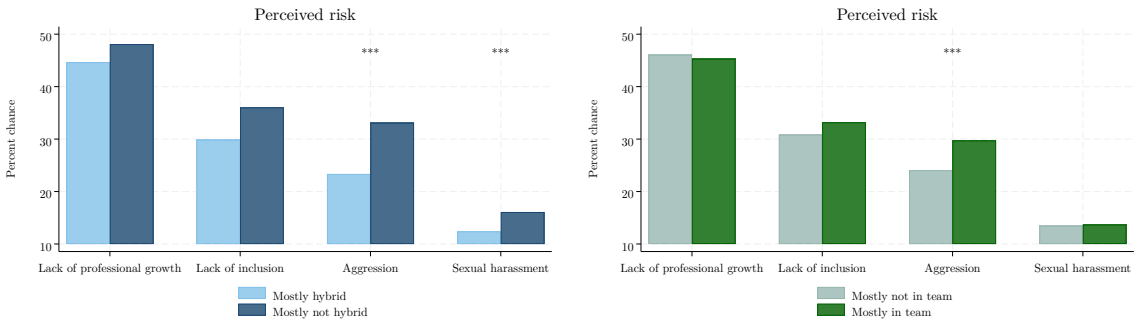
(A) Experience of Hostility — Hybrid

(B) Experience of Hostility — Teamwork



(C) Perceived Risk of Hostility — Hybrid

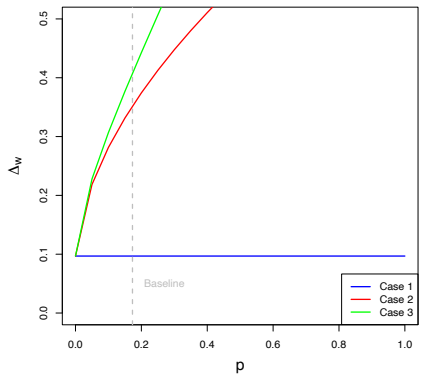
(D) Perceived Risk of Hostility — Teamwork



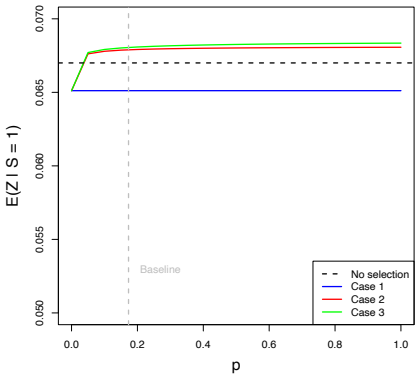
Notes: This figure shows respondents' reported measure of past experience of hostility and perceived risk of experiencing hostility in the next two years for each hostility amenities (inclusion, aggression-free and sexual harassment-free environments) and professional growth, separately by working arrangements, namely whether the respondent works mostly remote versus mostly in office (Panel A and C), and whether the respondent works mostly in team or solo (Panel B and D).

FIGURE 6. Simulations — By Perceived Probability of Sexual Harassment p

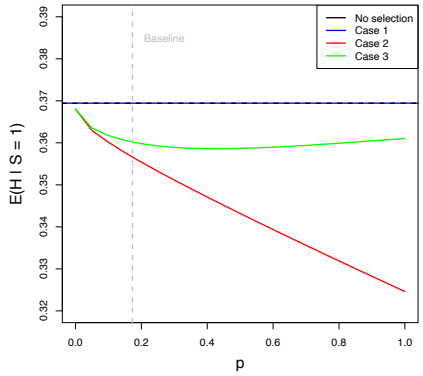
(A) Wage Differentials Δ_w



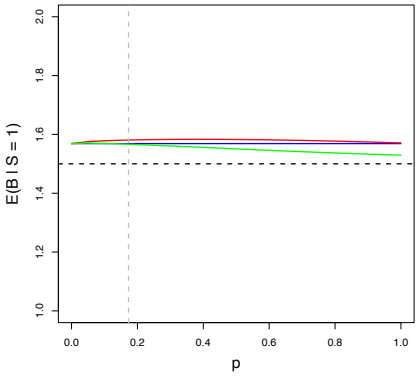
(B) Workers' Preference for Hybrid Work in Office Jobs $\mathbb{E}(Z|S=1)$



(C) Workers' Distaste for Sexual Harassment in Office Jobs $\mathbb{E}(H|S=1)$

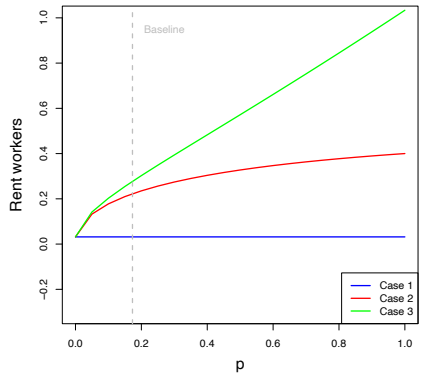


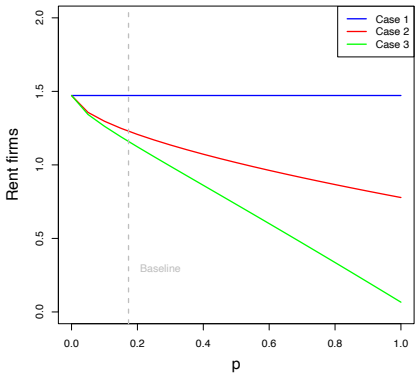
(D) Firms' Productivity Cost of Remote Work in Office Jobs $\mathbb{E}(B|S=1)$



(E) Workers' Excess in Office Jobs

(F) Firms' Excess Rents in Office Jobs





Notes: Panel A compares Δ_w the wage differentials between on-site and remote work across the three scenarios for various values of p, assuming $\sigma_B = 1$, $\mu_B = 1.5$, $\sigma_{Z,H} = 0.1$ and using parameters from Table E16, Panel B compares workers' selection on Z, Panel C compares workers' selection on H, Panel D compares firms' selection on B, Panel E compares workers' excess rents, across the three scenarios: Case 1 no risk of sexual harassment, Case 2 risk of sexual harassment internalized by workers only, Case 3 risk of sexual harassment internalized by workers and firms.

Table 1 – Description of Sociodemographic and Educational Sample Characteristics

	All	Enrolled Students	Graduated Students	Alumni
Sociodemographic characteristics				
Women	0.69	0.64	0.74	0.70
	(0.46)	(0.48)	(0.44)	(0.46)
Men	0.29	0.33	0.24	0.27
	(0.45)	(0.47)	(0.43)	(0.45)
Non-Binary	0.02	0.03	0.02	0.02
	(0.15)	(0.16)	(0.13)	(0.15)
Age	27.52	22.21	22.96	34.07
	(10.64)	(4.00)	(2.45)	(13.00)
Black	0.03	0.04	0.04	0.02
	(0.17)	(0.19)	(0.19)	(0.15)
Chinese	0.28	0.33	0.27	0.24
	(0.45)	(0.47)	(0.45)	(0.43)
South Asian	0.19	0.22	0.26	0.14
	(0.40)	(0.42)	(0.44)	(0.34)
White	0.23	0.11	0.13	0.36
	(0.42)	(0.31)	(0.34)	(0.48)
Other	0.27	0.30	0.30	0.24
	(0.45)	(0.46)	(0.46)	(0.43)
First generation college graduate	0.20	0.15	0.18	0.26
	(0.40)	(0.36)	(0.38)	(0.44)
Has children	0.10	0.01	0.01	0.22
	(0.30)	(0.08)	(0.09)	(0.41)
Major				
Psychology	0.36	0.15	0.19	0.62
	(0.48)	(0.36)	(0.39)	(0.49)
Sociology	0.10	0.10	0.07	0.10
	(0.29)	(0.31)	(0.26)	(0.30)
Biology	0.07	0.09	0.13	0.03
	(0.25)	(0.28)	(0.33)	(0.17)
Economics	0.06	0.05	0.03	0.08
	(0.23)	(0.21)	(0.16)	(0.28)
Commerce	0.06	0.02	0.08	0.07
	(0.23)	(0.16)	(0.28)	(0.26)
Computer Science	0.05	0.10	0.05	0.01
	(0.21)	(0.29)	(0.21)	(0.08)
Engineering	0.03	0.06	0.02	0.00
	(0.16)	(0.23)	(0.15)	(0.03)
Other	0.33	0.53	0.48	0.10
	(0.47)	(0.50)	(0.50)	(0.30)
N	2,048	724	436	888

Notes: This table presents descriptive statistics for sociodemographic characteristics and majors of whole experimental sample (column 1), and separately by participant status, with enrolled students (column 2), graduated students (column 3) and alumni (column 4).

Table 2 – Willingness-to-Pay Estimates to avoid Hostility at Work by Gender

	Mixed Logit (Median)		
	Full Sample	Women	Men
Inclusion	0.143***	0.151***	0.120***
vs. Lack of Inclusion	(0.004)	(0.005)	(0.008)
Aggression-free	0.195***	0.200***	0.170***
vs. Risk of Aggression	(0.004)	(0.005)	(0.008)
Harassment-free	0.309***	0.341***	0.199***
vs. Risk of Harassment	(0.006)	(0.007)	(0.009)
Professional growth	0.150***	0.153***	0.140***
vs. Lack of Professional growth	(0.005)	(0.006)	(0.009)
Hybrid	0.066***	0.065***	0.071***
vs. Full on-site	(0.006)	(0.008)	(0.011)
Teamwork	0.006	0.007	0.011
vs. Solo	(0.007)	(0.008)	(0.011)
N	26,624	18,395	7,592

Notes: This table presents median willingness-to-pay estimates from mixed logit model assuming normal distribution for marginal values of amenities, for each hostility attributes (lack of inclusion, aggression, sexual harassment) and for professional growth and working arrangements (hybrid work and teamwork) for the whole experimental sample and separately by gender.

Table 3 – Robustness Checks: Willingness-to-Pay Estimates to avoid Hostility at Work

	Baseline Mixed logit (Median)	Standard logit	Probit	Interacted model	Mixed logit (Mean)
	(1)	(2)	(3)	(4)	(5)
Inclusion	0.143***	0.119***	0.118***	0.133***	0.137***
vs. Lack of Inclusion	(0.004)	(0.005)	(0.005)	(0.013)	(0.004)
Aggression-free	0.195***	0.172***	0.171***	0.218***	0.184***
vs. Risk of Aggression	(0.004)	(0.005)	(0.005)	(0.011)	(0.004)
Harassment-free	0.309***	0.265***	0.265***	0.296***	0.280***
vs. Risk of Harassment	(0.006)	(0.006)	(0.006)	(0.010)	(0.006)
Professional growth	0.150***	0.133***	0.133***	0.165***	0.147***
vs. Lack of Professional growth	(0.005)	(0.005)	(0.006)	(0.018)	(0.005)
Hybrid	0.066***	0.070***	0.069***	0.090***	0.066***
vs. Full on-site	(0.006)	(0.007)	(0.007)	(0.012)	(0.007)
Teamwork	0.006	0.003	0.005	0.019	0.007
vs. Solo	(0.007)	(0.007)	(0.007)	(0.014)	(0.003)
N	26,624	26,624	26,624	26,624	26,624

Notes: This table presents median willingness-to-pay estimates for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth and for working arrangements (hybrid work and teamwork) for the full experimental sample from various specifications. Column 1 presents the baseline specification with median willingness-to-pay estimates from a mixed logit model assuming normal distribution for marginal values of amenities. Column 2 presents estimates from standard logit model. Column 3 presents estimates from probit model. Column 4 presents average WTP estimates from standard logit model with two-way interactions between amenities. Column 5 presents mean willingness-to-pay estimates from a mixed logit model assuming normal distribution for marginal values of amenities.

Table 4 – WTP and Later Labor Market Outcomes

	Male-Dominated Roles Two Years After Graduation	Female-Dominated Roles Two Years After Graduation	p-value diff.
Inclusion	0.088***	0.124***	0.169
vs. Lack of Inclusion	(0.017)	(0.020)	
Aggression-free	0.134***	0.171***	0.127
vs. Risk of Aggression	(0.016)	(0.019)	
Harassment-free	0.244***	0.323***	0.019
vs. Risk of Harassment	(0.020)	(0.027)	
Professional growth	0.147***	0.157***	0.731
vs. Lack of Professional growth	(0.016)	(0.023)	
Hybrid	0.050***	0.061**	0.699
vs. Full on-site	(0.021)	(0.023)	
Teamwork	0.009	0.006	0.932
vs. Solo	(0.023)	(0.025)	
Male-dominated major	Yes	Yes	
N	1,768	2,067	3,835

Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth and for working arrangements (hybrid work and teamwork) restricting the sample to student participants who worked in male-type roles (Column 1), or in female-type roles (Column 2) two years after the experiment. The p-value testing for different estimates between subgroups are reported in Column 3. Measures of male-dominated industries are computed from information available on LinkedIn public profiles using LLMs (Claude Opus 4.1 and ChatGPT 5 Pro) and data on positions and reported industries, with manual checks applied in cases of disagreement.

Table 5 – Perceived Risk of Hostility and (Log) Salary

	Log(Salary)					
	(1)	(2)	(3)	(4)	(5)	(6)
Perceived risk of sexual harassment at graduation - high	-0.103** (0.050)		-0.089* (0.049)	-0.091* (0.049)	-0.105** (0.051)	-0.104* (0.057)
Women		-0.085 (0.052)	-0.065 (0.051)			
Male-dominated major				0.275*** (0.054)		
GPA					0.066 (0.053)	
Perceived risk of lack of satisfaction and growth at graduation - high						-0.048 (0.054)
Perceived risk of lack of inclusion at graduation - high						0.026 (0.056)
Perceived risk of aggression at graduation - high						0.014 (0.052)
Mean dep. variable	63,017	63,017	63,017	63,017	63,025	63,017
Observations	650	650	650	650	632	650

Notes: This table presents the relationship between individual perceived risk of experiencing hostility at graduation and salary two years after, for the sample of student participants. For the variable of interest, we use the inputed salary two years after graduation obtained from Revelio Labs dataset for each individual position, complemented by position average when individual salary is missing, and complemented from our follow-up survey when the LinkedIn information is missing. Estimates are obtained from linear regressions, with standard errors clustered at the participant level. In column 1 and 3-6, we control for a dummy variable equal to one if the respondent reported higher than mean perceived risk of sexual harassment in 2023. In columns 2 and 3, we control for the gender of the participant. Column 4 controls for participant major (male- or female-dominated) and column 5 for their reported GPA. Finally, in column 6 we include measures of participants' reported risk of experiencing other hostility attributes in 2023.

Table 6 – Counterfactual Experiments

	Pay differential Office vs. Remote Δ_w	Workers' Rents	Firms' Rents
Counterfactual 1: Closing the gender gap in perceived probability of sexual harassment p			
Case 1	0%	0%	0%
Case 2	-14.85%	-14.63%	4.10%
Case 3	-18.69%	-20.21%	6.76%
Counterfactual 2: Reducing the average productivity cost of remote work μ_B by 1/3			
Case 1	-10.26%	-21.16%	-10.26%
Case 2	-22.83%	-35.37%	-22.83%
Case 3	-19.71%	-28.43%	-19.71%
Counterfactual 3: Closing the gender gap in distaste for sexual harassment μ_H			
Case 1	0%	0%	0%
Case 2	-5.92%	1.76%	1.64%
Case 3	-5.11%	1.42%	1.69%

Notes: This table presents results of counterfactuals experiments on pay differentials between remote and office jobs, workers' and firms' rents from the model simulations. Effects are presented in percent change of the baseline specification. We separate case 1 (no risk of sexual harassment) from case 2 (risk of sexual harassment internalized by workers only) and case 3 (risk of sexual harassment internalized by both workers and firms). In counterfactual 1, we close the gender gap in perceived probability of sexual harassment p, so that the sample adopts men's perceived risk. Counterfactual 2 reduces the average productivity cost of remote work μ_B by 1/3. Finally, in counterfactual 3 we shock the sample's preferences so that the gender gap in distaste for sexual harassment is closed.

(For Online Publication)

Appendix to

Workplace Hostility

Manuela R. Collis and Clémentine Van Effenterre

A Motivating Evidence

We use a large-sample representative dataset for the United States, namely the January 2018-December 2019 monthly Current Population Survey (CPS). We use their sample of 25-60 year old labor market participants with at least a Bachelor's degree (to match our empirical setting), and we match each occupation from the CPS with the Occupational Information Network (O*NET) classification.[A.1] We select two characteristics which relate to the workplace climate: the average occupation score for "Importance of cooperation" and "Concern for others". The importance of cooperation is computed from the question "Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude". Concern for others is computed from the question "Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job". Figure 1 presents the correlation between the share of female graduates by occupations on one hand, and the importance of cooperation (Panel A) and concern for others (Panel B) on the other hand.[A.2] We report the coefficients and standard errors of a linear regression where we regress the share of female graduates on each O*NET index separately. We find a positive relationship between the share of female graduates in an occupation, and the importance of cooperation and concern for others.

B Workplace Hostility Definition

B.1 Procedures of Pilot Study

We recruited 200 participants through the platform *Prolific*. To be eligible for participation, individuals had to be residents of either Canada or the United States, fluent in English, and

[A.1] To do so, we use crosswalks between census code (in CPS), SOC Code, and ONET occupation codes.

[A.2] We observe similar patterns when we don't restrict the sample to Bachelor graduates. Results are available upon request.

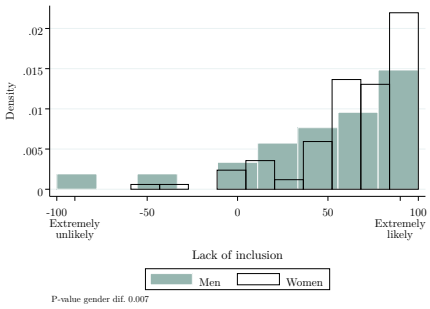
completed at least 100 studies with a minimum approval rate of 95 percent. Furthermore, in order to resemble our experimental sample, participants had to be enrolled or to have completed a bachelor degree or more. Lastly, we screened participants using a simple attention check question. The study was advertised as a 10-minute academic study in exchange for USD 2.50 in fixed compensation which translates into an hourly rate of USD 15 or CAD 19.70. This impression survey was conducted on June 18, 2023. The final sample consists of 200 participants with an average age of 29, 50 percent of whom are women and 50 percent are not white. In terms of working conditions, 57.50 percent of them work full-time. 44 percent work fully on-site, while the rest work partially on-site and partially remote (35 percent) or fully remote (21 percent). 15 percent perform all of their work in teams, and 14 percent work entirely on their own. The median annual salary is $35,500, for a median working week of 40 hours.

First, we asked participants to report how likely it is that each hostility attribute contributes to a hostile work environment. Our outcome of interest was a continuous variable from -100 ("extremely unlikely") to 100 ("extremely likely"). Figure B1 presents the distribution of answers separately by gender and reports the p-value of the test for the gender difference. Our results show that women are significantly more likely than men to declare that the lack of inclusion, aggression and sexual harassment contribute to a hostile work environment. Overall, this impression survey empirically validates that the workplace attributes don't completely overlap, and capture different degrees and natures of hostility at work. It also reveals widespread gender differences in perceptions of hostility, that cannot be fully explained by differences in past experience and perceived risk of hostility at a workplace.

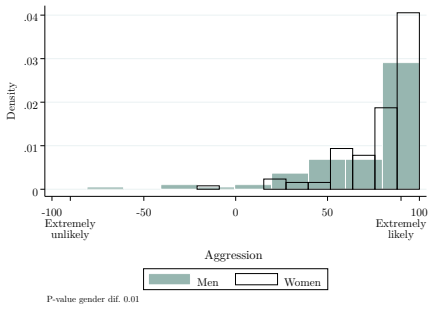
B.2 Pilot Results

FIGURE B1. Perception of Hostile Work Environment by Hostility Attributes — Prolific Respondents

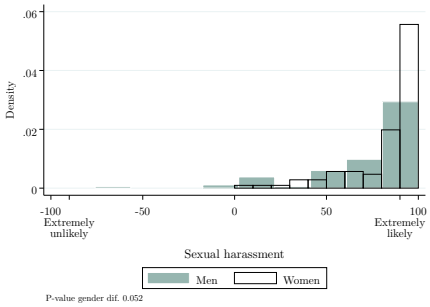
(A) Lack of Inclusion



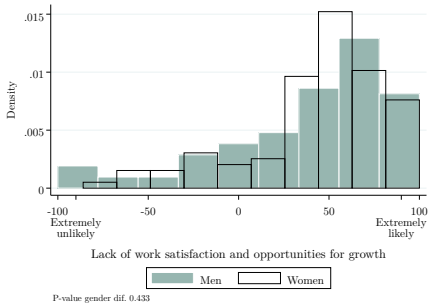
(B) Aggression



(C) Sexual Harassment

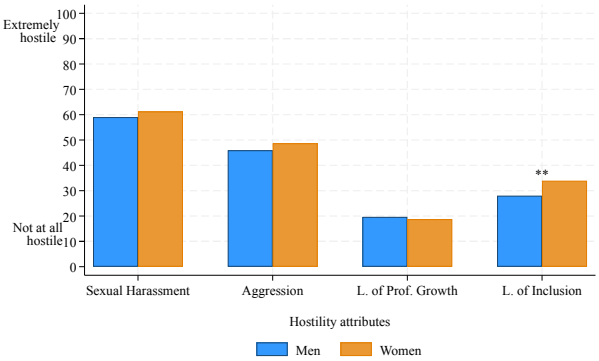


(D) Lack of Professional Growth



Notes: This figure shows the distribution of perceived hostility of hostility attributes to a work environment, separately by gender. We cross-randomized hostility attributes and ask "How likely is it that X contributes to a hostile work environment?".

FIGURE B2. Average Hostility Ratings of Job Scenarios by Hostility Attributes — Prolific Respondents

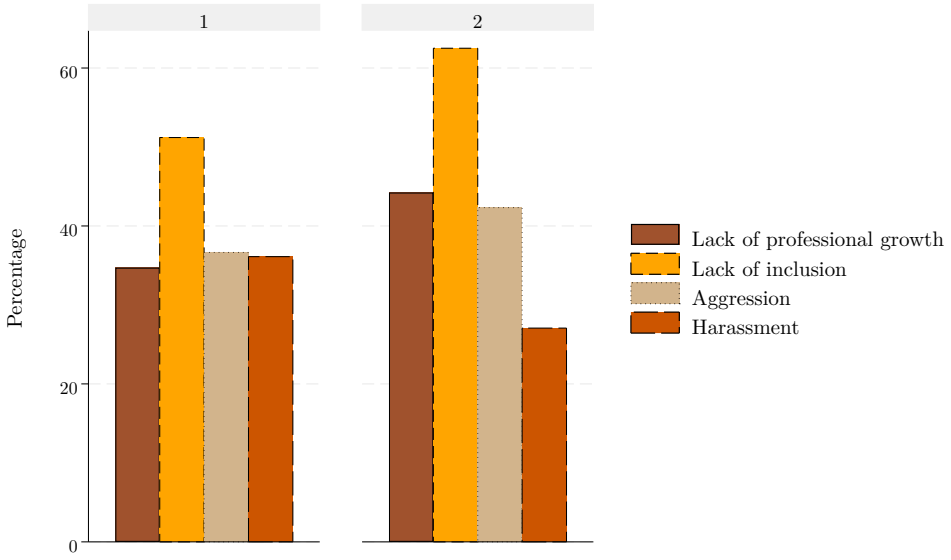


Notes: This figure shows the average perceived hostility of a job scenario by hostility attributes, separately by gender. We cross-randomized and vary the number of hostility attributes to a job scenario and ask "How hostile do you rate the above description of a work environment?".

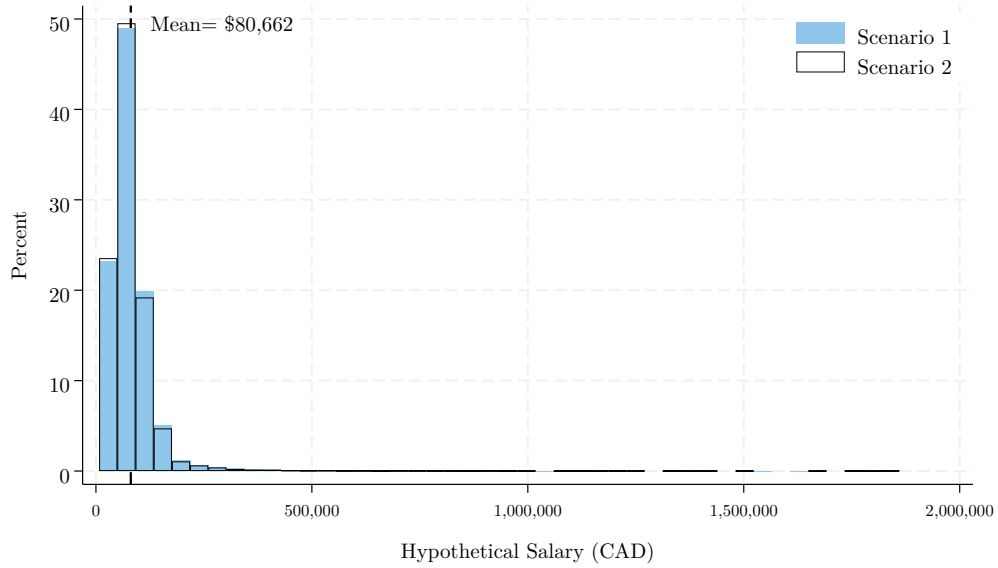
C Experimental Design

FIGURE C3. Hypothetical Scenarios

(A) Hostility Attributes



(B) Salary



Notes: This figure shows the distribution of hostility attributes across job scenarios and hypothetical salaries in the experiment.

Table C1 – Survey Response Rates

Field of Study	Seniority	Outreach	Responses	Response Rate (in percent)
Commerce	Upper year Undergraduate Students	603	29	4.81
	Alumni	9,763	93	0.95
Economics	4th year Undergraduate Students	971	204	20.01
	Alumni MA and MFE	3,135	86	2.74
Psychology	Upper-year Undergraduate Students	800	163	20.38
	Alumni	9,158	689	7.52
Computer Science	Upper-year Undergraduate Students	800	163	20.38
Sociology	Upper-year Undergraduate Students	812	153	18.84
	Alumni	1,375	104	7.56
Student Life	Upper-year Undergraduate Students and Alumni	3,154	1,116	35.38
Total Responses		30,495	2,755	9.03

Notes: The university sent out the promotional email for the following samples: Commerce (undergraduates and alumni), Economics (undergraduates), Psychology (undergraduates and alumni), and Student Life. The remaining samples have been contacted by the authors. Examples of promotional Emails are available upon request.

Table C2 – Job Scenarios

	Values	
	(1)	(2)
Aggression	"The workplace fosters a culture of friendly interactions. Instances of aggression are rare."	"The environment is very much cutthroat. Bullying does happen and intimidation is frequent and seen as tool to make you work harder."
Inclusion	"The team is incredibly inclusive and supportive. They actively embrace diversity and create an environment where everyone's voice is heard and respected."	"I often feel excluded and undervalued by my colleagues. It's challenging to be heard in an environment that lacks appreciation for diverse perspectives."
Sexual Harassment	"The company maintains a zero-tolerance policy towards sexual harassment, ensuring a safe workplace for all employees."	"Instances of sexual harassment are an open secret, creating an uncomfortable and unsafe work environment. People who make inappropriate comments or act inappropriately are not reprimanded by management."
Workplace climate survey	"The workplace climate survey reflects high employee engagement. It signifies a work environment that fosters growth and satisfaction."	"The workplace climate survey reflects low employee engagement. The results reveal widespread dissatisfaction and a lack of opportunities for growth."
Work Location	"You will complete all your tasks in-person at the office."	"You will complete 50% of your tasks in-person and 50% of your tasks remotely."
Team-Work	"You complete projects by yourself."	"You sometimes complete projects by yourself and sometimes in teams".

Notes: This table presents the two versions of each hostility attributes and other non-wage attributes (work location and team-work).

Table C3 – Median Annual Salaries by Industries and Major

	Median Annual Full-Time Salary (in CAD)
Economics and Business	65,000
Banking and Finance	107,000
Computer and Technology	76,000
Consulting	80,000
Education	69,500
Energy	63,200
Financial Audit and Accounting	52,800
Pharmaceutical	73,000
Retail	65,000
Real Estate	65,000
Reported salary $\leq$ 10,000	65,000
Psychology	41,600
Arts, Culture, Recreation, Sport	34,000
Business, Finance, Administration	52,800
Education, Law, Social Work, Government Services	59,200
Healthcare	54,400
Retail, Sales or Services	30,600
Reported salary $\leq$ 10,000	41,600
Computer Science	124,000
Administration or Policy	80,000
Arts, Culture, Recreation, Sport	91,000
Architecture	97,000
Business, Banking, Finance or related	80,000
Computer and Technology	94,000
Education, Law, Social Work, Government Services	91,000
Energy	91,000
Health Care and Services	79,500
Pharmaceutical	91,000
Retail, Sales or Services	91,000
Real Estate	119,000
Reported salary $\leq$ 10,000	91,000
Sociology	79,000
Administration, Policy, or Non-Profits	75,000
Arts, Culture, Recreation, Sport	79,000
Business, Banking, Finance or related	75,000
Education, Law, Social Work, Government Services	79,000
Health Care	86,000
Retail, Sales or Services	79,000
Real Estate	118,000
Reported salary $\leq$ 10,000	79,000

Notes: This table presents the median annual full-time equivalent salaries for each industries $\times$ major combinations. Salaries are computed using employment income statistics by occupation, major field of study and highest level of education from Statistics Canada (2021 Census) for the population of full-time workers aged between 25-64 with a bachelor's degree or higher in each major.

FIGURE C4. Seven Jobs used for the Choice Experiment

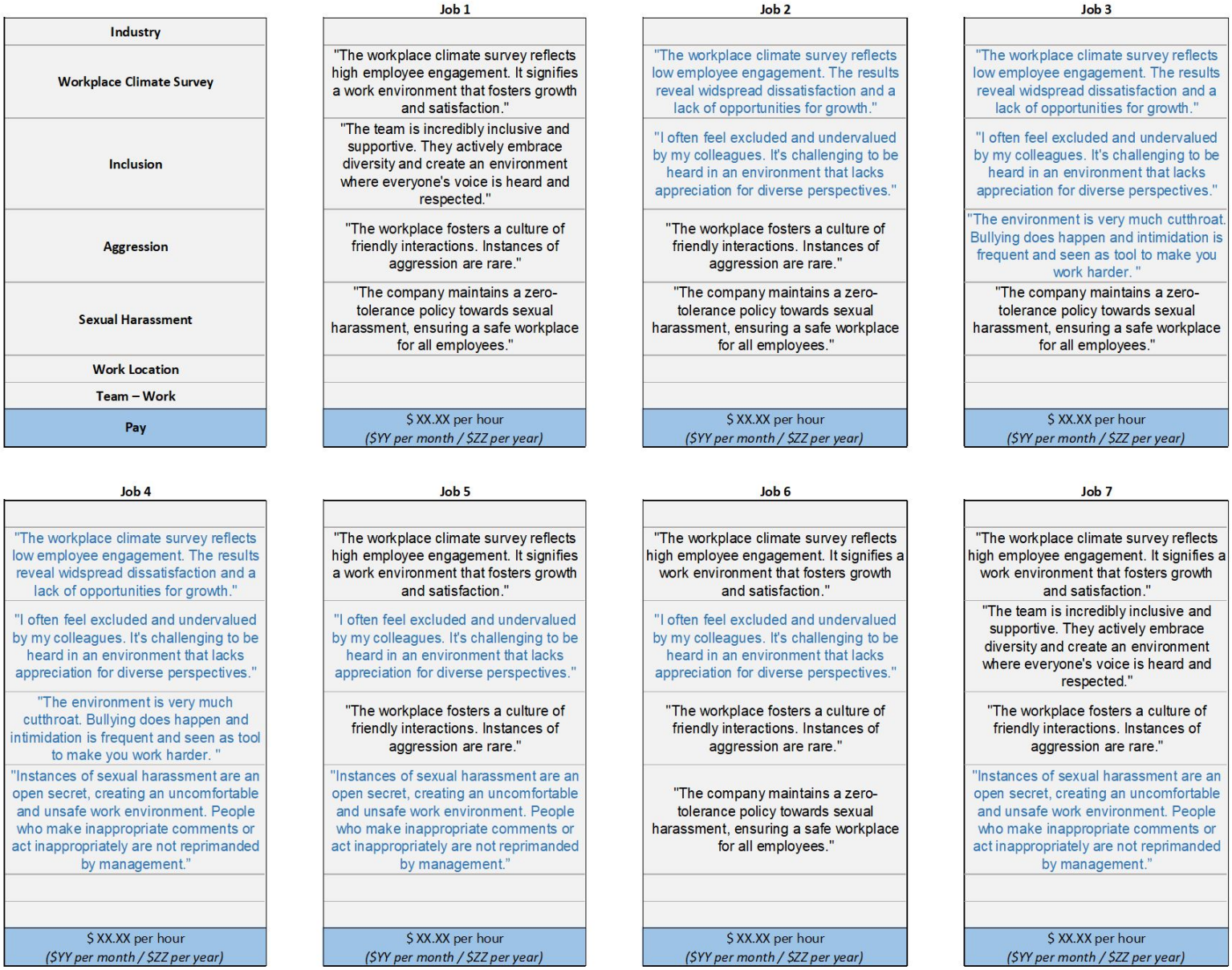


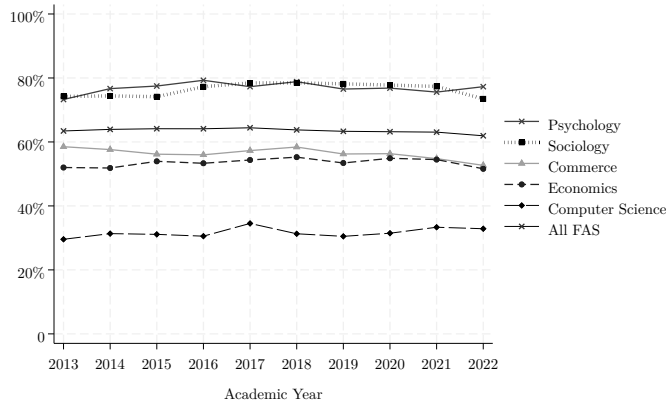
FIGURE C5. Scenario 12

	Job A	Job B
Workplace Climate Survey	"The workplace climate survey reflects high employee engagement. It signifies a work environment that fosters growth and satisfaction."	"The workplace climate survey reflects high employee engagement. It signifies a work environment that fosters growth and satisfaction."
Inclusion	"The team is incredibly inclusive and supportive. They actively embrace diversity and create an environment where everyone's voice is heard and respected."	"The team is incredibly inclusive and supportive. They actively embrace diversity and create an environment where everyone's voice is heard and respected."
Aggression	"The environment is very much cutthroat. Bullying does happen and intimidation is frequent and seen as tool to make you work harder. "	"The workplace fosters a culture of friendly interactions. Instances of aggression are rare."
Sexual Harassment	"The company maintains a zero-tolerance policy towards sexual harassment, ensuring a safe workplace for all employees."	"The company maintains a zero-tolerance policy towards sexual harassment, ensuring a safe workplace for all employees."
Work Location	You will complete all your tasks in-person at the office.	You will complete all your tasks in-person at the office.
Team-Work	"You sometimes complete projects by yourself and sometimes in teams."	"You sometimes complete projects by yourself and sometimes in teams."
Pay	**$ 38.44 per hour ($ 6662.5 per month / $ 79950 per year)**	**$ 28.13 per hour ($ 4875 per month / $ 58500 per year)**

FIGURE C6. Scenario 13

	Job A	Job B
Workplace Climate Survey	"The workplace climate survey reflects low employee engagement. The results reveal widspread dissatisfaction and a lack of opportunities for growth."	"The workplace climate survey reflects low employee engagement. The results reveal widspread dissatisfaction and a lack of opportunities for growth."
Inclusion	"The team is incredibly inclusive and supportive. They actively embrace diversity and create an environment where everyone's voice is heard and respected."	"I often feel excluded and undervalued by my colleagues. It's challenging to be heard in an environment that lacks appreciation for diverse perspectives."
Aggression	"The environment is very much cutthroat. Bullying does happen and intimidation is frequent and seen as tool to make you work harder. "	"The workplace fosters a culture of friendly interactions. Instances of aggression are rare."
Sexual Harassment	"The company maintains a zero-tolerance policy towards sexual harassment, ensuring a safe workplace for all employees."	"The company maintains a zero-tolerance policy towards sexual harassment, ensuring a safe workplace for all employees."
Work Location	You will complete all your tasks in-person at the office.	You will complete all your tasks in-person at the office.
Team-Work	"You sometimes complete projects by yourself and sometimes in teams."	"You sometimes complete projects by yourself and sometimes in teams."
Pay	**$ 28.44 per hour ($ 4929.17 per month / $ 59150 per year)**	**$ 33.13 per hour ($ 5741.67 per month / $ 68900 per year)**

FIGURE C7. Share of Female Students by Majors



Notes: This figure shows the evolution of the share of female students by majors. Administrative data, 2013-2022.

TABLE C4 – DESCRIPTION OF SAMPLE LABOR MARKET CHARACTERISTICS, SPLIT BY SENIORITY

	Mean	S.D	Min	Max	N
Panel A. Students (Enrolled and Graduated)					
Full-time	0.10	0.30	0	1	1,160
Unemployed (and job seeking)	0.12	0.33	0	1	1,160
Part-Time	0.02	0.13	0	1	1,160
Student	0.10	0.30	0	1	1,160
Not in paid work	0.00	0.00	0	0	1,160
Other (student)	0.66	0.47	0	1	1,160
GPA	3.41	0.45	2	4	1,116
Accepted a job	0.33	0.47	0	1	436
Annual salary (CAD)	7,158	22,303	0	300,000	1,160
Panel B. Alumni					
Full-time	0.66	0.47	0	1	888
Unemployed (and job seeking)	0.05	0.23	0	1	888
Part-Time	0.11	0.32	0	1	888
Student	0.00	0.00	0	0	888
Not in paid work	0.11	0.31	0	1	888
Other	0.04	0.20	0	1	888
Teamwork	0.93	0.26	0	1	888
Fully on-site	0.32	0.47	0	1	888
Hybrid	0.50	0.50	0	1	888
Fully remote	0.18	0.39	0	1	888
Worked Hours	35.02	14.58	0	100	888
Annual salary (CAD)	76,349	60,719	0	300,000	887

Notes: This table presents descriptive statistics for labor market outcomes for enrolled and graduated students (Panel A), alumni (Panel B) at the time of the choice experiment.

Table C5 – Experimental Sample - Summary statistics Hostility

	All	Women	Men	*P* Diff.	Students	Alumni	*P* Diff.	Non-white	White	*P* Diff.	Male-Dominated Fields	Female-Dominated Fields	*P* Diff.
Panel A. Past experience of													
professional growth	0.74	0.75	0.71	0.04	0.64	0.86	0.00	0.72	0.80	0.00	0.73	0.74	0.62
	(0.44)	(0.43)	(0.46)		(0.48)	(0.35)		(0.45)	(0.40)		(0.45)	(0.44)	
inclusion	0.89	0.89	0.88	0.60	0.87	0.91	0.01	0.88	0.91	0.04	0.89	0.89	0.82
	(0.32)	(0.31)	(0.32)		(0.33)	(0.29)		(0.33)	(0.28)		(0.31)	(0.32)	
aggression	0.63	0.64	0.61	0.21	0.91	0.26	0.00	0.68	0.46	0.00	0.74	0.61	0.00
	(0.48)	(0.48)	(0.49)		(0.29)	(0.44)		(0.47)	(0.50)		(0.44)	(0.49)	
sexual harassment	0.16	0.17	0.13	0.02	0.23	0.08	0.00	0.18	0.11	0.00	0.18	0.16	0.35
	(0.37)	(0.38)	(0.34)		(0.42)	(0.27)		(0.38)	(0.31)		(0.38)	(0.36)	
Panel B. Perceived risk of experiencing... within the next 2 years (in percent)													
lack of professional growth	46.35	46.71	45.46	0.32	46.83	45.73	0.34	46.29	46.57	0.83	45.38	46.52	0.48
	(25.56)	(25.12)	(26.63)		(23.42)	(28.12)		(24.70)	(28.31)		(24.74)	(25.70)	
lack of inclusion	35.40	36.54	32.52	0.00	38.15	31.80	0.00	36.83	30.50	0.00	34.73	35.51	0.62
	(24.90)	(24.91)	(24.67)		(23.29)	(26.44)		(24.45)	(25.80)		(23.99)	(25.05)	
aggression	29.60	29.58	29.64	0.96	32.02	26.43	0.00	30.41	26.81	0.01	30.07	29.52	0.72
	(24.44)	(23.92)	(25.73)		(22.95)	(25.94)		(24.15)	(25.23)		(25.01)	(24.35)	
sexual harassment	17.35	19.60	11.70	0.00	20.25	13.55	0.00	17.71	16.11	0.13	15.40	17.67	0.07
	(20.05)	(20.59)	(17.42)		(21.17)	(17.80)		(20.04)	(20.09)		(19.94)	(20.06)	
N	2,048	1,464	584		1,160	888		1,583	465		295	1,753	

Notes: This table presents descriptive statistics for the reported prevalence of past experienced hostility (Panel A) and perceived risk of experiencing hostility within the next two years (Panel B) measured during the post-experiment survey, for the whole experimental sample, and separately by gender, participants status (students or alumni), race and field of study.

Table C6 – Determinants of Perceived Risk of Hostility

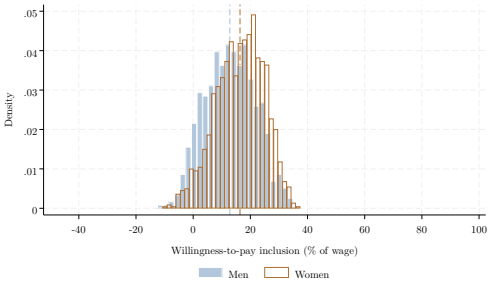
	High Perceived Risk of...			
	lack of satisfaction and growth	lack of inclusion	aggression	sexual harassment
Women	0.019	0.042*	0.003	0.162***
	(0.024)	(0.024)	(0.023)	(0.022)
Past experience of lack of satisfaction and growth	0.072***			
	(0.026)			
Past experience of lack of inclusion		0.099***		
		(0.036)		
Past experience of aggression			0.357***	
			(0.030)	
Past experience of sexual harassment				0.165***
				(0.031)
Male-dominated major dummy	Yes	Yes	Yes	Yes
Student / Alumni dummy	Yes	Yes	Yes	Yes
Sample Mean	0.511	0.438	0.427	0.354
Sample Mean Women	0.517	0.449	0.432	0.407
Sample Mean Men	0.495	0.399	0.404	0.211
Observations	2,048	2,048	2,048	2,048

Notes: This table presents determinants of the perceived risk of experiencing hostility at the time of the experiment for the whole sample. The variable of interest is the probability that the participant reports a higher-than-mean percent chance of experiencing an hostility attribute in the next two years. In column 1 we consider lack of professional growth, in column 2 lack of inclusion, in column 3 risk of aggression, and risk of sexual harassment in column 4. Covariates include the respondent's gender, a dummy variable equal to one if the respondent is an alumn, a dummy variable equal to one if they graduated in a male-dominated major, and a dummy variable equal to one if they reported having experienced each hostility attribute in the past.

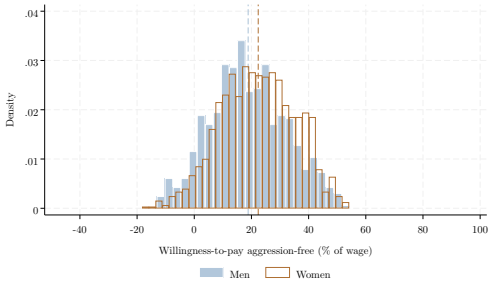
D Additional Results

FIGURE D8. Individual WTP Distributions for Hostility Attributes and Work Environments by Gender

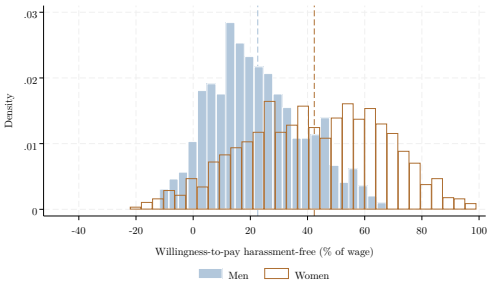
(A) Inclusion



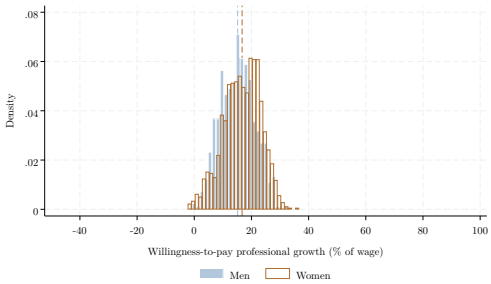
(B) Aggression-Free Environment



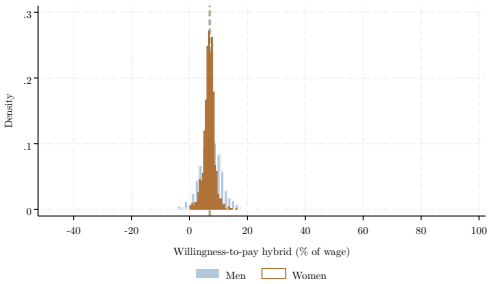
(C) Sexual Harassment-Free Environment



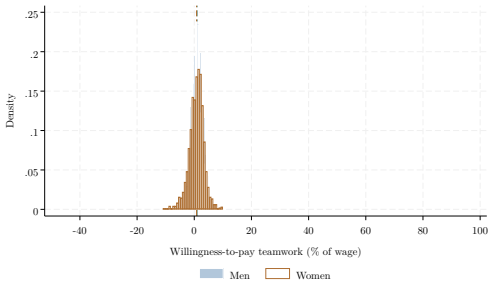
(D) Professional Growth



(E) Hybrid Work



(F) Teamwork



Notes: This figure shows individual WTP distributions for each hostility amenities (lack of inclusion, aggression and sexual harassment), for professional growth and working arrangements (hybrid, teamwork) separately by gender.

Table D7 – Stated and Revealed Preferences — Hybrid Work

	Works from Office	Works Remotely	p-value diff.
Panel A. Whole sample			
Inclusion	0.143***	0.119***	0.786
vs. Lack of Inclusion	(0.011)	(0.008)	
Aggression-free	0.198***	0.179***	0.204
vs. Risk of Aggression	(0.012)	(0.009)	
Harassment-free	0.270***	0.238***	0.085
vs. Risk of Harassment	(0.015)	(0.011)	
Professional growth	0.139***	0.116***	0.174
vs. Lack of Professional growth	(0.014)	(0.010)	
Hybrid	0.046***	0.109***	0.002
vs. Full on-site	(0.017)	(0.012)	
Teamwork	0.025	0.004	0.326
vs. Solo	(0.017)	(0.013)	
N			26,624
Panel B. Men			
Inclusion	0.098***	0.100***	0.960
vs. Lack of Inclusion	(0.025)	(0.016)	
Aggression-free	0.213***	0.167***	0.137
vs. Risk of Aggression	(0.027)	(0.016)	
Harassment-free	0.232***	0.175***	0.108
vs. Risk of Harassment	(0.030	(0.019)	
Professional growth	0.125***	0.139***	0.672
vs. Lack of Professional growth	(0.029)	(0.017)	
Hybrid	0.080***	0.105***	0.544
vs. Full on-site	(0.036)	(0.02)	
Teamwork	0.013	0.004	0.840
vs. Solo	(0.04)	(0.021)	
N			7,592
Panel C. Women			
Inclusion	0.131***	0.126***	0.750
vs. Lack of Inclusion	(0.013)	(0.01)	
Aggression-free	0.192***	0.180***	0.475
vs. Risk of Aggression	(0.014)	(0.01)	
Harassment-free	0.282***	0.262***	0.381
vs. Risk of Harassment	(0.018)	(0.013)	
Professional growth	0.144***	0.108***	0.069
vs. Lack of Professional growth	(0.016)	(0.012)	
Hybrid	0.036***	0.113***	0.001
vs. Full on-site	(0.019)	(0.016)	
Teamwork	0.035	0.007	0.274
vs. Solo	(0.019)	(0.016)	
N			18,395

Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth, and for working arrangements (hybrid work and teamwork) restricting the sample to respondents declaring they work fully on-site (Column 1) or hybrid (Column 2), for the full sample (Panel A), male respondents (Panel B) and female respondents (Panel C). Standard errors are in parenthesis. The p-value testing for different estimates between subgroups are reported in Column 3.

Table D8 – Stated and Revealed Preferences — Team Work

	Works Solo	Works in Team	p-value diff.
Panel A. Whole sample			
Inclusion	0.121***	0.122***	0.901
vs. Lack of Inclusion	(0.009)	(0.011)	
Aggression-free	0.194***	0.172***	0.111
vs. Risk of Aggression	(0.01)	(0.011)	
Harassment-free	0.245***	0.250***	0.754
vs. Risk of Harassment	(0.012)	(0.013)	
Professional growth	0.122***	0.126***	0.773
vs. Lack of Professional growth	(0.011)	(0.012)	
Hybrid	0.089***	0.095***	0.778
vs. Full on-site	(0.013)	(0.015)	
Teamwork	0.000	0.024	0.242
vs. Solo	(0.014)	(0.015)	
N			26,624
Panel B. Men			
Inclusion	0.089***	0.120***	0.267
vs. Lack of Inclusion	(0.016)	(0.023)	
Aggression-free	0.173***	0.188***	0.615
vs. Risk of Aggression	(0.017)	(0.022)	
Harassment-free	0.153***	0.240***	0.009
vs. Risk of Harassment	(0.019)	(0.027)	
Professional growth	0.12***	0.157***	0.235
vs. Lack of Professional growth	(0.018)	(0.025)	
Hybrid	0.081***	0.129***	0.192
vs. Full on-site	(0.022)	(0.03)	
Teamwork	0.026	-0.026	0.206
vs. Solo	(0.02)	(0.036)	
N			7,592
Panel C. Women			
Inclusion	0.132***	0.122***	0.542
vs. Lack of Inclusion	(0.011)	(0.012)	
Aggression-free	0.202***	0.159***	0.009
vs. Risk of Aggression	(0.012)	(0.012)	
Harassment-free	0.279***	0.251***	0.179
vs. Risk of Harassment	(0.015)	(0.015)	
Professional growth	0.122***	0.117***	0.757
vs. Lack of Professional growth	(0.013)	(0.013)	
Hybrid	0.091***	0.085***	0.807
vs. Full on-site	(0.017)	(0.018)	
Teamwork	0.007	0.045***	0.033
vs. Solo	(0.019)	(0.016)	
N			18,395

Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth, and for working arrangements (hybrid work and teamwork) restricting the sample to respondents declaring that none or some of their work is in teams (Column 1), or that all or most of their work is in teams (Column 2), for the full sample (Panel A), male respondents (Panel B) and female respondents (Panel C). Standard errors are in parenthesis. The p-value testing for different estimates between subgroups are reported in Column 3.

Table D9 – Experimental Sample — External Validity

	Experimental Sample Alumni	Canadian LFS
Demographics		
Women	0.705	0.567
	(0.456)	(0.495)
Men	0.275	0.433
	(0.447)	(0.495)
Has children	0.220	0.476
	(0.414)	(0.499)
Age 20-24	0.232	0.037
	(0.422)	(0.190)
Age 25-30	0.298	0.105
	(0.458)	(0.307)
Age 35-50	0.197	0.443
	(0.398)	(0.497)
Age 50+	0.143	0.414
	(0.350)	(0.493)
Employment Status		
Full-time	0.658	0.599
	(0.475)	(0.490)
Unemployed (and job seeking)	0.054	0.035
	(0.226)	(0.183)
Part-Time	0.114	0.107
	(0.318)	(0.309)
Student	0.000	0.058
	(0.000)	(0.234)
Not in paid work	0.108	0.259
	(0.311)	(0.438)
Worked Hours	35.02	35.61
	(14.58)	(9.86)
Annual salary (CAD)	76,349	71,715
	(60,719)	(31,044)
Broad Industries		
Government	0.036	0.085
	(0.185)	(0.279)
Other services and trade	0.057	0.137
	(0.233)	(0.344)
Business	0.217	0.085
	(0.413)	(0.278)
Science	0.068	0.133
	(0.252)	(0.340)
Education	0.332	0.160
	(0.471)	(0.367)
Arts	0.049	0.038
	(0.216)	(0.192)
Health	0.240	0.187
	(0.428)	(0.390)
Observations	888	29,284

Notes: This table presents descriptive statistics for the experimental sample (alumni) and the sample of college graduates over 19 years old from the October 2023 wave of the Canadian Labor Force Survey.

Table D10 – Willingness-to-Pay Estimates to avoid Hostility at Work — Reweighted Sample

	Sample of Alumni	Reweighted Sample
Inclusion	0.122***	0.134***
vs. Lack of Inclusion	(0.007)	(0.010)
Aggression-free	0.185***	0.199***
vs. Risk of Aggression	(0.007)	(0.011)
Harassment-free	0.247***	0.253***
vs. Risk of Harassment	(0.009)	(0.013)
Professional growth	0.124***	0.139***
vs. Lack of Professional growth	(0.008)	(0.011)
Hybrid	0.091***	0.106***
vs. Full on-site	(0.010)	(0.014)
Teamwork	0.007	0.014
vs. Solo	(0.010)	(0.014)
N	11,544	11,544

Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth and for working arrangements (hybrid work and teamwork) restricting the sample to alumni. Column 1 presents the un-reweighted results. In Column 2, the results are weighted by gender, age, and the presence of children within the college-graduate population of the Canadian Labor Force Survey (October 2023). Weights are equal the inverse predicted probability of being in the experiment sample to the LFS.

Table D11 – Willingness-to-Pay Estimates to avoid Hostility at Work

	Psychology major	Excluding Psychology major	Respondents Recruited Through Office for Career Services	Excluding Respondents Recruited Through Office for Career Services	Participants who Asked for the Research Paper	Excluding Participants who Asked for the Research Paper
	(1)	(2)	(3)	(4)	(5)	(6)
Inclusion	0.137***	0.109***	0.117***	0.121***	0.123***	0.110***
vs. Lack of Inclusion	(0.008)	(0.006)	(0.008)	(0.006)	(0.000)	(0.000)
p-value diff.	0.003		0.715		0.224	
Aggression-free	0.200***	0.156***	0.171***	0.173***	0.174***	0.169***
vs. Risk of Aggression	(0.008)	(0.006)	(0.008)	(0.006)	(0.000)	(0.000)
p-value diff.	0.00		0.880			
Harassment-free	0.259***	0.268***	0.290***	0.250***	0.258***	0.282***
vs. Risk of Harassment	(0.010)	(0.008)	(0.011)	(0.007)	(0.000)	(0.000)
p-value diff.	0.46		0.002		0.078	
Professional growth	0.125***	0.137***	0.144***	0.127***	0.129***	0.142***
vs. Lack of Professional growth	(0.009)	(0.007)	(0.009)	(0.007)	(0.000)	(0.000)
p-value diff.	0.259		0.128		0.281	
Hybrid	0.085***	0.063***	0.052***	0.081***	0.072***	0.065***
vs. Full on-site	(0.011)	(0.008)	(0.010)	(0.008)	(0.000)	(0.000)
p-value diff.	0.104		0.030		0.584	
Teamwork	0.003	0.003	-0.001	0.006	0.003	0.005
vs. Solo	(0.011)	(0.008)	(0.011)	(0.009)	(0.736)	(0.717)
p-value diff.	0.981		0.614		0.891	
N	9,633	16,991	10,270	16,354	18,655	7,969

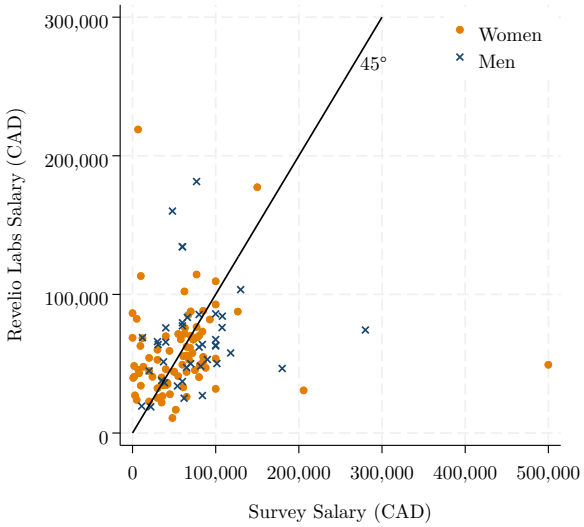
Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth and for working arrangements (hybrid work and teamwork) restricting the sample to psychology major respondents (Column 1) or excluding these participants (Column 2), restricting the sample to participants contacted by the university's office for career services (Column 3) or excluding them (Column 4), restricting the sample to participants who asked to receive results from the research paper (Column 5) or excluding these participants (Column 6). Standard errors are in parenthesis. The p-value testing for different estimates between subgroups are reported below each odd column.

Table D12 – Willingness-to-Pay Estimates to avoid Hostility at Work — Standard Logit

	Women	Men	Students	Alumni	White	Non-white	First gen	Not first gen	Male-Dominated Fields	Female-Dominated Fields
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Inclusion	0.127***	0.102***	0.118***	0.122***	0.119***	0.119***	0.108***	0.101***	0.122***	0.122***
vs. Lack of Inclusion	(0.006)	(0.008)	(0.006)	(0.007)	(0.010)	(0.005)	(0.000)	(0.000)	(0.012)	(0.005)
p-value diff.	0.011		0.676		0.991		0.732		0.147	
Aggression-free	0.177***	0.159***	0.162***	0.185***	0.188***	0.168***	0.196***	0.151***	0.159***	0.174***
vs. Risk of Aggression	(0.006)	(0.008)	(0.006)	(0.007)	(0.010)	(0.005)	(0.000)	(0.000)	(0.011)	(0.005)
p-value diff.	0.076		0.016		0.089		0.054		0.223	
Harassment-free	0.300***	0.183***	0.280***	0.247***	0.262***	0.266***	0.212***	0.176***	0.236***	0.270***
vs. Risk of Harassment	(0.008)	(0.010)	(0.008)	(0.009)	(0.013)	(0.007)	(0.000)	(0.000)	(0.014)	(0.007)
p-value diff.	0.000		0.007		0.821		0.195		0.024	
Professional growth	0.137***	0.128***	0.140***	0.124***	0.134***	0.133***	0.145***	0.124***	0.121***	0.135***
vs. Lack of Professional growth	(0.007)	(0.009)	(0.008)	(0.008)	(0.011)	(0.006)	(0.000)	(0.000)	(0.014)	(0.006)
p-value diff.	0.462		0.132		0.901		0.396		0.372	
Hybrid	0.068***	0.074***	0.053***	0.086***	0.091***	0.065***	0.077***	0.072***	0.073***	0.070***
vs. Full on-site	(0.008)	(0.012)	(0.009)	(0.010)	(0.009)	(0.007)	(0.003)	(0.000)	(0.010)	(0.007)
p-value diff.	0.712		0.004		0.123		0.872		0.867	
Teamwork	0.003	0.010	-0.002	0.005	0.018	-0.001	-0.007	0.013	-0.014	0.007
vs. Solo	(0.008)	(0.011)	(0.009)	(0.010)	(0.015)	(0.007)	(0.753)	(0.272)	(0.015)	(0.007)
p-value diff.	0.624		0.368		0.270		0.427		0.200	
N	26,624									

Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (lack of inclusion, aggression, sexual harassment), for professional growth and for working arrangements (hybrid work and teamwork) for various subgroups. The first two columns present estimates separately by gender, Columns 3 and 4 by participant status (enrolled or graduated students versus alumni), column 5 and 6 by participants' race, columns 7 and 8 by participants' parental educational status (whether they are first-gen college graduate or not), and columns 9 and 10 by field of study (male- or female-dominated). Standard errors are in parenthesis. The p-value testing for different estimates between subgroups are reported below each odd column.

FIGURE D9. Correlation Between Survey Salary and Revelio Labs Salary



Notes: This figure shows the correlation between measures of salary in the follow-up survey and inputed salary from Revelio Labs for the sample of students.

Table D13 – Follow-up Sample - Summary statistics

	Contact List	Follow-Up Sample	Difference
Sociodemographic characteristics			
Women	0.67	0.64	-0.04
	(0.47)	(0.48)	
Men	0.31	0.34	0.04
	(0.46)	(0.47)	
Non-Binary	0.02	0.02	0.01
	(0.13)	(0.14)	
Age	22.43	22.30	-0.21
	(3.30)	(3.34)	
Black	0.04	0.04	-0.00
	(0.20)	(0.19)	
Chinese	0.30	0.31	0.02
	(0.46)	(0.46)	
South Asian	0.25	0.23	-0.02
	(0.43)	(0.42)	
White	0.12	0.12	0.01
	(0.32)	(0.33)	
Other	0.30	0.29	-0.01
	(0.46)	(0.45)	
First generation college graduate	0.17	0.16	-0.01
	(0.38)	(0.37)	
Has no children	0.01	0.00	-0.01***
	(0.09)	(0.00)	
Major			
Psychology	0.08	0.08	0.01
	(0.27)	(0.28)	
Sociology	0.11	0.10	-0.01
	(0.31)	(0.30)	
Biology	0.11	0.10	-0.01
	(0.31)	(0.30)	
Economics	0.04	0.03	-0.01
	(0.20)	(0.18)	
Commerce	0.05	0.04	-0.01
	(0.22)	(0.20)	
Computer Science	0.09	0.11	0.04**
	(0.28)	(0.32)	
Engineering	0.05	0.07	0.04**
	(0.22)	(0.26)	
Other	0.56	0.57	0.00
	(0.50)	(0.50)	
Male-dominated fields	0.20	0.24	0.06**
	(0.40)	(0.43)	
N	1,116	420	

Notes: This table presents descriptive statistics for sociodemographic characteristics and majors of the contact list (column 1) and the follow-up sample (column 2). Column 3 reports the coefficient from the regression of each variable on the follow-up sample group indicator, with standard errors clustered at the respondent level.

Table D14 – WTP and Treatment with Risk of Sexual Harassment

	Treatment Without Harassment	Treatment With Harassment	p-value diff.
Panel A. Whole sample			
Inclusion	0.131***	0.098***	0.092
vs. Lack of Inclusion	(0.006)	(0.019)	
Aggression-free	0.186***	0.000	.
vs. Risk of Aggression	(0.005)	.	
Professional growth	0.142***	0.224***	0.000
vs. Lack of Professional growth	(0.006)	(0.017)	
Hybrid	0.065***	0.099***	0.079
vs. Full on-site	(0.009)	(0.018)	
Teamwork	0.004	0.020	0.419
vs. Solo	(0.638)	(0.270)	
N			14,600
Panel B. Men			
Inclusion	0.123***	0.078***	0.204
vs. Lack of Inclusion	(0.010)	(0.033)	
Aggression-free	0.174***	0.000	.
vs. Risk of Aggression	(0.009)	.	
Professional growth	0.119***	0.208***	0.005
vs. Lack of Professional growth	(0.012)	(0.029)	
Hybrid	0.084***	0.090***	0.855
vs. Full on-site	(0.016)	(0.030)	
Teamwork	0.017	0.055	0.262
vs. Solo	(0.016)	(0.032)	
N			4,182
Panel C. Women			
Inclusion	0.136***	0.106***	0.207
vs. Lack of Inclusion	(0.007)	(0.023)	
Aggression-free	0.192***	0.000	.
vs. Risk of Aggression	(0.006)	.	
Professional growth	0.152***	0.225***	0.001
vs. Lack of Professional growth	(0.008)	(0.021)	
Hybrid	0.057***	0.101***	0.074
vs. Full on-site	(0.011)	(0.023)	
Teamwork	-0.001	0.008	0.720
vs. Solo	(0.012)	(0.022)	
N			10,061

Notes: This table presents willingness-to-pay estimates from standard logit model for each hostility attributes (llack of inclusion, aggression, sexual harassment), for professional growth, and for working arrangements (hybrid work and teamwork) restricting the sample to job scenarios without sexual harassment (Column 1), or with sexual harassment (Column 2). The p-value testing for different estimates between subgroups are reported in Column 3.

D.1 Approximating our Data to Folke and Rickne (2022)

We replicate the main willingness-to-pay estimation in Folke and Rickne (2022), Section IV.D., equation (5). Adapting Folke and Rickne (2022), we treat every selection between job A and job B as two distinct choices: whether job A was selected and whether job B was selected. We cluster at the job scenario level. Since our multipliers range between 0.75 and 1.25 of the reference wage and are randomly determined, we can collapse them into the four wage buckets used in Folke and Rickne (2022): 5 percent less wage, approximately same wage, 5 percent more wage, 10 percent more wage. Note that we allow for wages ranging from 25 percent less to 25 percent more in our choices. We map our setting to three wage bucket choices.

The first approach simply assigns all observations to one of Folke and Rickne (2022)'s buckets. The second bounds by + five wage percentage points per bucket (for example, "approximately same wage" equals between 0.95 and 1.05 in wage multiplier). The third bracketing choice uses a more stringent approximation, bounding by +/- 2.5 wage percentage points per bucket (for example, "approximately same wage" equals between 0.975 and 1.025 in wage multiplier). The third decision rule is closest to Folke and Rickne (2022)'s approach but removes 59.9 percent of our observations, reducing granularity and precision.

Table D15 reports results on the three wage bracketing choices. The estimates following Folke and Rickne (2022)'s method yield somewhat higher estimates. These results can be reconciled with differences in research design. First, our control scenario is positive ("The company maintains a zero-tolerance policy towards sexual harassment, ensuring a safe workplace for all employees."), while their control scenario is "no information". Second, our scenario is a more severe form of sexual harassment. Folke and Rickne (2022)'s wording ranges from "Women in the work unit have expressed that men are not suitable for the job" to "A woman has groped a man in the work unit." While our scenario states that "Instances of sexual harassment are an open secret, creating an uncomfortable and unsafe work environment. People who make inappropriate comments or act inappropriately are not reprimanded by management." Taken together, this should result in higher willingness-to-pay estimates in our case, which is what we indeed observe.

Table D15 – Regression Results

	(1) No Bounds	(2) 0.05 Upper/Lower Bounds	(3) 0.025 Upper/Lower Bounds
Wage - 5%	−0.133***	−0.083***	−0.033***
	(0.006)	(0.007)	(0.010)
Wage + 5%	0.049***	0.052***	0.023**
	(0.009)	(0.009)	(0.010)
Wage + 10%	0.136***	0.116***	0.072***
	(0.007)	(0.007)	(0.010)
Harassment-free	−0.265***	−0.270***	−0.270***
vs. Risk of Harassment	(0.006)	(0.007)	(0.008)
Inclusion	−0.076***	−0.084***	−0.096***
vs. Lack of Inclusion	(0.007)	(0.008)	(0.010)
Aggression-free	−0.158***	−0.169***	−0.178***
vs. Risk of Aggression	(0.006)	(0.007)	(0.009)
Professional growth	−0.119***	−0.116***	−0.118***
vs. Lack of Professional growth	(0.006)	(0.007)	(0.010)
Hybrid	−0.085***	−0.081***	−0.085***
vs. Full on-site	(0.005)	(0.006)	(0.008)
Teamwork	−0.015***	−0.009	−0.010
vs. Solo	(0.005)	(0.006)	(0.008)
Individual FE	Yes	Yes	Yes
N	53,248	37,309	21,350
R-squared	0.132	0.143	0.189
S. Harassment WTP	−15.90%	−18.99%	−43.65%

Notes: This table replicates willingness-to-pay estimations using the strategy of Folke and Rickne (2022). Each column presents results of OLS regressions in which the outcome of interest is a dummy variable equal to one the first job presented was selected. Reference wages are collapsed into the four wage buckets: 5 percent less wage, approximately same wage, 5 percent more wage, 10 percent more wage. We allow for wages up until 25 percent less wage and 25 percent more wage in our choices. We map our setting to three wage buckets choices. In column 1, all observations are assigned to one of Folke and Rickne (2022)'s buckets. In column 2, wages are bounds by + five wage percentage points per bucket (for example "approximately same wage" will equal to between 0.95 to 1.05 in wage multiplier). In column 3, wages are bound by +/- 2.5 wage percentage points per bucket (for example "approximately same wage" will equal to between 0.975 and 1.025 in wage multiplier). Each regression controls for individual fixed effects. Standard errors are clustered at the individual level. Willingness-to-pay estimates are calculated using the ratio between the coefficient for sexual harassment and a weighted average of the three wage coefficients used in their experiment and are expressed in percentage of wage.

E Conceptual Framework

E.1 Micro-foundations of the decision problem

Note that two functional forms of the utility function can accommodate the worker's decision problem. Either the utility function is separable and characterized by:

$$U(C_S, S) - pH * S \tag{A.1}$$

with $S = 0, 1$ and

$$\begin{aligned} U(C_0, 0) &= U(C^*, 1) - pH \\ C^* &= U^{-1}(U(C_0, 0) + pH, 1) \end{aligned}$$

or the utility function is non-separable:

$$U(C_S - pH * S, S) \tag{A.2}$$

such that

$$\begin{aligned} U(C_0, 0) &= U(C^* - pH, 1) \\ C^* &= U^{-1}(U(C_0, 0), 1) - pH \end{aligned}$$

In both cases, C^* and H are jointly determined, hence we assume later that Z and H are not independent.

E.2 Equilibrium Wages

We derive the labor supply equations in both $S = 0, 1$ jobs:

$$\begin{aligned} L_1^s &= \int_0^{\Delta_w} \phi\left(\frac{x - \mu_Y}{\sigma_Y^2}\right) dx \\ L_0^s &= \int_{\Delta_w}^{\infty} \phi\left(\frac{x - \mu_Y}{\sigma_Y^2}\right) dx \end{aligned}$$

with $\phi(.)$ the probability density function of the standard normal distribution. L_1^S and L_0^S can be derived numerically using our estimates of $\mu_Z, \mu_H, \sigma_Z^2, \sigma_H^2$ and p. We simulate for values of $\sigma_{Z,H}$. We solve for Δ_w for the three cases.

Case 1: The equilibrium wage differential when there is no risk of sexual harassment (benchmark case) is given by

$$\Delta_{w1} = \frac{\sigma_B \mu_Z + \mu_B \sigma_Z}{\sigma_Z + \sigma_B} \tag{A.3}$$

Proof. We equalize expressions for $L_1^s = L_1^d$ and $L_0^s = L_0^d$:

$$\begin{aligned} G(\Delta_w) &= 1 - \Psi(\Delta_w) \\ 1 - G(\Delta_w) &= \Psi(\Delta_w) \end{aligned}$$

We express this equation using the standard normal distribution function $\Phi(.)$

$$\Phi\left(\frac{\Delta_w - \mu_Z}{\sigma_Z}\right) = 1 - \Phi\left(\frac{\Delta_w - \mu_B}{\sigma_B}\right)$$

Apply the inverse of the standard normal distribution function $\Phi^{-1}(.)$ to both sides:

$$\frac{\Delta_w - \mu_Z}{\sigma_Z} = -\frac{\Delta_w - \mu_B}{\sigma_B}$$

Hence

$$\Delta_{w1} = \frac{\sigma_B \mu_Z + \mu_B \sigma_Z}{\sigma_Z + \sigma_B}$$

□

In the benchmark case, Δ_{w1} is increasing in μ_Z and μ_B: the higher the average disutility for remote work μ_Z, the higher the compensation needed to make the marginal worker indifferent between $S = 1$ and $S = 0$. Similarly, the larger the average productivity gap between remote and office work μ_B, the higher the offered compensation. Finally, Δ_{w1} depends on the relative heterogeneity of workers' tastes (σ_Z) compare to firms' technology (σ_B).

Case 2: The equilibrium wage differential when there is a risk of sexual harassment only internalized by workers only is given by:

$$\Delta_{w2} = \frac{\sigma_B(\mu_Z + p\mu_H) + \mu_B\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}} + \sigma_B} \tag{A.4}$$

Proof. We equalize the expressions for $L_1^s = L_1^d$ and $L_0^s = L_0^d$:

$$\Phi\left(\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}\right) = 1 - \Phi\left(\frac{\Delta_w - \mu_B}{\sigma_B}\right)$$

Applying the same transformation of the inverse of the standard normal distribution function $\Phi^{-1}(.)$:

$$\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}} = -\frac{\Delta_w - \mu_B}{\sigma_B}$$

Hence

$$\Delta_{w2} = \frac{\sigma_B(\mu_Z + p\mu_H) + \mu_B\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}} + \sigma_B}$$

□

Everything else equal, Δ_{w2} is increasing in μ_H as the higher the average disutility to sexual harassment, the higher the compensation needed to make the marginal worker indifferent between $S = 1$ and $S = 0$. Δ_{w2} depends on the relative heterogeneity of workers' taste (with respect to remote work and sexual harassment) compare to firms' technology. The sign of $\Delta_{w1} - \Delta_{w2}$ depends on the relative heterogeneity of taste in both scenarios.

Case 3: The equilibrium wage differential when there is a risk of sexual harassment only internalized by workers and firms is given by:

$$\Delta_{w3} = \frac{\sigma_B(\mu_Z + p\mu_H) + \left(\mu_B + \frac{p}{K}\right)\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}} + \sigma_B} \tag{A.5}$$

With $K > 0$ and given that $1 \geq p > 0$, we can see that $\Delta_{w2} < \Delta_{w3}$ and that Δ_{w3} is increasing in p. When firms internalize the cost of harassment in terms of workers' disutility, the wage differential between $S = 0$ and $S = 1$ increases as the probability of harassment p increases.

Proof. We equalize the expressions for $L_1^s = L_1^d$ and $L_0^s = L_0^d$:

$$\Phi\left(\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}\right) = 1 - \Phi\left(\frac{\Delta_w - \frac{p}{K} - \mu_B}{\sigma_B}\right)$$

Applying the same transformation of the inverse of the standard normal distribution function $\Phi^{-1}(.)$ we find:

$$\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}} = -\frac{\Delta_w - \frac{p}{K} - \mu_B}{\sigma_B}$$

Hence

$$\Delta_{w3} = \frac{\sigma_B(\mu_Z + p\mu_H) + \left(\mu_B + \frac{p}{K}\right)\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}} + \sigma_B}$$

□

E.3 Selection and Rents

We now derive expressions to characterize selection into $S = 0, 1$ jobs and compute workers' and firms' rents in each scenario.

Case 1: Equilibrium without harassment. The selection patterns in equilibrium with no risk of harassment can be characterized as in the standard Rosen model as follows:

$$\begin{aligned}
\mathbb{E}(Z|S = 1, p = 0) &= \mu_Z - \sigma_Z\left[\frac{\phi\left(\frac{\Delta_w - \mu_Z}{\sigma_Z}\right)}{\Phi\left(\frac{\Delta_w - \mu_Z}{\sigma_Z}\right)}\right] \\
\mathbb{E}(H|S = 1, p = 0) &= E(H)
\end{aligned}$$

We can then derive $R_{wo1|S=1}$ the excess rent relative to what would be required to change an individual's decision to move from $S = 0$ to $S = 1$ as:

$$\begin{aligned}
R_{wo1|S=1} &= \Delta_{w1} - \mathbb{E}(Z|S = 1, p = 0) \\
&= \frac{\sigma_B\mu_Z + \mu_B\sigma_Z}{\sigma_Z + \sigma_B} - \mu_Z + \sigma_Z\left[\frac{\phi\left(\frac{\mu_B - \mu_Z}{\sigma_Z + \sigma_B}\right)}{\Phi\left(\frac{\mu_B - \mu_Z}{\sigma_Z + \sigma_B}\right)}\right]
\end{aligned}$$

The selection of firms choosing office work writes:

$$\begin{aligned}
\mathbb{E}(B|S=0,p=0) &= \mathbb{E}(B|B\leq\Delta_{w1}) \\
&= \mu_B - \sigma_B\left[\frac{\phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}{\Phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}\right] \\
\mathbb{E}(B|S=1,p=0) &= \mathbb{E}(B|B>\Delta_{w1}) \\
&= \mu_B + \sigma_B\left[\frac{\phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}{1-\Phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}\right]
\end{aligned}$$

Proof. Using the labor demand equations, we can write the selection of firms choosing remote work as:

$$\begin{aligned}
L_1^d &= \int_{\Delta_{w1}}^{\infty}\psi(B)dB = 1-\Psi(\Delta_{w1}) \\
L_0^d &= \int_{0}^{\Delta_{w1}}\psi(B)dB = \Psi(\Delta_{w1}) \\
\mathbb{E}(B|S=0,p=0) &= \mathbb{E}(B|B\leq\Delta_{w1}) \\
&= \mu_B - \sigma_B\left[\frac{\phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}{\Phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}\right] \\
\mathbb{E}(B|S=1,p=0) &= \mathbb{E}(B|B>\Delta_{w1}) \\
&= \mu_B + \sigma_B\left[\frac{\phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}{1-\Phi(\frac{\Delta_{w1}-\mu_B}{\sigma_B})}\right]
\end{aligned}$$

We can then replace Δ_{w1} by Δ_{w2} for Case 2. □

Case 2: Equilibrium with risk of harassment only internalized by the workers. We derive $R_{wo2|S=1}$ the excess rent accruing to workers choosing $S=1$ as:

$$\begin{aligned}
R_{wo2|S=1} &= \Delta_{w2} - \mathbb{E}(Z|S=1,p>0) - p\mathbb{E}(H|S=1,p>0) \\
&= \Delta_{w2} - (\mu_Z + p\mu_H) + \sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}\left[\frac{\phi\left(\frac{\Delta_{w2}-\mu_Y}{\sigma_Y}\right)}{\Phi\left(\frac{\Delta_{w2}-\mu_Y}{\sigma_Y}\right)}\right]
\end{aligned}$$

Proof. To characterize selection in the office jobs, we write

$$\mathbb{E}(H|S=1,p>0) = \mathbb{E}(H|Z+pH\leq\Delta_w)$$

and

$$\mathbb{E}(Z|S=1,p>0) = \mathbb{E}(Z|Z+pH\leq\Delta_w)$$

We write $Y = Z+pH$

$$\begin{pmatrix} Z \\ Y \end{pmatrix} \sim \mathcal{N}\left[\begin{pmatrix} \mu_Z \\ \mu_Y \end{pmatrix}, \begin{pmatrix} \sigma_Z^2 & \sigma_{Z,Y} \\ \sigma_{Z,Y} & \sigma_Y^2 \end{pmatrix}\right]$$

which implies $\mathbb{E}(Z|Y) = \mu_Z + \frac{\sigma_{Z,Y}}{\sigma_Y^2}(Y-\mu_Y)$

and

$$\begin{pmatrix} Z \\ Y \end{pmatrix} \sim \mathcal{N}\left[\begin{pmatrix} \mu_H \\ \mu_Y \end{pmatrix}, \begin{pmatrix} \sigma_H^2 & \sigma_{H,Y} \\ \sigma_{H,Y} & \sigma_Y^2 \end{pmatrix} \right]$$

which implies $\mathbb{E}(H|Y) = \mu_H + \frac{\sigma_{H,Y}}{\sigma_Y^2}(Y - \mu_Y)$ where

$$\sigma_{Z,Y} = cov(Z, Z + pH) = \sigma_Z^2 + p\sigma_{Z,H}$$

$$\sigma_{H,Y} = cov(H, Z + pH) = \sigma_H^2 + p\sigma_{Z,H}$$

According to the law of iterated expectations, we have that

$$\begin{aligned} \mathbb{E}(Z|Y \leq \Delta_w) &= \mathbb{E}[\mathbb{E}(Z|Y)|Y \leq \Delta_w] \\ &= \mathbb{E}\left(\mu_Z + \frac{\sigma_{Z,Y}}{\sigma_Y^2}(Y - \mu_Y)|Y \leq \Delta_w\right) \\ &= \mu_Z + \frac{\sigma_{Z,Y}}{\sigma_Y}\mathbb{E}\left(\frac{Y - \mu_Y}{\sigma_Y}|\frac{Y - \mu_Y}{\sigma_Y} \leq \frac{\Delta_w - \mu_Y}{\sigma_Y}\right) \end{aligned}$$

and

$$\begin{aligned} \mathbb{E}(H|Y \leq \Delta_w) &= \mathbb{E}[\mathbb{E}(H|Y)|Y \leq \Delta_w] \\ &= \mathbb{E}\left(\mu_H + \frac{\sigma_{H,Y}}{\sigma_Y^2}(Y - \mu_Y)|Y \leq \Delta_w\right) \\ &= \mu_H + \frac{\sigma_{H,Y}}{\sigma_Y}\mathbb{E}\left(\frac{Y - \mu_Y}{\sigma_Y}|\frac{Y - \mu_Y}{\sigma_Y} \leq \frac{\Delta_w - \mu_Y}{\sigma_Y}\right) \end{aligned}$$

It follows that

$$\begin{aligned} \mathbb{E}(Z|Y \leq \Delta_w) &= \mu_Z - \frac{\sigma_Z^2 + p\sigma_{Z,H}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}\frac{\phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})}{\Phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})} \\ \mathbb{E}(H|Y \leq \Delta_w) &= \mu_H - \frac{p\sigma_H^2 + \sigma_{Z,H}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}}\frac{\phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})}{\Phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})} \end{aligned}$$

We write the rent formula as

$$\begin{aligned} R_{wo|S=1} &= \Delta_w - \mathbb{E}(Z|S = 1, p > 0) - p\mathbb{E}(H|S = 1, p > 0) \\ &= \Delta_w - (\mu_Z + p\mu_H) + \sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}}\left[\frac{\phi\left(\frac{\Delta_w - \mu_Y}{\sigma_Y}\right)}{\Phi\left(\frac{\Delta_w - \mu_Y}{\sigma_Y}\right)}\right] \end{aligned}$$

We then replace Δ_w by the values found for Δ_{w2} and Δ_{w3}.

□

We also provide the rent formula assuming that Z and H are independent. Proof is in Appendix E.4.3. For the firm's selection, the formula is essentially unchanged as the firm doesn't internalize the cost of harassment. We just substitute the value of Δ_{w2}.

$$\begin{aligned}
\mathbb{E}(B|S=0) = \mathbb{E}(B|B \leq \Delta_{w2}) &= \mu_B - \sigma_B \left[\frac{\phi(\frac{\Delta_{w2}-\mu_B}{\sigma_B})}{\Phi(\frac{\Delta_{w2}-\mu_B}{\sigma_B})} \right] \\
\mathbb{E}(B|S=1) = \mathbb{E}(B|B \geq \Delta_{w2}) &= \mu_B + \sigma_B \left[\frac{\phi(\frac{\Delta_{w2}-\mu_B}{\sigma_B})}{1-\Phi(\frac{\Delta_{w2}-\mu_B}{\sigma_B})} \right]
\end{aligned}$$

Case 3: Firms internalize harassment cost The formula for worker's excess rent is unchanged. We just substitute the value of Δ_{w3}.

$$\begin{aligned}
R_{wo3|S=1} &= \Delta_{w3} - \mathbb{E}(Z|S=1, p>0) - p\mathbb{E}(H|S=1, p>0) \\
&= \Delta_{w3} - (\mu_Z + p\mu_H) + \sqrt{\sigma_Z^2 + p^2\sigma_H^2 + 2p\sigma_{Z,H}} \left[\frac{\phi\left(\frac{\Delta_{w3}-\mu_Y}{\sigma_Y}\right)}{\Phi\left(\frac{\Delta_{w3}-\mu_Y}{\sigma_Y}\right)} \right]
\end{aligned}$$

We can rewrite the selection of firms as a function of p:

$$\begin{aligned}
\mathbb{E}(B|S=0) = \mathbb{E}(B|B \leq \Delta_{w3} + a_2) &= \mathbb{E}\left(B|B \leq \Delta_{w3} - \frac{p}{K}\right) \\
&= \mu_B - \sigma_B \left[\frac{\phi\left(\frac{\Delta_{w3}-\frac{p}{K}-\mu_B}{\sigma_B}\right)}{\Phi\left(\frac{\Delta_{w3}-\frac{p}{K}-\mu_B}{\sigma_B}\right)} \right] \\
\mathbb{E}(B|S=1) = \mathbb{E}(B|B > \Delta_{w3} + a_2) &= \mathbb{E}\left(B|B \geq \Delta_{w3} - \frac{p}{K}\right) \\
&= \mu_B + \sigma_B \left[\frac{\phi\left(\frac{\Delta_{w3}-\frac{p}{K}-\mu_B}{\sigma_B}\right)}{1-\Phi\left(\frac{\Delta_{w3}-\frac{p}{K}-\mu_B}{\sigma_B}\right)} \right]
\end{aligned}$$

E.4 Independence Assumption

We explore equilibrium outcomes if assume that H and Z are independent random variables.

Assumption 4. *Z and H are independent random variables that are normally distributed, with $Z \sim \mathcal{N}(\mu_Z, \sigma_Z^2)$ and $H \sim \mathcal{N}(\mu_H, \sigma_H^2)$*

We write that $Y \sim \mathcal{N}(\mu_Y, \sigma_Y^2)$, with $\mu_Y = \mu_Z + p\mu_H$ and $\sigma_Y^2 = \sigma_Z^2 + p^2\sigma_H^2$. We can rewrite $Y = \mu_Y + \sigma_Y^2 X$ with $X \sim \mathcal{N}(0,1)$ and derive the labor supply equations in both $S = 0, 1$ jobs.

The formula for Δ_{w1} is unchanged, so are the rents for Case 1.

E.4.1 Derivation of Δ_{w2} for Case 2 with the independence assumption:

Proof. We equalize the expressions for $L_1^s = L_1^d$ and $L_0^s = L_0^d$:

$$\Phi\left(\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\right) = 1 - \Phi\left(\frac{\Delta_w - \mu_B}{\sigma_B}\right)$$

Applying the same transformation of the inverse of the standard normal distribution function $\Phi^{-1}(.)$:

$$\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}} = -\frac{\Delta_w - \mu_B}{\sigma_B}$$

Hence

$$\Delta_{w2} = \frac{\sigma_B(\mu_Z + p\mu_H) + \mu_B\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2} + \sigma_B}$$

□

E.4.2 Derivation of Δ_{w3} for Case 3 with the independence assumption:

Proof. We equalize the expressions for $L_1^s = L_1^d$ and $L_0^s = L_0^d$:

$$\Phi\left(\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\right) = 1 - \Phi\left(\frac{\Delta_w - \frac{p}{K} - \mu_B}{\sigma_B}\right)$$

Applying the same transformation of the inverse of the standard normal distribution function $\Phi^{-1}(.)$ we find:

$$\frac{\Delta_w - (\mu_Z + p\mu_H)}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}} = -\frac{\Delta_w - \frac{p}{K} - \mu_B}{\sigma_B}$$

Hence

$$\Delta_{w3} = \frac{\sigma_B(\mu_Z + p\mu_H) + \left(\mu_B + \frac{p}{K}\right)\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2} + \sigma_B}$$

□

E.4.3 Derivation of Selection and Workers' Rents for Case 2 and Case 3 with the independence assumption:

Proof. To characterize selection in the office jobs, we write

$$\mathbb{E}(H|S = 1, p > 0) \quad = \quad \mathbb{E}(H|Z + pH \leq \Delta_w)$$

and

$$\mathbb{E}(Z|S = 1, p > 0) \quad = \quad \mathbb{E}(Z|Z + pH \leq \Delta_w)$$

Let's write $Y = Z + pH$. We use the assumption that Z and H are jointly distributed according to a bivariate normal with zero correlation to write and the law of iterative expectations:

$$\begin{aligned}
\mathbb{E}(Z|Y \leq \Delta_w) &= \mathbb{E}[\mathbb{E}(Z|Y)|Y \leq \Delta_w] \\
&= \mathbb{E}[\mu_Z + \frac{\sigma_Z^2}{\sigma_Z^2 + p^2\sigma_H^2}(Y - \mu_Y)|Y \leq \Delta_w] \\
&= \mu_Z + \frac{\sigma_Z^2}{\sigma_Z^2 + p^2\sigma_H^2}\mathbb{E}\left[\frac{Y - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}|Y \leq \Delta_w\right] \\
&= \mu_Z + \frac{\sigma_Z^2}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\mathbb{E}\left[\frac{Y - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}|\frac{Y - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}} \leq \frac{\Delta_w - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\right] \\
&= \mu_Z - \frac{\sigma_Z^2}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\frac{\phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})}{\Phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})}
\end{aligned}$$

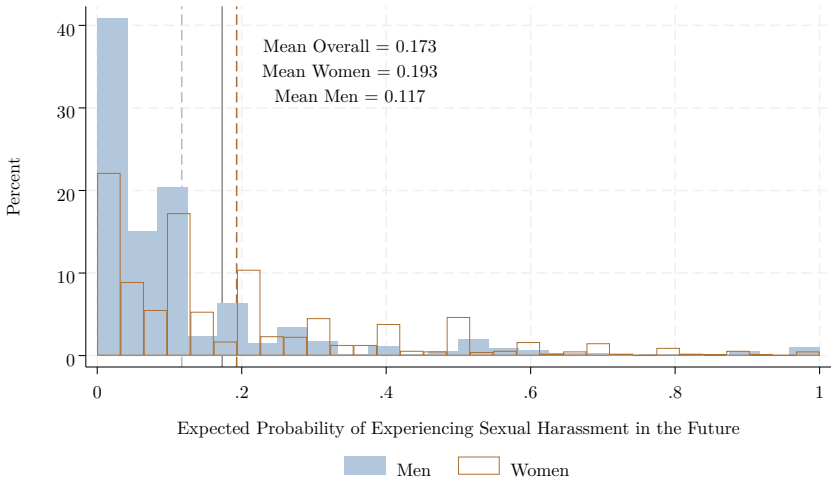
Similarly,

$$\begin{aligned}
\mathbb{E}(H|Y \leq \Delta_w) &= \mathbb{E}[\mathbb{E}(H|Y)|Y \leq \Delta_w] \\
&= \mathbb{E}[\mu_H + \frac{p\sigma_H^2}{\sigma_Z^2 + p^2\sigma_H^2}(Y - \mu_Y)|Y \leq \Delta_w] \\
&= \mu_H + \frac{p\sigma_H^2}{\sigma_Z^2 + p^2\sigma_H^2}\mathbb{E}\left[\frac{Y - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}|Y \leq \Delta_w\right] \\
&= \mu_H + \frac{p\sigma_H^2}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\mathbb{E}\left[\frac{Y - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}|\frac{Y - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}} \leq \frac{\Delta_w - \mu_Y}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\right] \\
&= \mu_H - \frac{p\sigma_H^2}{\sqrt{\sigma_Z^2 + p^2\sigma_H^2}}\frac{\phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})}{\Phi(\frac{\Delta_w - \mu_Y}{\sigma_Y})}
\end{aligned}$$

We then replace Δ_w by the values found for Δ_{w2} and Δ_{w3}. □

E.5 Simulations

FIGURE E10. Perceived Risk of Sexual Harassment p



Notes: The figure shows the distribution of the perceived risk of sexual harassment p, separately by gender taken from our survey.

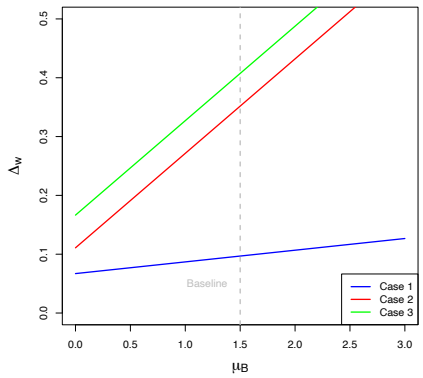
TABLE E16 – EMPIRICAL PARAMETERS

	Values
Perceived probability parameters	Source: Survey
Probability of sexual harassment p	0.173
Sample of men	0.117
Sample of women	0.193
Preference parameters	Model: Mixed Logit
WTP for remote work	
μ_Z	0.067
σ_Z	0.074
WTP for harassment-free	
μ_H	0.369
σ_H	0.231
Simulated parameters	
μ_B	1.5
σ_B	1
$\sigma_{Z,H}$	0.1

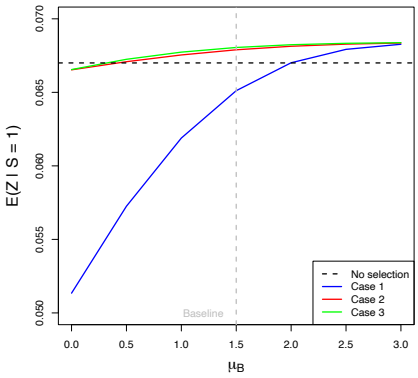
Notes: This table presents parameters used for the model simulations. The preference parameters are obtained from Montecarlo simulations of the mixed logit model.

FIGURE E11. Simulations — By Firms' Productivity Cost of Remote Work μ_B

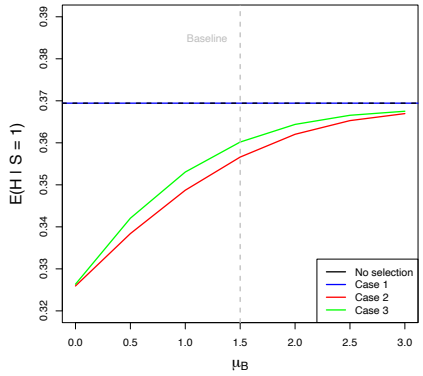
(A) Wage Differentials Δ_w



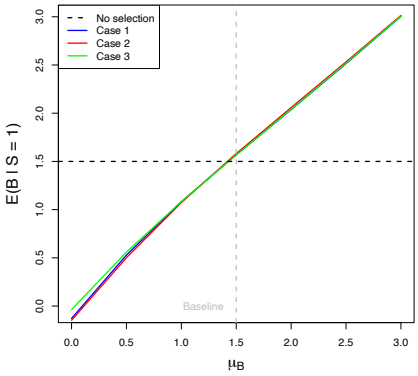
(B) Workers' Preference for Hybrid Work in Office Jobs $\mathbb{E}(Z|S=1)$



(C) Workers' Distaste for Sexual Harassment in Office Jobs $\mathbb{E}(H|S=1)$

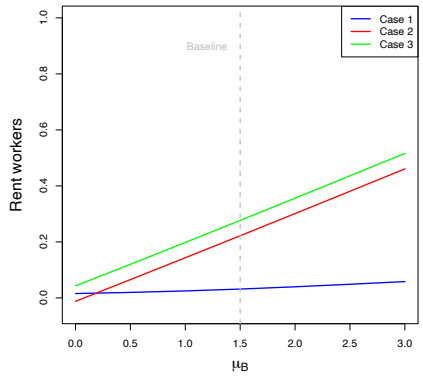


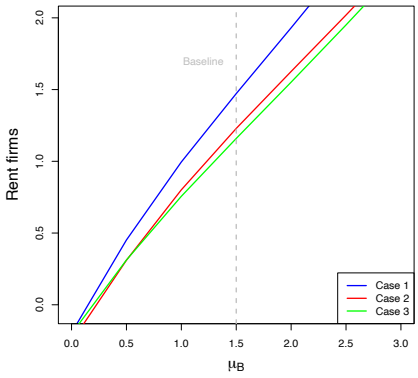
(D) Firms' Productivity Cost of Remote Work in Office Jobs $\mathbb{E}(B|S=1)$



(E) Workers' Excess Rents in Office Jobs

(F) Firms' Excess Rents in Office Jobs

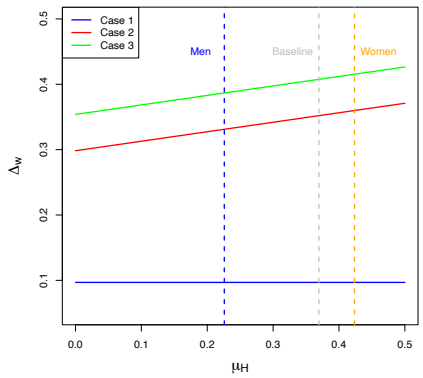




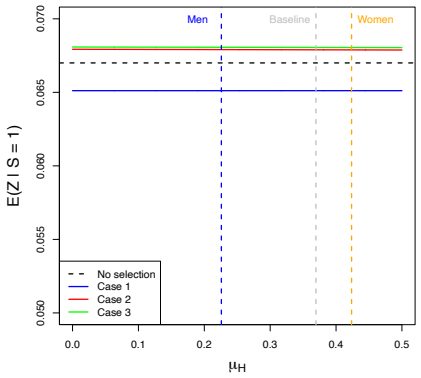
Notes: Panel A compares Δ_w the wage differentials between on-site and remote work across the three scenarios for various values of μ_B, assuming $\sigma_B = 1$, $\sigma_{Z,H} = 0.1$ and using parameters from Table E16, Panel B compares workers' selection on Z, Panel C compares workers' selection on H, Panel D compares firms' selection on B, Panel E compares workers' excess rents, across the three scenarios: Case 1 no risk of sexual harassment, Case 2 risk of sexual harassment internalized by workers only, Case 3 risk of sexual harassment internalized by workers and firms.

FIGURE E12. Simulations — By Workers' Distaste for Sexual Harassment μ_H

(A) Wage Differentials Δ_w

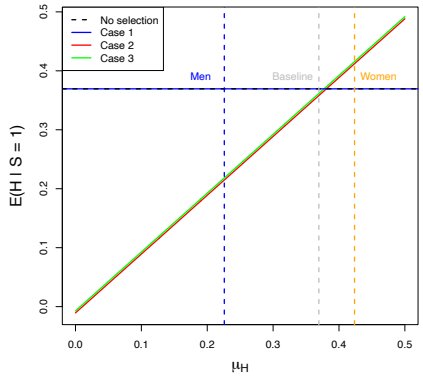


(B) Workers' Preference for Hybrid Work in Office Jobs $\mathbb{E}(Z|S=1)$

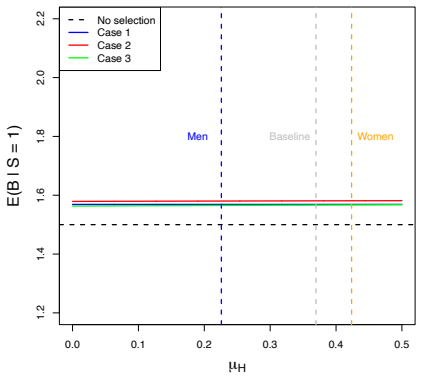


(C) Workers' Distaste for Sexual Harassment in Office Jobs $\mathbb{E}(H|S=1)$

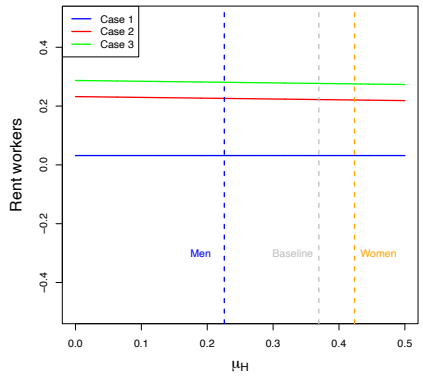
(D) Firms' Productivity Cost of Remote Work in Office Jobs $\mathbb{E}(B|S=1)$

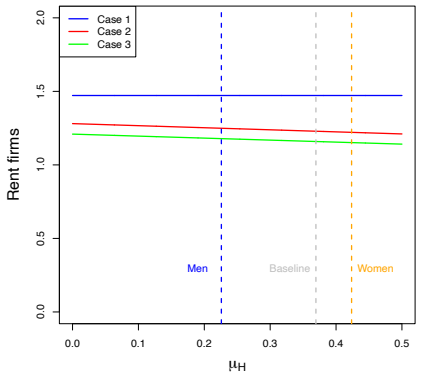


(E) Workers' Excess Rents in Office Jobs



(F) Firms' Excess Rents in Office Jobs

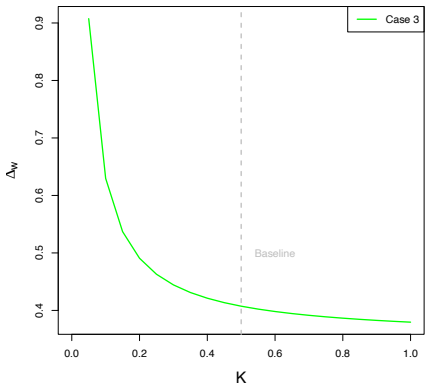




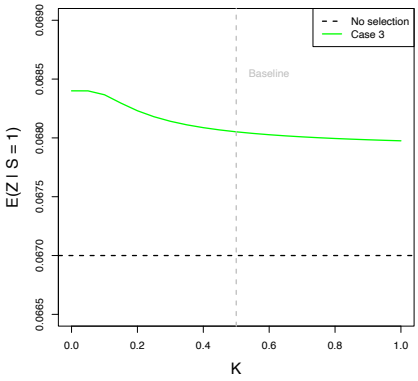
Notes: Panel A compares Δ_w the wage differentials between on-site and remote work across the three scenarios for various values of μ_H, assuming $\sigma_B = 1$, $\mu_B = 1.5$ and $\sigma_{Z,H} = 0.1$, using parameters from Table E16, Panel B compares workers' selection on Z, Panel C compares workers' selection on H, Panel D compares firms' selection on B, Panel E compares workers' excess rents, across the three scenarios: Case 1 no risk of sexual harassment, Case 2 risk of sexual harassment internalized by workers only, Case 3 risk of sexual harassment internalized by workers and firms.

FIGURE E13. Simulations — By Firms' Policy Cost K

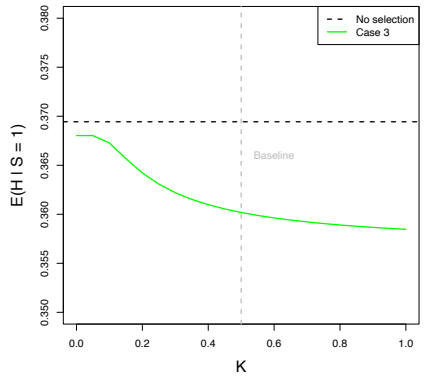
(A) Wage Differentials Δ_w



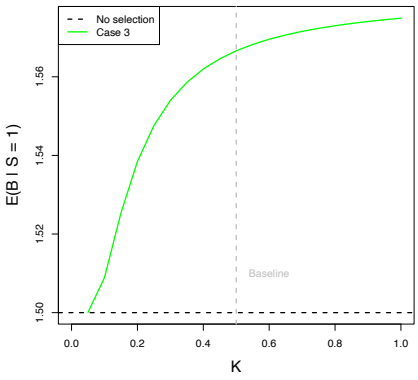
(B) Workers' Preference for Hybrid Work in Office Jobs $\mathbb{E}(Z|S=1)$



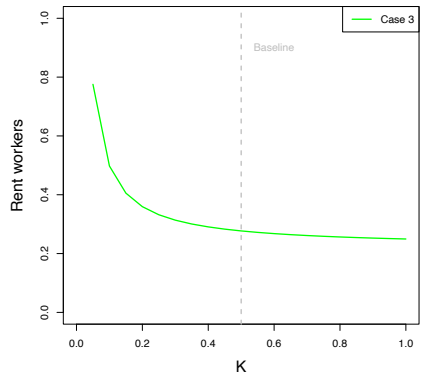
(C) Workers' Distaste for Sexual Harassment in Office Jobs $\mathbb{E}(H|S=1)$



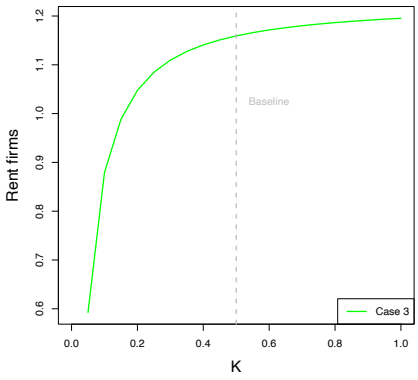
(D) Firms' Productivity Cost of Remote Work in Office Jobs $\mathbb{E}(B|S=1)$



(E) Workers' Excess Rents in Office Jobs



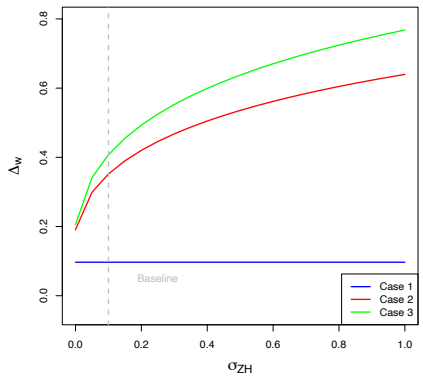
(F) Firms' Excess Rents in Office Jobs



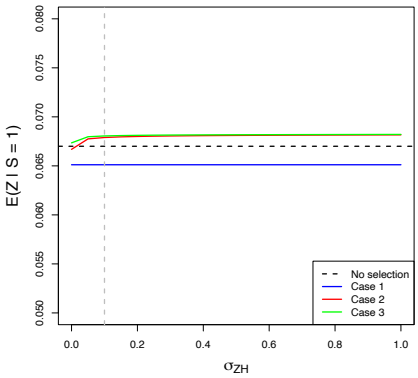
Notes: Panel A plots Δ_w the wage differentials between on-site and remote work for various values of K, assuming $\sigma_B = 1$, $\mu_B = 1.5$ and $\sigma_{Z,H} = 0.1$, using parameters from Table E16, Panel B plots workers' selection on Z, Panel C or various values of K workers' selection on H, Panel D or various values of K firms' selection on B, Panel E or various values of K workers' excess rents.

FIGURE E14. Model's Predictions — By Covariance of Preferences over Amenities $\sigma_{Z,H}$

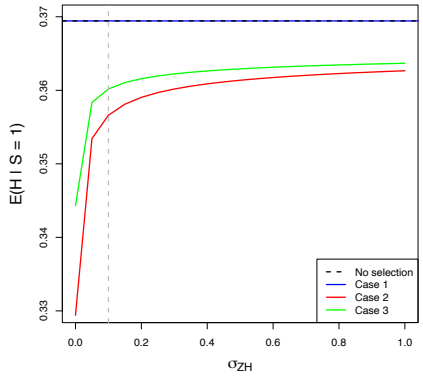
(A) Wage Differentials Δ_w



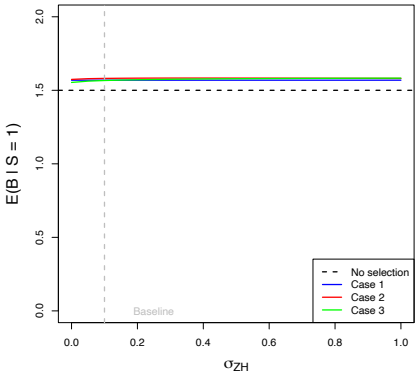
(B) Workers' Preference for Hybrid Work in Office Jobs $\mathbb{E}(Z|S=1)$



(C) Workers' Distaste for Sexual Harassment in Office Jobs $\mathbb{E}(H|S=1)$

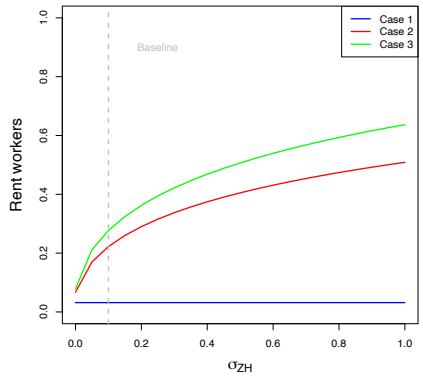


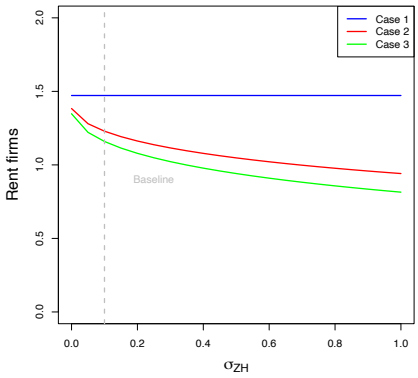
(D) Firms' Productivity Cost of Remote Work in Office Jobs $\mathbb{E}(B|S=1)$



(E) Workers' Excess Rents in Office Jobs

(F) Firms' Excess Rents in Office Jobs

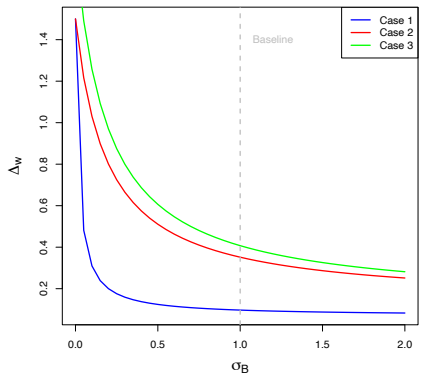




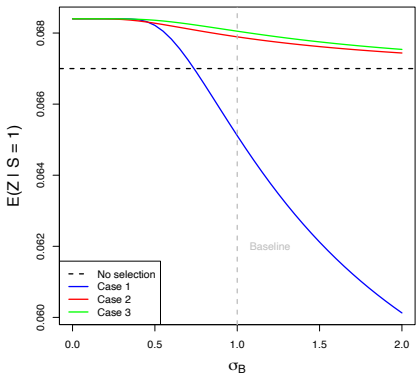
Notes: Panel A compares Δ_w the wage differentials between on-site and remote work across the three scenarios for various values of $\sigma_{Z,H}$, assuming $\sigma_B = 1$, $\mu_B = 1.5$, and using parameters from Table E16, Panel B compares workers' selection on Z, Panel C compares workers' selection on H, Panel D compares firms' selection on B, Panel E compares workers' excess rents, across the three scenarios: Case 1 no risk of sexual harassment, Case 2 risk of sexual harassment internalized by workers only, Case 3 risk of sexual harassment internalized by workers and firms.

FIGURE E15. Simulations — By Firms' Heterogeneity σ_B

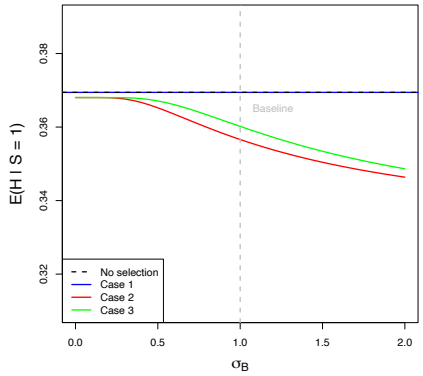
(A) Wage Differentials Δ_w



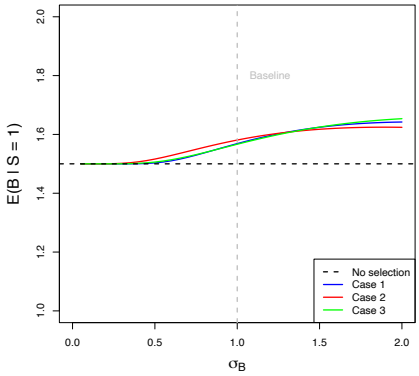
(B) Workers' Preference for Hybrid Work in Office Jobs $\mathbb{E}(Z|S=1)$



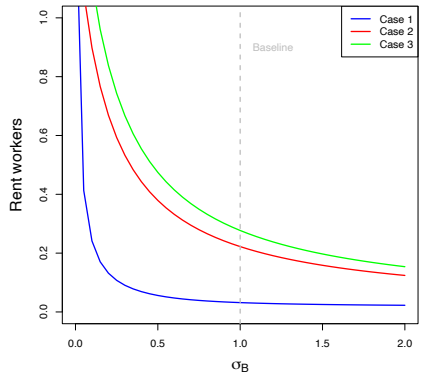
(C) Workers' Distaste for Sexual Harassment in Office Jobs $\mathbb{E}(H|S=1)$



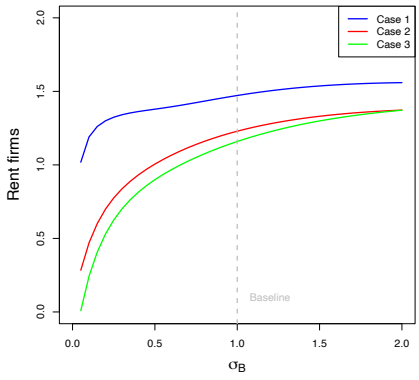
(D) Firms' Productivity Cost of Remote Work in Office Jobs $\mathbb{E}(B|S=1)$



(E) Workers' Excess Rents in Office Jobs



(F) Firms' Excess Rents in Office Jobs



Notes: Panel A compares Δ_w the wage differentials between on-site and remote work across the three scenarios for various values of σ_B, assuming $\mu_B = 1.5$, $\sigma_{Z,H} = 0.1$ and using parameters from Table E16, Panel B compares workers' selection on Z, Panel C compares workers' selection on H, Panel D compares firms' selection on B, Panel E compares workers' excess rents, across the three scenarios: Case 1 no risk of sexual harassment, Case 2 risk of sexual harassment internalized by workers only, Case 3 risk of sexual harassment internalized by workers and firms.