Hidden Discrimination in Frictional Labor Markets

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Version: March 26, 2026.

Abstract

This paper shows that frictions shape which worker attributes employers value, and when those attributes carry identity connotations, changes in the friction environment affect hiring disparities. Through this channel, frictions can hide discrimination. We test for gender discrimination among 921 employers in male-dominated Ugandan manufacturing sectors. Employers perceive women as more trustworthy but worry about harassment risk, two attributes related to common monitoring and cooperation frictions. In a hiring experiment that holds supply fixed, therefore, we randomly assign monitoring support targeting either worker misbehavior or workplace safety. Under business-as-usual conditions, men are hired at rates 10 percentage points higher than women, yet 42% of selected candidates are women, revealing substantial unmet demand. Audits to monitor workers and prevent stealing widen the gender gap by 63%, concentrated among employers with the strongest stated preferences for hiring women. Audits to prevent harassment, instead, close the gender gap. Monitoring frictions mask hidden discrimination: the gender penalty is not driven by statistical discrimination on technical performance, the trust premium reflects inaccurate beliefs, and we find no technical performance differences by gender. The results provide proof of concept that when multiple distortions coexist, solving one friction can worsen allocative efficiency, consistent with second-best logic. Finally, in this multidimensional framework, residual measures of bias are sensitive to which attributes are measured and treated as productive.

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‡We thank Siwan Anderson, Abhijit Banerjee, Aditi Bhowmick, Laura Boudreau, Nina Buchmann, Lorenzo Casaburi, Raquel Fernandez, Peter Hull, Alex Imas, Rocco Macchiavello, Kristina Manysheva, Rohini Pande, Bobby Paksad-Hurson, Supreet Kaur, Jon Roth, Frank Schilbach, Anna Vitali, David Yanagizawa-Drott, Roberto Weber and audience participants at BREAD, Brown, CEPR, EBRD, KU Leuven, MIT, NBER Development, NEUDC, NYU, Princeton, and Zurich Behavioral Lab Meeting for helpful comments. Josh Bwiira and Carlotta Riva provided outstanding field management and research assistance. The experiments were approved by Mildmay Uganda (0408-2023) and the Uganda National Council for Science and Technology (SS2574ES), and pre-registered at the AER Registry (AEARCTR-0013698).

1 Introduction

Labor markets in developing countries are characterized by multiple frictions. Standard theories predict more discrimination in such markets, emphasizing two channels: frictions allow prejudice to persist by reducing competition (Becker, 1957; Black, 1995) and generate statistical discrimination by limiting information (Phelps, 1972; Arrow, 1973).

This paper highlights a third channel: frictions shape which worker attributes employers value. Unlike the first two, this channel can reduce or amplify hiring disparities. If a group faces bias but is perceived as superior on a friction-relevant attribute, resolving that friction reveals hidden discrimination.

We investigate this channel by testing for gender discrimination in hiring in three Ugandan male-dominated manufacturing sectors, through a hiring experiment that holds supply fixed and manipulates two workplace frictions: monitoring constraints over workers' behavior (stealing) and cooperation (harassment/distraction). This allows us to isolate how the friction environment affects the demand for female workers. Our design also measures the role of technical performance, by cross-randomizing gender and performance signals in candidate profiles, and the accuracy of employers' beliefs, through a complementary lab-in-the-field experiment with trainees.

Female labor force participation in Uganda is relatively high (76.5%; ILO, 2025), as is common in sub-Saharan Africa, yet most sectors remain nearly single-gendered. Occupational segregation is a driver of the gender gap (Blau and Kahn, 2017; Goldstein et al., 2019). Mechanics, welding, and carpentry (our focus) are among the higher-return vocational sectors in the country and a target of policies promoting women's entry.[1] Demand-side barriers remain understudied, particularly in sub-Saharan Africa (Heath et al., 2024), in part because supply constraints limit the pool of female applicants.[2] Whether employers in these sectors would hire women given access to female candidates is an open question.

Most employers in our sample (84.9% of 921) state a preference for hiring more women than they currently employ.[3] Employers value multiple worker attributes and hold gen-

[1] Supply-side interventions such as vocational training have shown mixed results for women (McKenzie, 2017).

[2] Labor supply decisions are shaped by intra-household bargaining (Bursztyn et al., 2020; Kala and McKelway, 2025), social norms (Fernández et al., 2004; Jayachandran, 2015; Agte and Bernhardt, 2023), and constraints such as transport, safety, and childcare (Field and Vyborny, 2022; Amaral et al., 2023; Halim et al., 2023; Ajayi et al., 2023).

[3] The stated ideal gender mix is 20% women, about 10 times higher than the actual gender mix.

dered beliefs about each. When asked to identify the most important trait in a worker, employers cite: trustworthiness (good behavior/no stealing), effort, technical skills, learning, and cooperation.[4] Men are perceived as stronger on technical performance and effort, but employers can discipline effort through piece-rate pay (Foster and Rosenzweig, 1994) and address skills gaps through on-the-job training. The attributes that are hardest to find and monitor are trustworthiness (90.4%) and cooperation (46%), both tied to well-documented frictions in low-income settings: monitoring constraints over worker behavior (Heath, 2018) and teamwork (Hjort, 2014). Women are perceived as more trustworthy, the attribute most valued under monitoring frictions. Employers do not perceive women as less cooperative, but over 40% worry about the risk of harassment or distraction when hiring women. The gendered perception of friction-relevant attributes creates the conditions to test for our channel.

To measure revealed preferences for hiring women, we design a hiring experiment that holds supply fixed: employers evaluate and select from a gender-balanced pool of vocationally trained candidates. In the status quo, employers mostly hire through networks, which mitigate adverse selection and moral hazard (Chandrasekhar et al., 2020) but constrain the talent pool and, in male-dominated sectors, exclude women (Beaman et al., 2018).[5] In an incentivized hiring experiment following Kessler et al., 2019, we randomly assign a third of the employers to evaluate trainee profiles cross-randomized by gender and technical performance under business-as-usual conditions. Revealed choices broadly confirm stated preferences: 89.6% select at least one female CV, and 42% of selected CVs are women. Employers are not gender-neutral on average: the hiring gender gap is 10 percentage points, but the gap narrows with stronger stated preferences and disappears in the top quintile. Women face a hiring penalty but positive returns to entry.

We investigate to what extent the demand for female workers is shaped by monitoring and cooperation frictions, as opposed to technical skills, or bias. Our main experimental variation relaxes the two workplace frictions and tests whether the hiring gender gap responds consistently with the gendered beliefs about friction-relevant worker attributes we document. The design has three conditions. One-third of the employers, described above, receives no audits and measures preferences under business-as-usual (control group). The remaining two-thirds also evaluate candidates, but are randomized

[4]We recode these categories from open-ended answers, and elicit beliefs for each of the 5 categories.

[5]Even when vocationally trained workers are available and have better skills, employers perceive an experimentation cost from hiring outside their networks (Breza and Kaur, 2025; Groh et al., 2016).

to one of two gender-neutral technologies, implemented through workplace audits.[6] Employers in the Monitoring–Behavior (MB) arm receive audits focused on deterring new workers from stealing and dishonesty, testing whether reducing monitoring constraints affects the gender gap. Monitoring–Safety (MS) provides audits that monitor workers to ensure new workers' safe and respectful treatment, testing whether reducing harassment concerns affects the gender gap.[7]

We test two interconnected hypotheses. Monitoring support for workers' behavior should lower the relative demand for women by reducing the value of trustworthiness, widening the hiring gender gap. Monitoring support for workplace safety should increase demand for women by addressing harassment concerns, narrowing the gap. We expect both effects to operate through employers' gendered beliefs about worker attributes. An identification concern is that audits could instead affect hiring through employer scrutiny. For example, employers may hire fewer women under audits if they worry about scrutiny while around women or if they planned to harass them. Under behavior audits, scrutiny and the trustworthiness channel predict the same direction, so we cannot distinguish them. Under safety audits, the two channels have opposite predictions: scrutiny would widen the gap, while addressing harassment concerns would narrow it. The safety audit arm therefore provides a mechanism test of the scrutiny channel. Finally, the cross-randomization of gender and technical performance allows us to test for statistical discrimination on performance, given that men are perceived as stronger on technical skills.

As predicted, the two treatments have opposite impacts on the gender gap. Both behavior and safety audits increase total hiring relative to the control group, but through different margins: behavior audits increase male hiring by 5.2 percentage points ($p < 0.001$) with no significant effect on women ($p = 0.480$), while safety audits increase female hiring by 7.4 percentage points ($p < 0.001$) with no significant effect on men ($p = 0.399$). Employers assigned to behavior audits show a gender gap of 16.4 percentage points, 63% larger

[6]The audits mimic support provided by staff at some vocational training institutes during internships and consist of weekly visits of our enumerators during the 1-month probation period. Audit visits are unannounced in timing but known to occur by trainees and employers. We highlight to employers that treatments are randomized; there is no selection into treatment on either firm or worker side.

[7]We think of the treatments as technologies addressing two distinct frictions. Monitoring–Behavior addresses a principal-agent problem: workers may steal inputs or payments, so employers must monitor. Monitoring–Safety addresses worker-to-worker cooperation frictions that relate to harassment or distractions, which we are careful to frame as gender neutral. In other contexts, like co-ethnicity (Hjort, 2014), these types of frictions exist within same-sex workers. In our setting, the same technology (audits) can address both the trustworthiness friction and the cooperation friction, which allows for a cleaner experimental design. Whether these frictions affect hiring through worker productivity or through costs outside the production function, our design does not rely on this distinction.

than under business-as-usual (10.3 percentage points against women). This widening is concentrated among employers with stronger stated preferences for hiring women: among those expressing any such preference, the gap doubles; among those above the median, it more than triples. Safety audits increase the relative demand for women. Employers assigned to safety audits show a gender gap of 1.7 percentage points, statistically indistinguishable from zero, a six-fold reduction relative to business-as-usual. That safety audits increase rather than decrease demand for women rules out that audit visits deter hiring through scrutiny. These patterns support the proposed channel: workplace frictions affect the gender gap through employers' gendered beliefs about the relevant worker attributes.[8]

Is the hidden gap efficient statistical discrimination, with accurate beliefs about trustworthiness compensating for accurate beliefs about technical performance or safety? The gender gap does not respond to technical performance signals: high-performance profiles are more likely to be selected (10.1 percentage points; $p < 0.001$), but the effect does not differ by gender ($p = 0.307$). The gap is not driven by employers using gender as proxy for skills. Efficient statistical discrimination would also require women to actually be less skilled but more trustworthy. A lab-in-the-field experiment with 182 trainees shows that employers' beliefs are inaccurate on both dimensions. On technical performance, we find no gender differences in practical skills (self-assessed following Alfonsi et al., 2020) or in a sector-specific theory exam; yet employers expect women to perform worse. On trustworthiness, a novel behavioral task we design measuring cheating in a workplace-like setting (misreporting output for pay) finds no gender differences; yet employers expect women to cheat less when unsupervised. Beliefs introduce a wedge rather than reflect real productivity differences.[9] Whether safety concerns constitute bias or reflect productivity differences is debatable; harassment may directly reduce women's productivity, but employers may be paternalistically discriminating (Buchmann et al., 2023) or responding to reputational concerns. Given the evidence that men and women are equally productive, solving monitoring frictions removes a distortion that was compensating for bias, widening the gender gap and reducing allocative efficiency.

Solving monitoring frictions reveals hidden discrimination; thus, how much bias do women face? The answer depends on which attributes the researcher measures and treats as pro-

[8] Whether these attributes matter because they affect productivity (e.g., harassment reducing women's output), production costs (e.g., monitoring male workers), or costs outside the production function (e.g., employer liability) is a question our experiment does not resolve.

[9] Even if gendered beliefs about trustworthiness were accurate, frictions could have introduced a wedge if they represented differences in costs borne by the employers; e.g. if monitoring women required fewer hours.

ductive. A one-dimensional framework that considers only technical performance yields 10.3 percentage points of bias. Adding trustworthiness as a second dimension increases the estimate by 6 percentage points. Adding harassment risk as a third dimension reduces it by 3 percentage points. Yet it is not obvious whether these attributes reflect actual productivity differences. The residual bias estimate ranges from 1.9 to 16.75 percentage points depending on which attributes are measured and treated as productive.

Our paper contributes to the literature testing for discrimination in the labor market (Goldin and Rouse, 2000; Bertrand and Mullainathan, 2004; Kline et al., 2022). Recent work takes a systemic view, showing that discrimination in one domain feeds into others (Lang and Spitzer, 2020) and that the structure of the evaluation process shapes discrimination (Bohren et al., 2025b). We highlight a different systemic channel: not how employers evaluate workers, but which attributes they value. The production environment determines which worker attributes matter for hiring. When these attributes carry identity connotations, changes in the production environment widen or narrow hiring disparities, even if the production technology remains unchanged.[10]

Modeling workers as multidimensional, a perspective increasingly emphasized in the labor literature (Deming, 2017; Woessmann, 2024; Deming and Silliman, 2025), has implications for measuring discrimination. When identity bundles with multiple attributes, discrimination along different dimensions can cancel out: positive perceived selection on one dimension offsets bias on another, producing small outcome gaps that mask larger underlying discrimination.[11] This adds to a growing literature cautioning against interpreting outcome gaps as evidence for or against discrimination, for reasons including selection dynamics (Bohren et al., 2019, 2025b) and uncertainty about the skills of underrepresented groups (Macchiavello et al., 2026). This also implies that residual estimates omitting positively-selected dimensions will understate bias, reversing the standard direction of omitted variable bias highlighted by Lang and Spitzer (2020).

Our findings contribute to a growing literature at the intersection of labor and development economics (see Breza and Kaur, 2025 for a recent review), which highlights how

[10]This differs from work showing that production technology shapes gender roles through complementarity with gender-specific innate skills (Alesina et al., 2013). In our setting, the production technology is the same, what varies are the monitoring frictions.

[11]Whether differential treatment along a given dimension reflects statistical discrimination or bias is itself blurred: the same attribute may be valued because it raises worker productivity, lowers production costs such as monitoring, or reduces non-production costs such as reputational risk. With multiple relevant attributes come multiple beliefs, each of which may be inaccurate, multiplying the sources of bias (Bohren et al., 2025a).

features specific to poor countries point to multiple coexisting labor market frictions. Particularly relevant to this paper, there is ample evidence of information frictions that make it hard for workers to signal skills (Abebe et al., 2021; Bassi and Nansamba, 2022; Carranza et al., 2022) and the importance of identity on the labor market (Cassan et al., 2022; Oh, 2023). We differ from this literature in that we directly manipulate two workplace frictions using an experiment. We make three contributions. First, we show that frictions affect not only hiring levels but also the composition of hiring along identity lines. Second, we show that frictions raise the importance of soft skills such as trustworthiness relative to technical performance, and that employers use identity as a proxy for both. Third, when multiple frictions coexist and employers' beliefs are inaccurate, solving one does not necessarily improve allocative efficiency. In our setting, solving two frictions has opposite effects on the demand for workers by gender: one counteracts bias, the other reinforces it, providing micro-level evidence of the second-best concern (Lipsey and Lancaster, 1956).

Finally, a rich literature studies barriers to female labor force participation, yet evidence on demand-side barriers remains limited, particularly for Africa (see Heath et al., 2024 for a review). Existing work documents demand-side discrimination in wages and promotion within sectors where women already work in South Asia (e.g., Brown 2023; Macchiavello et al. 2026). On hiring barriers specifically, Buchmann et al. (2023) show that paternalistic safety concerns lead employers in Bangladesh not to hire women for a night-shift job, even when female applicants are willing to take it. Our results are consistent: alleviating harassment concerns increases demand for women in the male-dominated sectors we study in sub-Saharan Africa. Which frictions bind determines whether demand-side distortions favor or penalize women, which may help explain why training interventions yield mixed effects (Bandiera et al., 2022a; Heath et al., 2024).

2 Setting, Sample, and Motivating Evidence

2.1 Setting and Sample

We study motor mechanics, welding, and carpentry firms in Kampala, Uganda. These are among the higher-return vocational sectors in the country (Alfonsi et al., 2020), and are extremely male-dominated.

Our sample consists of 921 employers, one per firm: 318 from motor mechanics, 300 from carpentry, and 303 from welding (see Table 1).[12] We selected firms in the neighborhoods of the greater Kampala area where these sectors are clustered, as shown in Appendix Figure A1. We conducted a listing of all firms in these neighborhoods and interviewed all those who consented to participate, conditional on meeting the following criteria: (i) working in small or medium-sized firms (fewer than 100 employees); (ii) aged 18 or older; (iii) expressing interest in hiring a trainee within nine months; and (iv) proficiency in either English or Luganda.

In our sample, 84.9% of respondents are business owners; 15.1% hold managerial positions. The firms are well established, employing on average 8.3 workers (median 5). They serve approximately 11.8 clients per day, operate for over 10 years, and report mean monthly profits of USD 286 on revenues of USD 718.[13] 96.4% of employers are men, and only 2.26% of all workers are women (173 out of 7,658 employees). Fewer than 14% of firms employ any women. This extreme occupational segregation is not specific to our sample. Alfonsi et al. (2024) document that when COVID-19 disrupted the Ugandan labor markets, occupational segregation by gender intensified.

We also collaborate with seven vocational training institutes (VTIs) in Kampala to collect data on trainees and gain access to candidates seeking employment. Our primary VTI partner is the Smart Girls Foundation, a nonprofit that delivers nationally recognized vocational training through its "Girls With Tools" program, preparing women for male-dominated sectors including automotive mechanics, electrical installation, welding, and carpentry. Although the program primarily targets women, it also trains male students (see Appendix Figure A2, panel B).

Through these partnerships, we survey 182 trainees enrolled in automotive mechanics, carpentry, or welding programs. Of these, 33% specialize in automotive mechanics, 19.8% in carpentry, and 21.2% in welding (see Appendix Table A14).[14] Trainees are 21.6 years old on average and enrolled in programs lasting 6 to 24 months, with those longer than one year accredited by the Uganda Directorate of Industrial Training (DIT). Women make

[12] Of these, 906 are retained in the main analysis after applying preregistered attention checks. We initially focused on a single sector, motor mechanics. In the preregistration, we noted that we might expand to additional sectors for power and external validity, depending on the number of mechanics we were able to interview. After the first wave, we decided to expand the study to carpentry and welding in the second wave. The preregistration was amended before expanding data collection and includes a document that summarizes the motivations (see Appendix A.1 for details).

[13] Uganda's 2024 GDP per capita was USD 1,023.

[14] An additional 16.5% are enrolled in broader fields such as electrical work but report job aspirations aligned with our target sectors. About 9.5% of the trainees are enrolled in multiple programs.

up 37% of our trainee sample; this share falls to 18.8% when excluding trainees from the Girls With Tools program. This nonetheless appears to be an upward trend compared to the 11% share of female vocational training applicants in welding and motor mechanics documented by Alfonsi et al. (2020).

2.2 The Multitasking Firm and Monitoring Constraints

Firms in this setting are organized around bundles of tasks rather than specialized production activities. Bassi et al. (2023) document that small manufacturing firms in Uganda, including sectors closely related to ours, exhibit minimal labor specialization, in large part because customized production makes it costly to unbundle tasks across workers. Given the reliance on probationary workers and apprentices, employers combine technical work with administrative tasks, supervision, and on-the-job training. Employers in our sample report spending an average of 10.4 hours at the firm each day, dedicating 2.06 hours to monitoring, the second most time-consuming activity after technical work, and more than they spend on training workers.

Monitoring constraints naturally emerge from this production environment. The physical layout of workshops compounds the challenge: firms typically combine indoor workspaces with large outdoor areas (see Figure A2, panel A), making it difficult to observe all workers at once. Over 90% of employers report wanting to increase monitoring, and 83% have experienced theft by an employee.

Piece-rate pay offers a partial solution. Four out of five employers report paying piece rates, which tie compensation to output and make effort contractible. Piece rates incentivize productivity but do not prevent theft or ensure good behavior when the employer's attention is elsewhere. Employers respond to this residual moral hazard through hiring: around 80% of current workers were recruited through personal networks: friends, family, clients, or existing employees (Beaman et al., 2018; Alfonsi and De Souza Ferreira, 2024). Referrals provide implicit trustworthiness screening, as incumbent workers or network members can be held accountable for those they refer (Heath, 2018).

Network hiring restricts the talent pool. In our setting, vocationally trained workers have been shown to have better skills (Alfonsi et al., 2020), and evidence from wage subsidies experiments suggests that employers perceive an experimentation cost from hiring outside their usual channels (Groh et al., 2016). In male-dominated sectors, however,

network-based recruitment also produces overwhelmingly male candidate pools. Indeed, employers estimate that on average 3.6% of their applicants are women; 80% report none at all.[15] This makes it difficult to assess whether employers are at all interested in hiring women. Vocational training could help women overcome the structural barriers that limit their entry into male-dominated sectors, yet evidence on training effectiveness is mixed (McKenzie, 2017; Bandiera et al., 2022b). In particular, we know little of employers' preferences for gender and skills.

2.3 Stated Preferences for Worker Gender Mix

When asked, "What is the best gender composition of the workers in your firm?" (on a scale from 0 to 10 women out of 10) 84.9% of employers report preferring at least one woman out of ten workers, and 70.5% prefer two or more (Figure 2). 14.6% state a preference for a roughly gender-balanced workforce of 4 to 6 women out of 10. These stated diversity preferences are notable given the well-documented role of gender norms (Fernández and Fogli, 2009; Jayachandran, 2021), male status concerns (Bernhardt et al., 2018), and male backlash (Abou Daher et al., 2025) in limiting women's labor force participation in low-income settings.

The stated preferences show little indication of experimenter demand effects, with no bunching at focal values such as 1 or 5 women out of 10. Most employers attribute the gap between desired and actual gender mix to supply constraints: there are few women in the applicant pool, which, as noted above, is mostly network-based. The data are consistent with this account. The firm-level share of female workers (2.7%) roughly tracks the perceived share of female applicants (3.6%). These stated preferences may also be consistent with evidence that gender norms are perceived as more binding than they actually are (Bursztyn et al., 2020).

[15] We lack data on the actual gender composition of the applicant pool. For comparison, Ashraf et al. (2025) finds that firms in India and Turkey draw from applicant pools where men outnumber women four to one.

2.4 Stated Preferences for Worker Attributes and Gender Beliefs

When asked to identify the most important trait in a worker, employers most frequently cite good behavior, described as trustworthiness, honesty, and not stealing (Figure 1, panel A). Good behavior is also the trait employers report as the hardest to find and the hardest to monitor. Effort and hard work rank second in importance, but only 34% of employers cite effort as hard to monitor, consistent with the prevalence of piece-rate pay, which makes effort contractible (Foster and Rosenzweig, 1994). Employers also mention learning interest (14.24%) and, in a few cases, cooperation. Physical strength is never mentioned.

Employers hold gendered perceptions of these attributes. Following Macchiavello et al. (2026), for each of the five traits mentioned we ask whether men are better, women are better, or there is no difference, so that a perceived advantage for one gender implies a corresponding liability for the other. Men are perceived as stronger in technical domains (technical skills, interest, and effort), while women are perceived as more trustworthy (Figure 1, panels C and D). Employers perceive men and women as similarly cooperative.

We also ask employers directly about their concerns when hiring women (Figure 1, panel E).[16] Many responses echo the trait data: employers worry about skills (mostly strength) and interest in the job (mostly leaving).[17] Stealing is never mentioned, consistent with women's perceived trustworthiness. The most notable finding is about cooperation. Harassment (from men to women) or, less frequently, distraction (from women to men) are the most frequently cited concerns when hiring women, mentioned by over 40% of employers. Thus, mixed-gender workplaces appear to introduce frictions similar to those documented in inter-ethnic contexts (Hjort, 2014).

Monitoring constraints affect firm profits through two channels. Employers must dedicate time to supervision that would otherwise go to productive activities: in our sample, employers spend 2.06 hours per day monitoring, the second most time-consuming activity after technical work. Theft imposes direct losses on the firm. Both channels raise the value of trustworthiness in hiring. Cooperation frictions such as harassment risk raise the cost of integrating women into male-dominated workplaces, for example via time spent

[16] Gendered perceptions are elicited only for the traits employers mention as most important, a set likely shaped by their predominantly male workforce. Asking about women directly captures additional concerns this approach may miss.

[17] Interestingly, no employer mentions strength as a relevant attribute for their business.

managing interpersonal conflicts. Harassment may impose costs on employers outside the production function: reputational concerns, or perceived liability for workers' safety. Harassment may also reduce the productivity of female workers directly, for instance through mental health effects, or lower teamwork productivity, as documented in mixed-gender teams in other settings (Ronchi and Salvestrini, 2025).

3 Experimental Design

We measure revealed demand for female workers in an incentive-compatible hiring experiment with 921 employers in Kampala. Employers evaluate and select from a gender-mixed pool of vocationally trained candidates, providing access to female workers outside their usual networks. If a match is formed, we offer employers a UGX 50,000 payment ($12/month) in line with other wage subsidies experiments. We independently vary the monitoring environment across employers, allowing us to identify how workplace frictions shape demand for women and the hiring penalty against them.

3.1 Incentivized Ratings Experiment

To measure the relative demand for female workers, our experiment follows an incentivized ratings design (Kessler et al., 2019). We provide employers with a gender-balanced pool of hypothetical trainee profiles. Based on their ratings of these profiles, employers receive referrals of real candidates for probationary hire. Our primary outcomes are the share of female candidates selected and the gender gap in hiring.[18]

Profiles. We collect administrative data on 472 trainees enrolled with partner VTIs in Kampala since 2016. From this information, we create 36 base profiles by cross-randomizing attributes such as age, marital status, possession of a driver's license, language spoken, motivation for career choice, education, training background, and references.[19]

[18] We focus on the hiring margin rather than the wage gap. In this setting, as noted by Alfonsi et al. (2020), wages are difficult to measure: many apprentices are unpaid, payment structures vary widely across firms (piece rates, fees, stipends), and probationary workers often also receive in-kind compensation which is hard to monetize.

[19] We pilot-test these profiles with 25 employers out of sample.

We then generate four versions of each base profile by cross-randomizing two additional attributes: gender (signaled by an avatar) and technical performance (indicated by class rank, visualized as a star rating). Performance signals are anchored to the actual distribution within each VTI cohort: median performers receive three stars, top performers (above the 95th percentile) receive five stars. This yields 144 unique profiles (4 versions $\times$ 36 base profiles; see Figure 3 for an example). Each employer reviews one randomly assigned version of each profile, creating within-employer variation in both gender and performance. This design allows us to estimate the hiring gender gap conditional on performance signals and to test whether performance signals affect the gender gap, as in the standard statistical discrimination test.

Each employer evaluates 24 of the 36 base profiles, each shown in one randomly assigned version, during regular work hours.[20] Our primary outcome is *Meet*: whether the employer wants to initiate a probationary hire ("Do you want us to refer you a similar worker to start the probation period at your firm?"; Yes/No). Secondary outcomes probe employers' perceptions of work quality (rated 0–10), behavior and trustworthiness (rated 0–10), and expected monthly earnings one year from now.[21]

Incentives. The incentivized ratings design provides incentives for decision-makers to select candidate profiles according to their true preferences, while avoiding deception. Employers are told that profiles are hypothetical but that referrals will be made from a pool of real candidates at partner VTIs based on their choices in the experiment. Before evaluating profiles, each employer is informed that more accurate ratings lead to better matches.

Because the mapping from ratings to referrals is not fully disclosed, selection may partly reflect strategic behavior rather than preferences. However, this is only problematic if strategic behavior differs by gender (Litwin and Low, forthcoming). Since candidate characteristics are independently and randomly assigned conditional on gender, employers

[20] We calibrate the number of evaluations to reflect the average monthly inflow of jobseekers (24.6) reported by employers during scoping activities.

[21] *Work Quality*: "How would you rate the worker's technical skills and work quality? Please rate on a scale from 0 to 10, where 0 is very low quality and 10 is very high quality."; *Behavior*: "How would you rate the workers' behavior (trustworthiness and honesty)? Please, rate on a scale from 0 to 10, where 0 is not at all trustworthy/honest and 10 is very trustworthy/honest." *Earnings*: "What is your best guess of the monthly earnings of this worker a year from now?". As discussed in Appendix A.1, we initially preregistered two primary outcomes, the second being an indicator of the desire to make an offer. Due to a programming error, this outcome was not elicited in the first wave (motor mechanics); consequently, we chose not to collect it in the second wave (welding and carpentry) either.

do not have to manipulate the gender composition of referrals to avoid the risk or maximize the likelihood of being referred to certain candidates.

Competition for female candidates induces employers to avoid selecting women, however this mechanism would bias measured demand downward. Upward bias would require employers to strategically avoid men, which is implausible given that vocationally trained men are perceived as high quality and dominate the pool. Referrals are also stratified geographically, limiting competition for specific candidate types.

Social incentives, such as the desire not to look discriminatory, may also attenuate the referral incentives. Existence or awareness of affirmative action policies is also limited.[22] Nonetheless, to assess the problem, inspired by De Quidt et al. (2018), we ask employers: "In your opinion, would it be better for us if you hired men or women or it does not matter?" The majority (66.7%) report it does not matter, and only 6.8% believe the research team prefers they hire women, suggesting that the scope for social desirability bias is limited. We test that our results are robust to excluding the subsample of employers that show social desirability bias.

3.2 Treatment Assignment

Employers are randomly assigned to make hiring decisions under one of three experimental conditions: a Business-as-usual arm and two monitoring support regimes. Treatment assignment is stratified by enumerator, survey wave, and sector. The Business-as-usual arm, beyond measuring the relative demand for trained female workers under status-quo conditions, serves as the control group (C).

In both treatment arms, monitoring support is implemented via weekly unannounced visits from our enumerator team during the probation period. These external audits mirror the support provided by VTI staff during internships. Employers are explicitly told that receiving audits is random and does not reflect any characteristics of the firm or workers. The script also explains that any selected worker will be aware of the monitoring regime upon starting the probationary period, so that treatment effects operate through expectations of monitoring on top of ex-post detection. However, workers will only learn of the audits after accepting the job, meaning that employers should not expect supply

[22] Only 18.7% of employers had heard of the United Nations Development Programme's Gender Equality Seal, the only such policy we could identify in this context.

responses. We think of these audits as a monitoring technology randomly made available for free to the firm. Employers report an expected audit duration of approximately 1.7 hours per visit, suggesting that interventions could meaningfully relax monitoring constraints.

Employers assigned to the Monitoring-Behavior (MB) arm receive unannounced visits aimed at discouraging new workers' misbehavior and theft. Behavior audits target frictions related to misbehavior and theft from new workers. These frictions make trustworthiness a valued attribute and the dimension on which employers perceive women more favorably. Employers in the Monitoring-Safety (MS) arm receive unannounced visits focused on ensuring that new workers are safe and treated with respect. Safety audits target how new workers are received in the workplace: ensuring they are safe and treated with respect. The two monitoring support regimes differ only in the dimension they target, with scripts that are nearly identical across arms, except for the dimension they target; treatment assignment is conveyed in the script which is read to the employers before evaluating the profiles.[23] Both arms are framed gender-neutrally to avoid priming effects on the demand for female workers. For example, we do not mention sexual harassment to avoid signaling a gendered concern.

Behavior audits target frictions related to misbehavior and theft from new workers. These frictions raise the importance of trustworthiness, the primary monitoring concern reported by employers and the dimension on which employers perceive women more favorably. We predict that behavior audits will reduce relative demand for trustworthy workers, and under the assumption that employers perceive women as more trustworthy, widen the gender gap compared to business-as-usual conditions. Safety audits target cooperation frictions: how new workers are received and treated in the workplace. These frictions may

[23]Business-as-usual script: "We are committed to ensuring that managers and workers will have a positive experience if they end up being matched."; MB script: "We are committed to ensuring that managers and workers will have a positive experience if they end up being matched. Our team members will conduct unannounced weekly visits to some of the firms where new workers are placed during the probation period. These workers will also be informed about the visits. Your firm may be randomly selected to receive such support visits via a lottery. Receiving visits does not reflect any characteristics of the firm or the workers. These visits discourage new workers from practices such as stealing, dishonesty, and disrespect by way of monitoring."; MS script: "We are committed to ensuring that managers and workers will have a positive experience if they end up being matched. Our team members will conduct unannounced weekly visits to some of the firms where new workers are placed during the probation period. These workers will also be informed about the visits. Your firm may be randomly selected to receive such support visits via a lottery. The visits received do not reflect the characteristics of the firm or the workers. Visits are to ensure that the new workers are safe (not harassed) and treated with respect. These visits cannot discourage new workers from practices such as stealing, dishonesty, and disrespect by monitoring.

apply to any "diversity" dimension, including religion or ethnicity; in male-dominated sectors, however, they disproportionately deter the hiring of women, so solving them should narrow the gender gap compared to business-as-usual conditions.

Three potential concerns are worth discussing. First, the MB script explicitly mentions theft, which could prime implicit associations between female workers and dishonesty rather than operating through the monitoring mechanism. We address this confounder including the same theft wording in the MS script deliberately. Specifically, the statement that visits cannot deter stealing or dishonesty. Any priming effect therefore is present in both arms.

Second, safety audits may affect female hiring through an alternative channel: if employers themselves are a source of harassment, safety visits introduce scrutiny of their own conduct, which could deter hiring women to avoid that scrutiny. This channel operates in the opposite direction from the primary mechanism (frictions). This mechanism does not rule out the first, but makes the net effect on female hiring an empirical question and the MS results informative for policy. Workplace safety is a priority in international labor policy (ILO, 2019), and factory audits are often suggested as a tool to monitor compliance with labor standards (ILO-IFC Better Work programme). Whether such interventions affect hiring decisions remains an open question.

Third, behavior audits could generate residual safety effects through the presence of external visitors, independently of the monitoring mechanism, a potential confounder. This is where MS is essential to our design and our goal of identifying the effect of solving frictions on hiring disparities. Under the assumption that safety audits generate scrutiny effects at least as strong as behavior audits, finding no effect on female hiring under MS rules out scrutiny as a driver of MB effects; otherwise, the MB-MS difference provides a lower bound for the pure monitoring effect on the gender gap.

3.3 Empirical Strategy

We restrict the sample to the 906 employers (out of 921) who pass attention checks and exhibit variation in profile evaluations, following our pre-registered main sample proto-

col.[24] Table 2 shows covariate balance across the three experimental arms, including employers' characteristics and firm-level attributes.[25]

We estimate the hiring gender gap, defined as the difference in selection rates between male and female candidates with otherwise identical trainee profiles, using the following regression model:

$$\text{Meet}_{ijs} = \beta_0 + \beta_1 \text{Female}_{ij} + \delta_i + \sigma_s + u_{ijs}. \tag{1}$$

Meet_{ijs} denotes employer j's interest in meeting candidate profile i to hire them on probation. Female_{ij} equals 1 if employer j is randomly assigned to the female version of profile i. The coefficient β_1 captures the gender gap, measured as the differential effect for female relative to male candidates. δ_i and σ_s denote profile and strata fixed effects. Standard errors are clustered at the employer and profile levels.

To identify the average treatment effect of monitoring regimes on the gender gap, we estimate:

$$\begin{aligned} \text{Meet}_{ijs} = \beta_0 &+ \beta_1 \text{Female}_{ij} + \beta_2 \text{MB}_j + \beta_3 \text{MS}_j \\ &+ \beta_4 \text{Female}_{ij} \cdot \text{MB}_j + \beta_5 \text{Female}_{ij} \cdot \text{MS}_j + \delta_i + \sigma_s + u_{ijs}, \end{aligned} \tag{2}$$

which mirrors the baseline specification in equation 1. MB_j and MS_j are indicators for assignment to the Monitoring-Behavior and Monitoring-Safety arms, respectively; the Business-as-usual arm is the omitted category. The main coefficients of interest are $\hat{\beta}_4$ and $\hat{\beta}_5$, which capture the differential effect of each monitoring regime on the probability of selecting a female profile, that is, the change in the gender gap relative to business-as-usual conditions.

Employers' stated preferences for workforce gender composition are a natural source of heterogeneity in treatment effects. Employers with no stated preference for women are five times more likely to select no female trainees at baseline, leaving limited scope for monitoring to shift their behavior. Therefore, we also estimate a fully interacted version of this model to assess heterogeneity in treatment effects by employers' stated preferences for the gender composition of their workforce.

[24] Sample selection is uncorrelated with treatment assignment (Appendix Table A1).

[25] We find mild imbalances in one baseline variable: employer having formal vocational training. Results are robust to including this control.

4 Results

4.1 Experimental Demand for Female Workers

We examine hiring choices in the Business-as-usual arm ($N = 326$). Employers' revealed hiring choices are broadly consistent with their stated preferences for gender mix. Women face positive returns to entry: when given access to a trained applicant pool, 89.6% of employers select at least one female trainee (Figure 4). Of the profiles shown to employers, 47% are female; among all selected candidates, the average share of women is 42.2% (median 44.1%). We refer to these selection choices as relative demand for female workers, since the experimental design identifies them against an identical male candidate.

Yet employers are not gender-neutral on average. As shown in column 1 of Table 3, Panel A, women are 10.3 percentage points less likely to be selected than men with otherwise identical profiles (equation 1). The hiring gender gap is equivalent to an increase of approximately 1.3 GPA points and is statistically significant ($p < 0.001$). The gap is moderate relative to the extreme gender segregation of the Ugandan labor market, where only 2.3% of workers in these sectors are women. Relative to the mean selection rate of men, this corresponds to a gap of approximately 22%. The gap is present, though smaller, among employers with some stated preference for hiring women.

Stated preferences predict the experimental gender gap, as shown in Figure A3, panel A: the gender gap narrows significantly across the preference distribution. A 10-percentage-point increase in stated gender-mix preferences is associated with a 4.95 percentage point narrowing of the gap against female candidates ($p < 0.001$), equivalent to a 23.4% reduction relative to the gender gap among employers who report a preference for all-male ideal workforce composition.[26] Employers in the top quintile, those with a stated ideal gender mix of at least 40% women, behave as gender-neutral.

4.2 Do Behavior Audits Increase the Gender Gap?

We compare the selection rate of male and female candidates between employers randomly assigned to receive behavior audits (MB) and those in the business-as-usual condition (C). Our hypothesis is that behavior audits reduce monitoring constraints, lowering the value

[26] See Appendix Table A12, Column (1).

of trustworthiness in hiring. Because employers perceive women as more trustworthy, this should widen the hiring gender gap.

As a sanity check, we confirm that behavior audits reduce the experimentation cost of hiring from a pool of unknown workers: employers are 4.1 percentage points more likely to select a trainee, consistent with audits reducing monitoring constraints (Appendix Table A6).

The higher selection rate under MB operates entirely through a higher likelihood of selecting male trainees, consistent with our hypothesis. Figure 5 shows selection rates by gender across arms: male hiring under MB is higher, while female selection rates are comparable across the business-as-usual and MB arms, implying a fall in relative demand for women. Monitoring-Behavior is associated with a 5.2 percentage point higher male hiring rate relative to the Business-as-usual arm (Table 4, column 1; $p < 0.001$), with no statistically significant effect on female candidates ($p = 0.480$).

Providing support in monitoring workers' behavior widens the hiring gender gap against women relative to business-as-usual conditions. Table 4 estimates equation 2 on the full sample. The gender gap under behavior audits is 16.4 percentage points, compared to 10.3 percentage points under business-as-usual, a 60% increase. The difference is statistically significant at the 1% level ($p = 0.008$). As an alternative benchmark, the widening of the gender gap induced by behavior audits is equivalent to 54% of the hiring premium of a top- relative to an average-performer male profile (11.8 percentage points; $p < 0.001$).

The effects of behavior audits on the gender gap are stronger among employers with stronger stated preferences for hiring women. Figure 6 reports the gender gap for three subsamples: the full sample, employers with any stated preference for hiring women, and top-quintile employers. The first split was pre-registered: we expected that employers with no stated preference for hiring women would be less likely to hire women under business-as-usual conditions, leaving limited scope for behavior audits to widen the gap further. Indeed, employers with no stated preference are five times more likely to select no female trainees at baseline.[27]

[27] 33 employers in the Business-as-usual arm who currently employ no women and express a preference for a 100% male workforce nonetheless select at least one female profile in the experiment. Consistent with our mechanism, when asked to explain their apparently inconsistent choices, over 30% cite honesty and trustworthiness as the reason for selecting that female candidate; the remainder state they chose female applicants to give them a chance to prove themselves.

Among employers with any stated preference for hiring women, the gender gap under MB is 15.5 percentage points compared to 7.8 percentage points under business-as-usual, more than double. The pattern is sharpest among top-quintile employers, who behave as gender-neutral under business-as-usual: the gender gap under MB is 15.2 percentage points ($p < 0.001$), 2.7 times the full-sample estimate, compared to a gap statistically indistinguishable from zero under business-as-usual (Table 4). These patterns are also strikingly evident from the raw data (Appendix Figure A3) and a non-parametric regression analysis, in Table A12.

Stated preferences for gender diversity lose most of their predictive power for hiring choices once monitoring frictions are relaxed under Monitoring-Behavior. Under business-as-usual, employers in the top quintile of stated preferences for hiring women are 1.68 times more likely to select women than employers in the bottom quintile. Once monitoring frictions are relaxed, top-quintile employers exhibit gender gaps comparable to those of employers with no stated preference for hiring women.

The results are consistent with our hypothesis: support in monitoring workers' behavior and preventing theft widens the hiring gender gap, revealing latent gender gaps especially among employers who are predicted to behave as gender-neutral under business-as-usual conditions. This widening operates through a higher likelihood of hiring men, which is consistent with a perceived reduced risk of theft.

4.3 Do Safety Audits Affect the Gender Gap?

We compare the selection rate of male and female candidates between employers randomly assigned to receive safety audits (MS) and those in the business-as-usual condition. Safety audits could affect the gender gap through two opposing channels. We expect safety audits to reduce the cost of integrating women into male-dominated workplaces, narrowing the gap. External oversight, however, introduces scrutiny of employers' own conduct, which could deter them from hiring women, widening it. As with behavior audits, we first test how safety audits affect the experimentation cost of hiring from a pool of unknown workers. We find that employers are 6.4 percentage points more likely to select a trainee ($p = 0.012$), consistent with audits reducing monitoring constraints rather than deterring hiring through scrutiny (Appendix Table A6).

While behavior audits increase overall hiring by increasing the selection of men, safety audits affect selection rates only via the hiring of women. In the Monitoring-Safety arm, the likelihood of selecting a female trainee is 7.4 percentage points higher relative to the Business-as-usual arm (Table 4, column 1; $p < 0.001$), with no effect on male candidates ($p = 0.399$). Figure 5 illustrates this pattern: female selection rises from 41.9% to 49.3%, while male selection stays flat.

Safety audits close the hiring gender gap. Table 4 estimates equation 2 on the full sample. The gender gap under safety audits is 1.7 percentage points, compared to 10.3 percentage points under business-as-usual, an 83.5% reduction. The difference is statistically significant at the 1% level ($p = 0.008$). We cannot reject the null that the hiring gender gap under safety audits is zero. These results are inconsistent with the scrutiny channel binding for women dominating the safety channel. Safety audits do not deter hiring overall, as shown above, nor female hiring specifically.

We also find that, unlike behavior audits, the effect of safety audits does not vary with employers' stated preferences for hiring women. This is consistent with cooperation frictions binding uniformly: harassment and safety concerns represent a barrier to hiring women that applies regardless of employers' preferences for gender diversity. Figure 6 shows that the gender gap is uniformly lower under Monitoring-Safety across all preference subgroups, with estimates of comparable magnitude across quintiles (Table 4, columns 4–6).[28]

4.4 Mechanism Discussion and Robustness

The two treatments have opposite effects on the gender gap, consistent with a change in which worker attributes employers value. Technologies that reduce monitoring frictions lower the value of trustworthiness, the dimension on which employers perceive women more favorably. Since monitoring frictions were advantaging women, Monitoring-Behavior widens the penalty against them. Technologies that address cooperation frictions reduce integration concerns, the dimension on which employers perceive women less favorably. Since cooperation frictions were penalizing women, Monitoring-Safety narrows the gap.

An alternative explanation for the Monitoring-Behavior result is employer scrutiny: the auditor's presence raises the cost of hiring women independently of any change in the value

[28] Appendix Table A12 confirms that the treatment effect does not vary with the continuous measure of stated preferences ($p = 0.767$). Appendix Figure A3 visualizes the uniform shift across the full preference distribution.

of trustworthiness. If scrutiny drove the Monitoring-Behavior effect, it should operate even more strongly under Monitoring-Safety, where audits directly target safety. Therefore, the comparison between Monitoring-Safety and the control group rules out scrutiny as an alternative driver of the Monitoring-Behavior result.

The distributional effects of the treatments provide further supporting evidence. If scrutiny effects were concentrated among a subset of employers, some would increase and others decrease female hiring under audits, generating crossings in the distribution or higher variance. We observe neither. The Monitoring-Safety gap distribution shifts entirely left of the control with no crossing, narrowing the gap for every employer subgroup (Appendix Figure A5). Moreover, the variance of the gender gap does not differ across treatment arms.

Experimenter demands are unlikely to drive demand for female workers up, as discussed in Section 3.1, and we find little evidence in support of social desirability bias: only 6.8% believe we prefer they hired women. Moreover, the relative demand for women is meaningfully predicted by stated preferences for the gender composition of the workforce. As expected, the gender gap is widest among employers who state no preference for hiring women: these employers are five times more likely to select no female candidates in the experiment.

Results are robust across empirical strategies. Within-subject results are consistent in sign and stronger in magnitude: Monitoring-Behavior roughly doubles the gender gap (12.2 percentage points, $p < 0.001$) and Monitoring-Safety raises female hiring by 14.9 percentage points ($p < 0.001$; Appendix Table A13). The larger magnitudes likely reflect heterogeneity in employer baseline preferences muting the between-subject estimates. The treatment effects are also robust to experimenter demands, as dropping the respondents who expect us to want them to hire women from the sample if anything strengthens the results (Appendix Table A9).

The treatment effects are consistent with employers responding to changes in the demand for worker attributes rather than audit scrutiny. Under Monitoring-Safety, where audits most directly monitor employer conduct toward workers, female hiring rises, the opposite of what scrutiny predicts. The full distribution of employer-level responses shifts in the same direction, with no crossing relative to the control (Appendix Figure A5), ruling out that the average effect masks offsetting responses across employers.

The mechanism we propose requires that stated gendered perceptions of worker attributes are also reflected in how employers actually evaluate candidates. Pre-registered secondary outcomes confirm this: holding other attributes constant, female profiles are rated as more trustworthy but as having lower technical performance (Appendix Table A5). These patterns suggest that the same attributes employers state to care about also shape baseline demand for female workers, and the treatment effects.

5 Hidden Gender Discrimination

Our results reveal a hidden hiring penalty against women in the status quo. Absent support in monitoring workers' behavior, theft risk makes women valuable as employers perceive them as more trustworthy. This demand for trust offsets a larger penalty. Employers in the top quintile of stated preferences for hiring women behave as gender-neutral under business-as-usual, yet show a gender gap of 15.2 percentage points under Monitoring-Behavior, statistically indistinguishable from employers in the bottom quintile.

Three questions follow. First, is the gap we uncover bias, or does it reflect forms of efficient discrimination? Second, how much bias do women face? Third, are employers' beliefs about workers' attributes accurate? If beliefs about trustworthiness are wrong, the trust advantage that masks discrimination under business-as-usual is itself a distortion, not efficient screening.

5.1 Sources of the Hidden Penalty: Evidence of Discrimination

We use the cross-randomization of gender and performance signals to rule out statistical discrimination on technical performance, and survey evidence to identify the relevance of customer or coworker discrimination. We also benchmark the role of safety concerns. We conclude that monitoring frictions do not compensate for screening on other technical dimensions, and rule out that expectations of customer or coworker discrimination drive the results. Leveraging the Monitoring-Safety arm as a benchmark, we find that safety concerns account for approximately half of the hidden gap. The results point to meaningful hidden discrimination.

5.1.1 Statistical Discrimination on Technical Performance

The hidden gender penalty we uncover could reflect statistical discrimination on technical performance. If employers who stated preferences for hiring women were compensating for believing women are less skilled, removing the trust advantage would cause them to revert to hiring on technical performance, favoring men. Under this interpretation, the widening gender gap under Monitoring-Behavior reflects a change in the weight of relevant attributes, not greater discrimination against women.

We test this using the cross-randomization of gender and technical performance signals in the worker profiles. Profiles are randomly assigned a top or average performance ranking within their vocational training cohort, based on evaluations of both theory and practical tasks. If employers use gender as a proxy for technical performance, high-performance signals should narrow the gap (Bertrand and Duflo, 2017). We estimate a fully interacted model of hiring on gender, technical performance, and monitoring regimes (Appendix Table A4; Figure **??**).[29] As a sanity check, employers place substantial weight on this signal: high-performance profiles are 10.1 percentage points more likely to be selected (22.9%; $p < 0.001$).

We find that female and male candidates benefit equally from the performance signal under business-as-usual conditions. The interaction between technical performance and gender is small, negative, and statistically insignificant ($p = 0.312$): the gender gap does not narrow with higher observed technical performance. Results are similar using an alternative profile quality index that equally weights secondary education, DIT certification, enrollment in a 12-month program, and GPA: a one-standard-deviation increase raises the probability of selection by 13.3 percentage points ($p < 0.001$) but does not reduce the gender gap ($p = 0.454$; Appendix Table A3).

Across all three arms, the gender gap is orthogonal to technical performance signals, ruling out statistical discrimination on this dimension. The treatment effects are inconsistent with statistical discrimination on technical performance: solving safety or monitoring frictions does not shift employers toward higher-performing women, or away from lower-performing ones. Under Monitoring-Behavior, male hiring rises while female hiring remains unchanged for both performance levels ($p = 0.871$). Under Monitoring-Safety, the pattern is symmetric: female hiring rises uniformly across performance levels ($p = 0.758$).

[29] We also present sample-split estimates in Appendix Table A2.

We find no evidence of customer or coworker discrimination: 45% of employers expect profits to increase with more female workers and only 9% expect a decrease, with 84% of the former citing either that customer value women's trustworthiness or that customers would be attracted by women. The gender gap does not differ between employers who believe female workers attract customers and those who do not (Appendix Table A10). Similarly, 63% of employers report that all current workers would accept a female colleague, and these beliefs do not predict the gap (Appendix Table A11).

5.1.2 Safety Concerns

Safety concerns account for a substantial share of the gender gap. Under business-as-usual, the gap is 10.3 percentage points; Monitoring-Safety reduces it to 1.7 percentage points, an 8.6 percentage point reduction. Under the assumption that the value of safety audits does not depend on whether behavior audits are also offered, we can benchmark how much of the hidden gap is attributable to safety concerns. Of the 6 percentage points of hidden discrimination revealed by Monitoring-Behavior, approximately half (3 percentage points) can be attributed to harassment and safety concerns, with the remainder reflecting bias that was also masked by the trust premium.

Whether safety concerns reflect actual productivity costs or paternalistic preferences is not clear ex ante, and our experiment does not resolve this. If employers treat harassment risk as a productivity difference, approximately half of the hidden gap reflects efficient statistical discrimination rather than bias. If instead safety concerns reflect paternalism, or if employers price in costs such as reputation, the full 6 percentage points revealed under Monitoring-Behavior represents bias.

5.2 Measuring Bias in a Multi-Dimensional Skill Framework

We can show that residual estimates of bias depend on which attributes are measured and treated as productive. In a standard unidimensional worker attribute framework, where workers can be ranked according to a single measure of technical performance, the gender gap observed under business-as-usual conditions would be interpreted as evidence of a hiring penalty against women of approximately 10 percentage points attributable to bias. Our design highlights, however, that this interpretation can be incomplete as the unidimensional framework can underestimate bias if positive statistical discrimination

along one productive dimension (or positive bias) can mask negative discrimination or bias along another, while negative statistical discrimination along unobserved dimensions can mechanically inflate residual measures of bias. As a result, residual approaches will offer different estimates of bias depending on which relevant productivity characteristics are observed.

Our experimental results show that this simple identification problem has first-order measurement implications. In a framework with both technical performance and trustworthiness as productive attributes, the implied degree of bias against women is at least 60% larger (16 percentage points) than what would be inferred under a one-dimensional model.[30] This reveals 6 percentage points of hidden discrimination that was masked by women's perceived trust advantage. Comparing the Monitoring-Safety and Business-as-usual arms allows us to decompose this hidden gap: approximately half (3 percentage points, or 30% of the original 10 percentage point gap) relates to harassment concerns, with the remainder reflecting other sources of bias.[31]

However, what should be considered as a determinant of productivity is not obvious and conceptually important for the estimate of bias. If employers treat safety risk as a genuine productivity cost, then the 3 percentage points of the hidden gap attributable to harassment concerns might reflect rational statistical discrimination rather than bias, leaving approximately 13 percentage points (10pp baseline + 3pp other hidden bias) as the residual bias estimate. If instead employers' safety concerns reflect paternalistic preferences rather than productivity considerations, then the relevant distinction is between altruism and paternalism. Given that all candidates have self-selected into vocational training for male-dominated trades and that female and male trainees exhibit similar risk preferences, employers' responses to safety-related frictions are most consistent with paternalistic discrimination. Under this interpretation, the full 6 percentage points gap revealed when monitoring frictions are reduced represents bias deriving in part from gender norms that promote the protection of women.

[30] Because monitoring frictions are not fully eliminated, this estimate should be interpreted as a lower bound.

[31] The Monitoring-Safety vs. Business-as-usual comparison shows that addressing safety concerns reduces the gap by 8.3 percentage points (from 10 percentage points to 1.7 percentage points), suggesting safety concerns are a substantial friction. However, when monitoring constraints are relaxed (MB), revealing the full 16 percentage point gap, approximately half of the 6 percentage point increase in hidden discrimination can be attributed to factors related to harassment and safety, with the other half reflecting additional bias that was also masked by the trust premium.

This exercise highlights that the technology under which hiring decisions are made, and our assumptions about which attributes constitute productivity, have meaningful measurement implications. In our setting, residual bias estimates range from 1.9 percentage points (when trustworthiness and harassment concerns are both treated as sources of accurate statistical discrimination) to 16.75 percentage points (when harassment concerns are treated as paternalistic and the trust premium is fully accounted for). Of course, there may be additional dimensions of productivity that we do not observe. As a result, outcome gaps are not necessary for the presence of discrimination and lack of outcome gaps, as for the example in the Monitoring-Safety arm, need not mean absence of discrimination.

5.3 Beliefs Accuracy

Finally, whether the trust advantage that masks discrimination under business-as-usual reflects efficient screening or a distortion depends on the accuracy of employers' beliefs. We cannot determine whether trust or safety are productive attributes. We can, however, assess belief accuracy by comparing employers' gendered beliefs about worker attributes to survey data from 182 vocational trainees across seven training centers, incentivizing employer responses with the true survey results. Our sample of trainees is described in Appendix Table A14.

Technical skills. We assess two measures of technical skills. To measure technical skills on practical tasks, we ask trainees to self-report their ability to perform sector-specific technical tasks, following the approach developed by Alfonsi et al. (2020).[32] We assess theoretical knowledge with a set of theoretical questions specific to their specialization. The theoretical questions were designed by VTI instructors; an exam example is shown in Figure A6. The results of both trainee outcomes and employers' beliefs by gender are summarized in Figure 7 and in Appendix Table A15.

Employers perceive female workers as less skilled, both on practical and theoretical tasks. On average, employers expect women to be 20.8% and 25.4% less likely than men to answer correctly on theory and practical exams, respectively (both $p < 0.001$). These beliefs are inaccurate: we find no evidence of gender differences in trainee performance.

[32]For trainees in motor mechanics: "Can you perform an oil change on a vehicle?"; for welders: "Can you perform a clean and strong weld on stainless steel surface?"; for carpenters: "Can you perform a wood sanding using a coated abrasive?".

In self-assessments, female and male trainees are equally likely to report being able to perform a standard sector task ($p = 0.831$). On the theory exam, women perform at least as well as men, if anything outperforming them, though the difference is not statistically significant (8.3 percentage points; $p = 0.068$).[33]

Trustworthiness. The literature typically measures trust using the investment game (Berg et al., 1995), but this game captures beliefs about how much another party will reciprocate trust, conditional on having been trusted. Similarly, survey-based measures, such as those in the World Values Survey, elicit generalized trust or prosociality. The die-rolling paradigm (Fischbacher and Föllmi-Heusi, 2013) detects dishonesty statistically by comparing self-reported outcomes to known distributions, but this is very distant from the type of stealing or moral hazard that employers are concerned about in our setting. In a production setting closer to ours, Caria and Falco (2024) design an incentive-compatible game to measure moral hazard, but they focus on unsupervised effort in productive tasks. None of these definitions captures trustworthiness as honesty and non-stealing. Finding that employers' beliefs are inaccurate on these outcomes would not be informative. We therefore design an incentivized task measuring both effort and cheating, supervised and unsupervised.

Our "Cheating" task is as follows. We randomly assign trainees to supervised or unsupervised conditions. In the unsupervised condition, trainees receive a flat wage to complete up to 12 proofreading tasks, with no output verification. In the supervised condition, trainees are paid piece rate, with supervisors verifying output and paying only for completed tasks. The number of completed tasks is our measure of output/effort. We introduce an incentive to cheat: trainees can increase their pay by 50% by claiming to find more than 10 proofreading mistakes, although by design there are fewer than 10, making this a direct measure of cheating. The sample is stratified by treatment and gender to estimate mean outcomes separately for each group.[34] Employers predict average task completion and likelihood of cheating for male and female trainees separately, under

[33]Because of time constraints, we elicited employers' beliefs on one randomly selected theory question and matched these to actual trainee outcomes. On this question, female trainees are 23.4 percentage points more likely to answer correctly ($p = 0.017$); see Table A15.

[34]To avoid deception, individual output is not verified in the unsupervised arm. Effort can only be assessed at the treatment-by-gender cell level. As a sanity check, employers expect supervision to increase task completion by 21.2 percentage points ($p < 0.001$) from a baseline rate of 66.9%; this effect is driven by male trainees increasing effort under supervision, with the gender gap in completion disappearing under supervision ($p = 0.985$).

both supervised and unsupervised conditions. Results are presented in columns (7)–(11) of Appendix Table A15.

Most relevant to our question, employers expect unsupervised female trainees to misreport less than unsupervised men (11.5 percentage points relative to a perceived average likelihood of 46.6% for men, $p < 0.001$).[35] The effect is driven by both men and women: 25.6% of men cheat when supervised, and women are 5.7 percentage points less likely than men to cheat. Thus, overall employers expect women to exert more effort and cheat less than men, especially when unsupervised. Employers' beliefs are not in line with actual trainee behavior. Task completion is nearly universal (97%) across gender and supervision. Cheating is low on average (10.4%), with no statistically significant gender differences. Supervision substantially reduces misreporting (63%, $p = 0.014$), with no differential effect by gender ($p = 0.593$).

5.3.1 Discussion

This section establishes three facts about the hidden gender gap. First, the penalty does not reflect statistical discrimination on technical performance: high-performance signals do not narrow the gap. Second, the safety benchmark suggests that only half of the hidden gap operates through harassment and safety concerns. Third, as far as we can measure, male and female workers have comparable skills, and employers' beliefs are inaccurate.

These results help us interpret the effect of monitoring technology on the gender composition of hiring. The fact that hiring composition varies when frictions are solved could be efficient if beliefs are accurate and the relevant attribute reflects genuine worker productivity differences under the different technologies. We cannot establish whether safety or trustworthiness are productive attributes, or measure actual worker productivity under the different frictions. This limits our ability to precisely estimate the extent of bias. This limitation, however, is not specific to our setting: no discrimination study observes every attribute that employers value, and residual bias estimates always depend on assumptions about which attributes are productive. Our contribution is to show that these assumptions matter. We show that the measured gender gap is sensitive to which frictions are present and which attributes they reward. A standard unidimensional framework that

[35] Employers overall expect supervision to reduce the overall likelihood of cheating by 18.1 percentage points.

accounts only for technical performance misses the trust advantage that masks discrimination under business-as-usual, and underestimates bias.

Employers' beliefs are inaccurate: they expect women to be more trustworthy and less technically skilled, yet we find no gender differences on either dimension among trainees. The trust advantage that offsets the gender penalty under business-as-usual is not grounded in real behavior differences. Moreover, trustworthiness and safety plausibly operate through costs to the firm — monitoring burden, theft losses, reallocation of productive employer time — rather than through worker productivity differences. Under either interpretation, the monitoring friction introduces a wedge, not efficient screening. Removing it widens the gender gap and reduces allocative efficiency— two distortions partially offsetting in a second-best equilibrium, where resolving one worsens the other.

6 Conclusions

We study hiring preferences for women in three male-dominated manufacturing sectors in Uganda and their relationship to workplace frictions. We document substantial unmet demand for female workers, despite employers perceiving women as less technically skilled. Employers also hold gendered beliefs about attributes such as cooperation and trustworthiness, whose value depends on the frictions employers face. We show that technology to address frictions affects the hiring gender gap in opposite directions, predicted by employers' gendered beliefs about attributes. Experimentally reducing monitoring constraints over new worker behavior widens the hiring gender gap; addressing harassment concerns by monitoring new workers' interactions closes it. Monitoring frictions hide discrimination, as the hiring gender penalty we uncover is not explained by statistical discrimination on performance. The extent of hidden discrimination varies significantly depending on which attributes we measure and consider as productive, and is concentrated among employers that have the strongest stated diversity preferences. Back-of-the-envelope calculations suggest that 56% of the stated demand for diversity in the workplace is explained by demand for trustworthiness.

Our experiment measures employers' hiring preferences, not realized labor market outcomes. How these preferences translate into retention and female labor force participation depends on many factors we do not observe. With this caveat, apparently gender-neutral technology can have gendered effects on hiring. This need not be inefficient: if beliefs

are accurate and workers' productivity is genuinely changing, resolving frictions improves allocations. However, when multiple wedges coexist, solving one friction can reduce efficiency in a second-best sense. In our setting, beliefs about productive attributes by gender are inaccurate on various dimensions and there is bias. Our experiment provides direct evidence of this logic, as the two interventions push the gender gap in opposite directions. Moreover, that gender bundles multiple potentially productive attributes also complicates estimation of bias: positive perceived selection along friction-rewarded traits can lead to underestimating discrimination, and the researcher must take a stance on what employers treat as productive. More speculatively, since the production function defines which attributes are productive but is itself endogenous, discriminatory employers may choose production technologies that favor the attributes of preferred groups, blurring the line between taste-based and statistical discrimination.

Turning to policy implications, relatively simple safety interventions can meaningfully reduce the perceived cost of hiring women. Our treatment, however, operates on employers' beliefs about risk and may not improve actual workplace safety, unlike interventions that directly address harassment reporting (Boudreau et al., 2023) or safety through policing (Amaral et al., 2023). Our results also speak to the effectiveness of supply-side interventions. Training programs for women yield mixed results (Bandiera et al., 2022a; Heath et al., 2024), in part because their impact depends on which demand-side barriers bind. The same trained female worker may face a different hiring likelihood depending on which constraints employers face.

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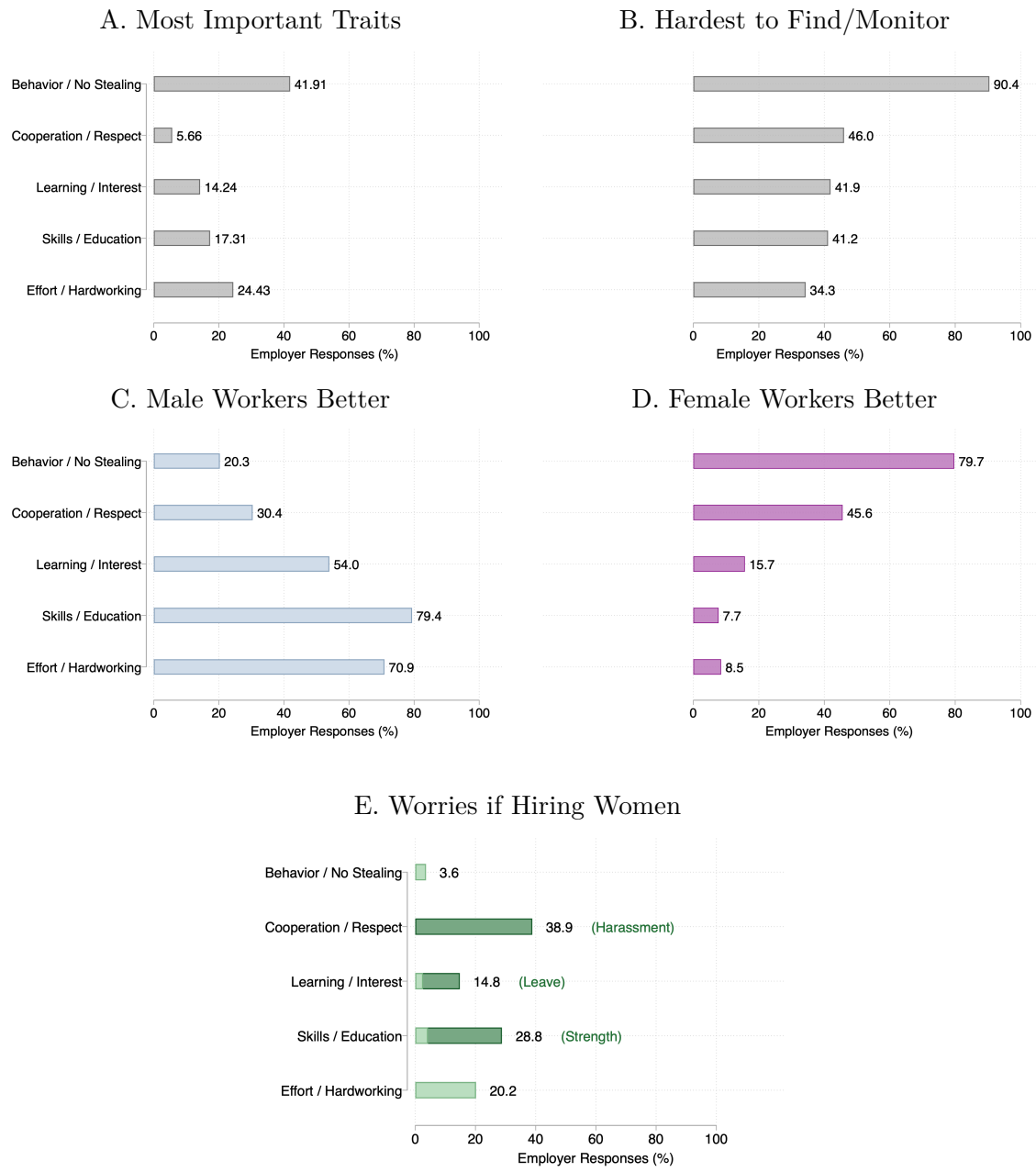
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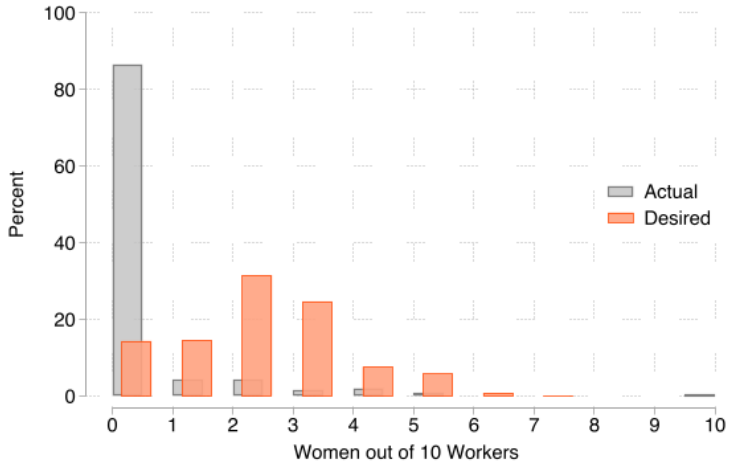
Figures

Figure 1: Demand for Worker Attributes and Employers' Gendered Perceptions



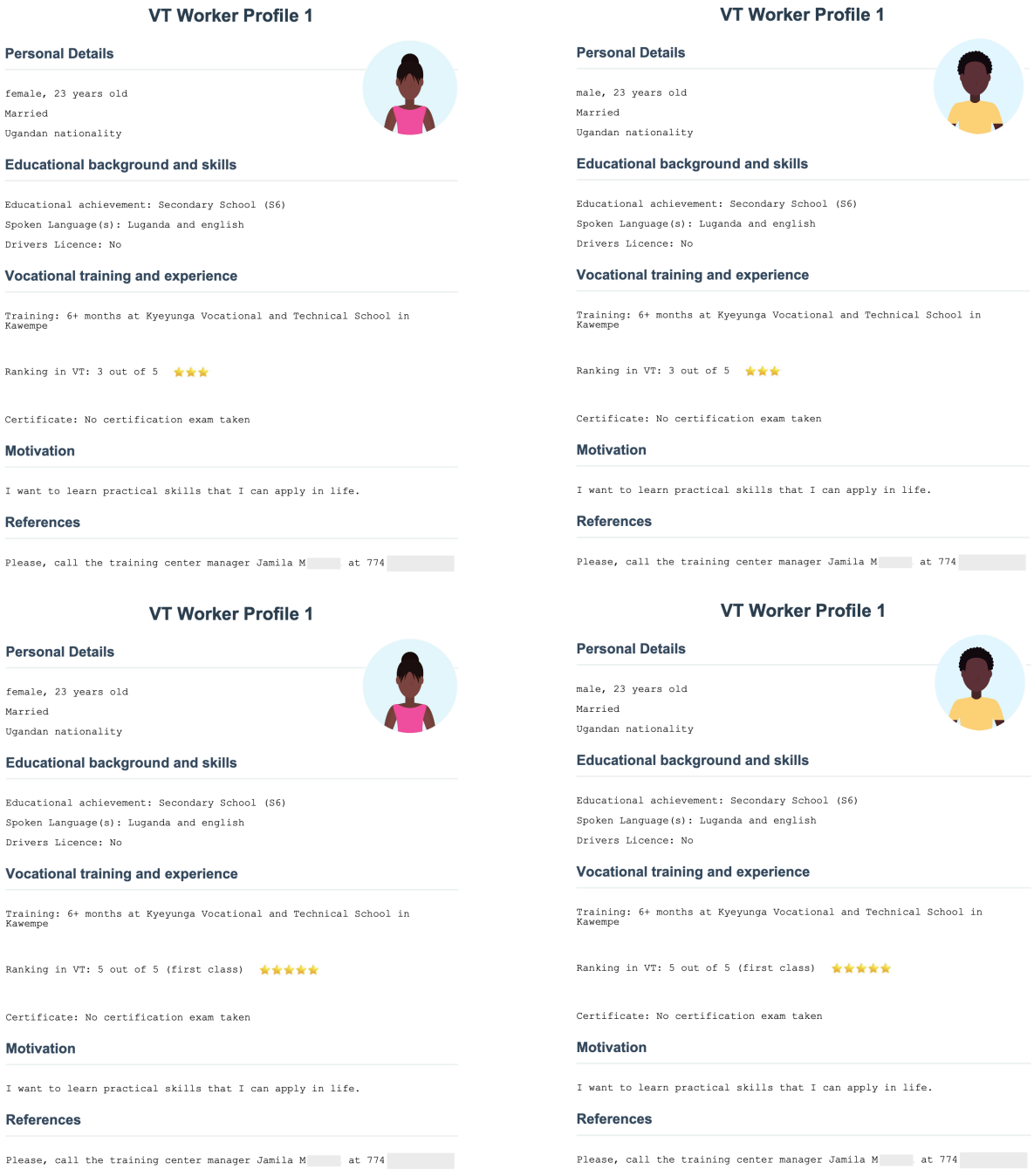
Notes: Descriptive statistics from the full sample of employers. Panel A: share citing each trait as most important in a worker (open-ended responses, manually recoded). Panel B: share reporting each trait as hardest to find or monitor. Panels C–D: share answering "Male" or "Female" to "Do you think male or female workers are better at [trait]?", including indifference. Panel E: open-ended responses to "If you think of hiring a woman, what do you worry about?", recategorized into the same trait categories. Darker bar portions isolate gender-specific sub-worries: "Strength" within Skills/Education, "Leave" within Learning/Interest, "Safety/Harassment" within Cooperation/Respect. Of respondents, 10.73% answered "Nothing" and 1.79% "Other".

Figure 2: Employers' Desired and Actual Gender Mix Among Workforce



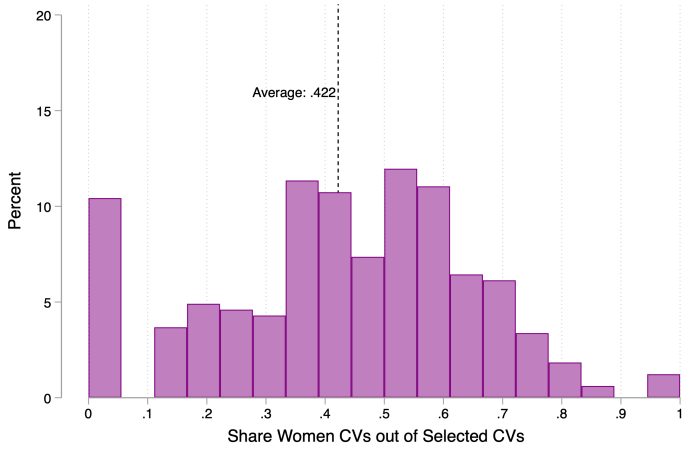
Notes: The figure is based on the full sample of employers. It presents the distributions of the desired gender composition (on a scale from 0 women out of 10 (all men) to 10 women out of 10 (all women)) versus the actual share of women among current workers, rescaled to 10.

Figure 3: CV Examples



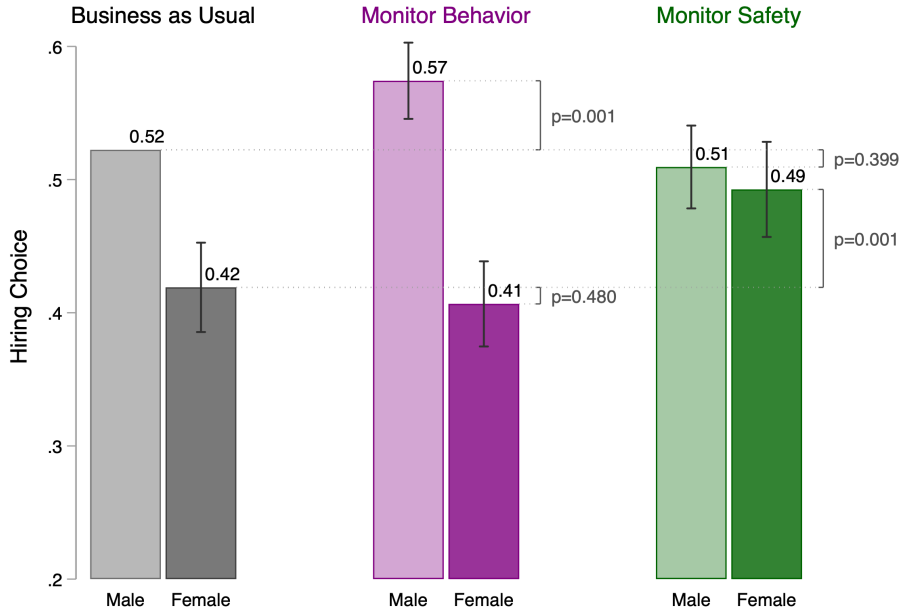
Notes: Examples of hypothetical profile 1 in both female and male versions and for high and low performance levels. In total, there are 24 profiles, with four variations for each profile that reflect the 2×2 design based on gender and performance.

Figure 4: Demand for Female Workers in the Experiment Under Business as Usual



Notes: Data from the main experiment, restricted to the 326 employers in the Control group (business-as-usual), comprising 7,365 hiring decisions. The figure shows the distribution of the share of female candidates among those selected for a meeting, with an average female share of 42.2%.

Figure 5: Hiring Choice by Gender and Monitoring Arm



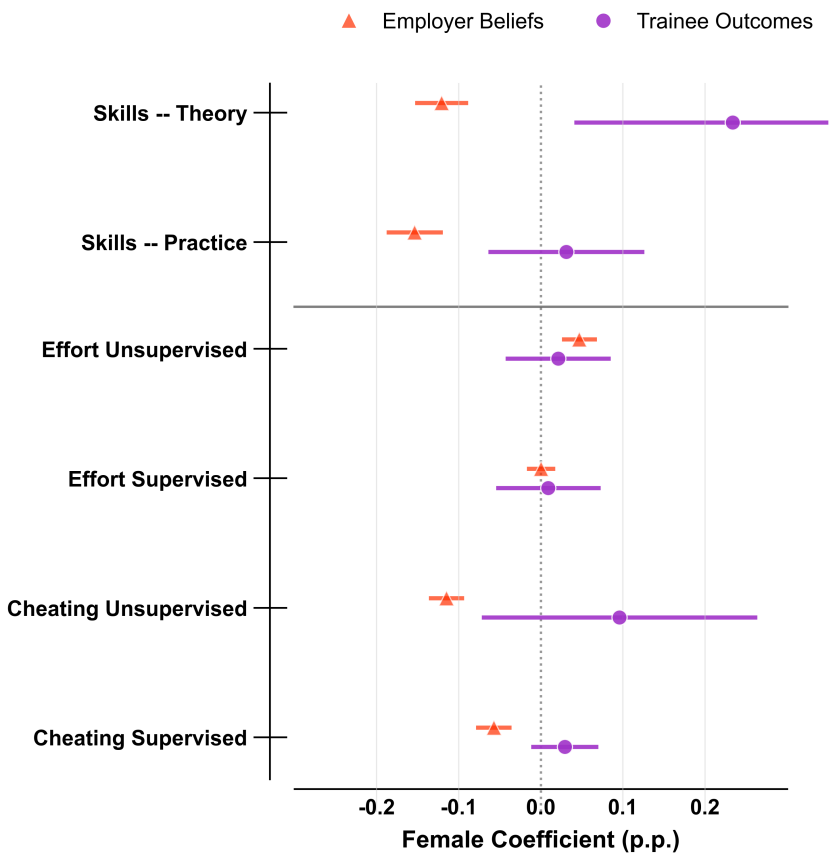
Notes: Bars report the likelihood of the employer to meet the candidate for hiring on probation for male and female candidates across the three monitoring arms: Business as Usual (Control), Monitor Behavior, and Monitor Safety. Levels are estimated from a fully interacted specification of candidate gender and monitoring condition as in Equation 2, with 95% confidence intervals. Brackets and p-values report within-gender, across-arm comparisons testing whether each monitoring treatment shifts hiring relative to the Control, separately for male and female candidates. Monitor Behavior significantly increases hiring of male candidates ($p < 0.001$) with no effect on female candidates ($p = 0.480$), while Monitor Safety significantly increases hiring of female candidates ($p < 0.001$) with no effect on male candidates ($p = 0.399$). $N = 20{,}726$ evaluations from 921 employers.

Figure 6: Hiring Gender Gap by Monitoring Arm and Preferences for Workforce Gender-Mix



Notes: Data from the experiment. Point estimates and 95% confidence intervals for the gender gap against women are estimated using the regression in Equation 2 and reported by treatment arm. The figure presents results across three levels of employers' stated preferences for workforce gender mix. Circles denote estimates for the full sample ($N = 20{,}726$). Squares denote estimates for employers with any stated preferences for workforce gender mix ($N = 17{,}748$); these are obtained from a regression that includes an indicator for having any stated preferences, fully interacted with candidate gender and the randomly assigned monitoring condition. Triangles denote estimates from the same specification using an indicator for employers in the top quintile of stated preferences (i.e., 40–60% female workers; $N = 3{,}031$).

Figure 7: Gender Gap in Skills and Trustworthiness



Notes: Data from the baseline employer survey and the trainee survey. The figure plots the coefficient on gender for employers' beliefs and for actual trainee behavior. Practical technical skills are self-assessed; theoretical skills are elicited via an exam. The Cheating task is described in Section 5.3.

Tables

Table 1: Descriptive Statistics by Sector

	All	Mechanics		Carpentry		Welding	
	Mean	Mean	[Q25;Q75]	Mean	[Q25;Q75]	Mean	[Q25;Q75]
Panel A: **Firms**							
Workers (N)	8.34	15.16	[7 ; 20]	4.55	[2.5 ; 5]	5	[3 ; 6]
Female workers (N)	0.14	0.13	[0 ; 0]	0.19	[0 ; 0]	0.09	[0 ; 0]
Trainees (N)	2.64	5.4	[2 ; 6]	0.97	[0 ; 2]	1.41	[0 ; 2]
Family workers (share)	0.14	0.07	[0 ; 0.12]	0.16	[0 ; 0.25]	0.2	[0 ; 0.33]
Age (years)	10.73	12.11	[6 ; 16]	10.01	[5 ; 14]	9.99	[5 ; 13]
Firm capital (USD)	1215.0	1594.4	[0.04 ; 1852]	933.4	[0.04 ; 1037]	1079.1	[0.04 ; 1481]
Firm revenue (USD)	718.1	589.3	[0.04 ; 926]	705.0	[0.04 ; 1111]	874.1	[0.04 ; 1407]
Firm profits (USD)	286.0	246.2	[0.04 ; 370]	276.8	[0.04 ; 370]	339.4	[0.04 ; 556]
Customers (N/day)	11.76	6.44	[4 ; 8]	14.37	[6 ; 20]	14.76	[5 ; 20]
Any stealing	0.83	0.9	[1 ; 1]	0.81	[1 ; 1]	0.77	[1 ; 1]
Monitor constrained	0.9	0.89	[1 ; 1]	0.93	[1 ; 1]	0.89	[1 ; 1]
Panel B: **Employers**							
Male	0.96	0.96	[1 ; 1]	0.96	[1 ; 1]	0.97	[1 ; 1]
Age (years)	37.08	40.08	[32 ; 47]	35.78	[28 ; 42]	35.24	[29 ; 40]
Experience (years)	15.21	18.66	[10 ; 25]	13.19	[6 ; 19]	13.6	[8 ; 20]
Higher education	0.63	0.64	[0 ; 1]	0.62	[0 ; 1]	0.65	[0 ; 1]
VTI trained	0.31	0.37	[0 ; 1]	0.27	[0 ; 1]	0.29	[0 ; 1]
Hours worked (per day)	10.44	10.47	[10 ; 12]	10.48	[9 ; 12]	10.38	[10 ; 11]
Hours monitor (per day)	2.06	2.03	[1 ; 2]	2.1	[1 ; 2]	2.07	[1 ; 2]
Observations	921	318		300		303	

Notes: The table reports summary statistics for the full sample, with means and interquartile ranges by sector. Panel A presents firm characteristics and Panel B employer characteristics. Monetary values are in USD. *Family workers (share)* is the share of workers who are family members or close friends. *Any stealing*, *Monitoring constrained*, *Higher education*, and *VTI trained* are binary indicators for having experienced worker theft, desiring more monitoring, completing secondary education, and having received VTI training, respectively.

Table 2: Balance Table

	C (1)		MB (2)		MS (3)		*p*-value	*p*-value	N
	Mean	SD	Mean	SD	Mean	SD	(1)-(2)	(1)-(3)	
Panel A: **Firms**									
Workers (N)	8.24	(8.96)	8.67	(8.66)	7.95	(9.14)	0.085	0.502	903
Female workers (N)	0.19	(0.55)	0.21	(0.56)	0.17	(0.48)	0.464	0.831	906
Trainees (N)	2.52	(3.43)	2.57	(3.25)	2.81	(5.48)	0.381	0.097	906
Family workers (share)	0.15	(0.25)	0.15	(0.23)	0.13	(0.22)	0.527	0.115	898
Age (years)	10.62	(7.82)	11.27	(8.11)	10.35	(7.23)	0.244	0.671	906
Firm capital (USD)	1245	(2776.4)	1437	(3547.9)	974.7	(1421.8)	0.220	0.136	866
Firm revenue (USD)	649.2	(861.9)	699.9	(885.8)	805.6	(1055.4)	0.556	0.122	861
Firm profits (USD)	259.8	(396.4)	279.8	(405.2)	317.1	(468.7)	0.634	0.187	865
Customers (N/day)	11.9	(17.65)	12.03	(13.2)	11.1	(11.87)	0.810	0.109	906
Any stealing	0.83	(0.38)	0.85	(0.36)	0.81	(0.39)	0.667	0.528	906
Monitoring constrained	0.9	(0.31)	0.92	(0.28)	0.9	(0.3)	0.395	0.930	906
Panel B: **Employers**									
Male	0.97	(0.17)	0.95	(0.23)	0.98	(0.14)	0.115	0.387	906
Age (years)	37.12	(9.84)	36.47	(9.25)	37.26	(10.26)	0.472	0.620	903
Experience (years)	15.12	(8.96)	15.38	(9.11)	14.81	(9.01)	0.580	0.719	904
Higher education	0.62	(0.49)	0.62	(0.49)	0.66	(0.47)	0.966	0.491	906
VTI trained	0.27	(0.45)	0.34	(0.47)	0.32	(0.47)	0.058	0.159	906
Hours worked (per day)	10.55	(1.54)	10.45	(1.7)	10.35	(1.82)	0.592	0.237	906
Hours monitor (per day)	2.08	(1.58)	2	(1.29)	2.08	(1.52)	0.459	0.970	902

Notes: The table presents baseline balance for the main experimental sample. Columns (1), (2), and (3) report means by treatment arm—Business-as-usual (C), Monitoring Behavior (MB), and Monitoring Safety (MS)—with standard deviations shown in parentheses in adjacent columns. Columns (1)–(2) and (1)–(3) report *p*-values from regressions of each outcome on a treatment indicator, including strata fixed effects and robust standard errors. The final column reports the sample size used in each balance test. Some observations are missing due to respondent nonresponse. Significance levels are based on randomization inference *p*-values: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Hiring Gender Gap in Control Arm and by Stated Preferences

			Stated Preferences for Workforce Gender Mix				
Meet (0-1)	(1) Main Sample	(2) Gender-Mix Pref. > 0	(3) Bottom QT	(4) 2nd QT	(5) 3rd QT	(6) 4th QT	(7) Top QT
Female	-0.103***	-0.077***	-0.233***	-0.153***	-0.098***	-0.083***	0.026
	[0.016]	[0.015]	[0.050]	[0.038]	[0.026]	[0.027]	[0.032]
Observations	7,365	6,206	1,159	870	2,340	1,764	1,232
R-squared	0.123	0.123	0.200	0.190	0.149	0.129	0.137
Control mean	0.522	0.517	0.552	0.497	0.523	0.535	0.491

Notes: The table reports treatment effects from regression model 1 for employers in the Control (business-as-usual) group, overall and by quintiles of employers' preferred workforce gender composition. Column (1) presents results for the full business-as-usual sample; column (2) excludes employers who prefer an all-male workforce. Columns (3)–(7) restrict the sample to each quintile of the preferred gender composition distribution. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire them on probation. *Female* is an indicator for female candidates. Standard errors, reported in brackets, are clustered at the respondent and profile levels. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Hiring Gender Gap Across Treatment Arms and by Stated Preferences

			Stated Preferences for Workforce Gender Mix				
Meet (0-1)	(1) Main Sample	(2) Gender-Mix Pref. > 0	(3) Bottom QT	(4) 2nd QT	(5) 3rd QT	(6) 4th QT	(7) Top QT
Female	-0.103***	-0.078***	-0.235***	-0.158***	-0.099***	-0.087***	0.029
	[0.016]	[0.016]	[0.052]	[0.039]	[0.026]	[0.028]	[0.034]
Monitor Behavior	0.052***	0.061***	-0.014	0.038	0.052*	0.060**	0.104***
	[0.014]	[0.015]	[0.040]	[0.037]	[0.027]	[0.026]	[0.034]
Monitor Safety	-0.013	-0.017	-0.000	-0.061*	-0.016	-0.020	-0.005
	[0.015]	[0.017]	[0.047]	[0.035]	[0.026]	[0.027]	[0.044]
Female x Monitor Behavior	-0.064***	-0.077***	0.003	-0.050	-0.061	-0.040	-0.178***
	[0.022]	[0.023]	[0.071]	[0.061]	[0.038]	[0.044]	[0.047]
Female x Monitor Safety	0.086***	0.091***	0.026	0.137**	0.104**	0.091*	0.070
	[0.028]	[0.028]	[0.089]	[0.054]	[0.044]	[0.045]	[0.073]
Observations	20,725	17,748	2,977	3,002	6,471	5,244	3,031
R-squared	0.127	0.126	0.177	0.175	0.147	0.119	0.124
Control Mean	0.522	0.517	0.552	0.497	0.523	0.535	0.491

Notes: The table reports the treatment effects for the main sample, and by quintiles distribution of stated preferred gender workforce composition of the employer. Column (1) shows the effects from the main sample; column (2) excludes employers with preferences for an all-male workforce. Columns (3) to (7) restrict the sample to each quintiles distribution of preferred gender workforce composition. The dependent variable is *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire them on probation. *Female* is a binary variable indicating whether the profile corresponds to a woman. *Monitoring Behavior* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' behavior. *Monitoring Safety* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' respect. Profile and strata fixed effects are included (not reported in the table). Standard errors are clustered by respondent and profile levels. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

A Appendix

A.1 Differences From Preregistration

We note three main deviations from the first pre-registration. First, the second primary outcome was not recorded as intended due to a coding error in the survey. The variable *Offer*—elicited using the question, "How likely would you be to offer this worker a position as a mechanic at your firm? Please rate on a scale from 0 to 10, where 0 is very unlikely and 10 is very likely"—was intended to be a primary outcome but was not recorded in the first wave; we therefore chose not to collect it in the second wave.

Second, we expanded the study to include two additional sectors—carpentry and welding—in addition to mechanics. As preregistered, we planned to expand data collection to additional sectors if power proved insufficient. We observed substantial heterogeneity in stated preferences for hiring women, and the additional sectors provide sufficient power to study treatment effect heterogeneity by stated preferences.

Third, because the number of firms per new sector in the second wave was uncertain, we added a *within-subject* component. After completing the initial 24 evaluations under the main treatment condition, each employer rated 12 additional profiles under a second monitoring condition.

Fourth, although the respect audit arm was preregistered as an active control or benchmark, we report its results as an additional treatment of interest given their policy relevance.

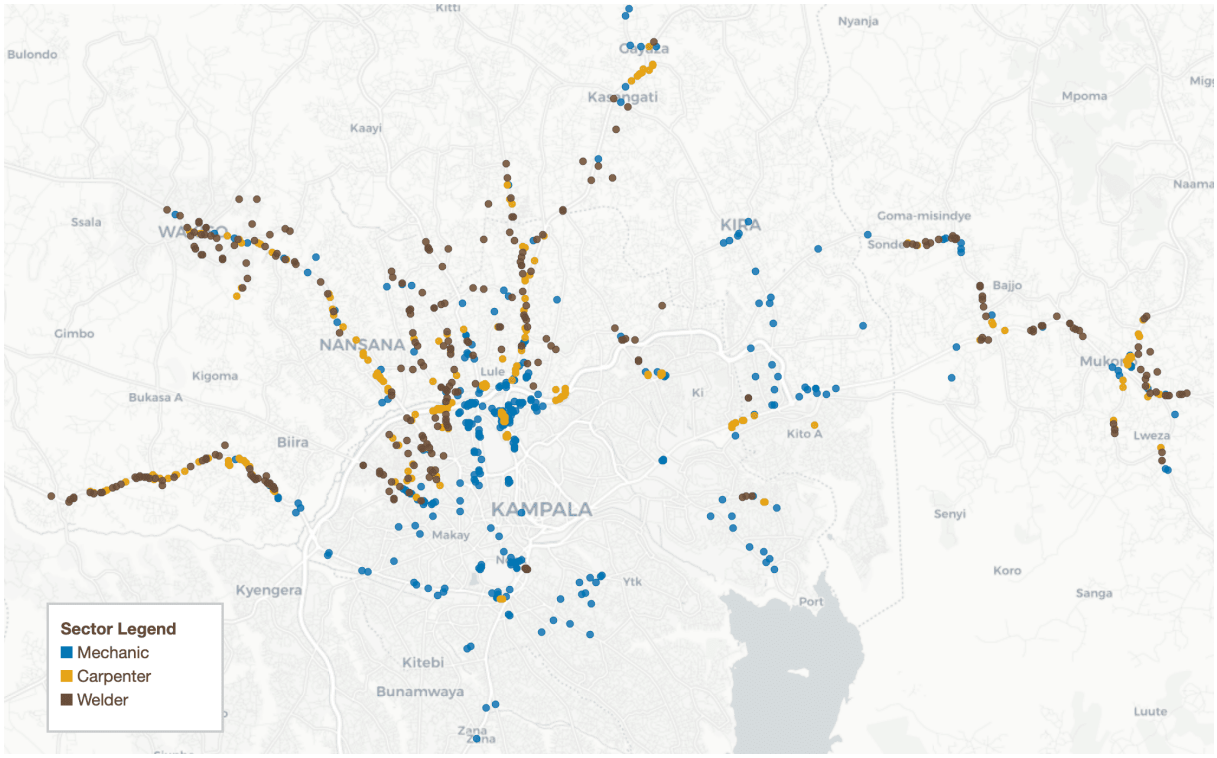
We amended the preregistration before expanding the sample to reflect these changes (except the last one) and to document the motivations.

A.2 Within-Subject Design Results

The within-subject design is not our primary specification, but it provides greater statistical power. Employers assigned to the Business-as-usual arm were randomly assigned a second condition of either Monitoring-Behavior or Monitoring-Safety; employers assigned to an active monitoring arm rated profiles under the other active arm as their second condition. The Business-as-usual condition was never assigned as the second condition, ensuring that control-group responses are uncontaminated by prior exposure to an active monitoring regime. The order of the two conditions was randomized. The results, summarized in Table A13, are consistent in sign with those from the between-subjects design and larger in magnitude. Monitoring-Behavior increases the gender gap by 12.2 percentage points ($p < 0.001$) and Monitoring-Safety closes it by 14.9 percentage points ($p < 0.001$; Table A13, column (1)). The larger magnitudes are consistent with the within-subject design removing noise from heterogeneity in employers' baseline preferences, which attenuates the between-subject estimates. In particular, the between-subject Monitoring-Behavior estimate is a lower bound: employers with no baseline demand for female workers cannot exhibit a further reduction, compressing the average effect in the between-subject design.

A.3 Appendix Figures

Figure A1: Firm's Location



Notes: This figure reports the locations of firms in the study sample in the metropolitan area of Kampala, Uganda. For privacy, location accuracy has been reduced by showing random positions within a 100m radius of the actual location.

Figure A2: Firm and Vocational Training Environment

(A) Firm Layout



(B) Practical VTI Class

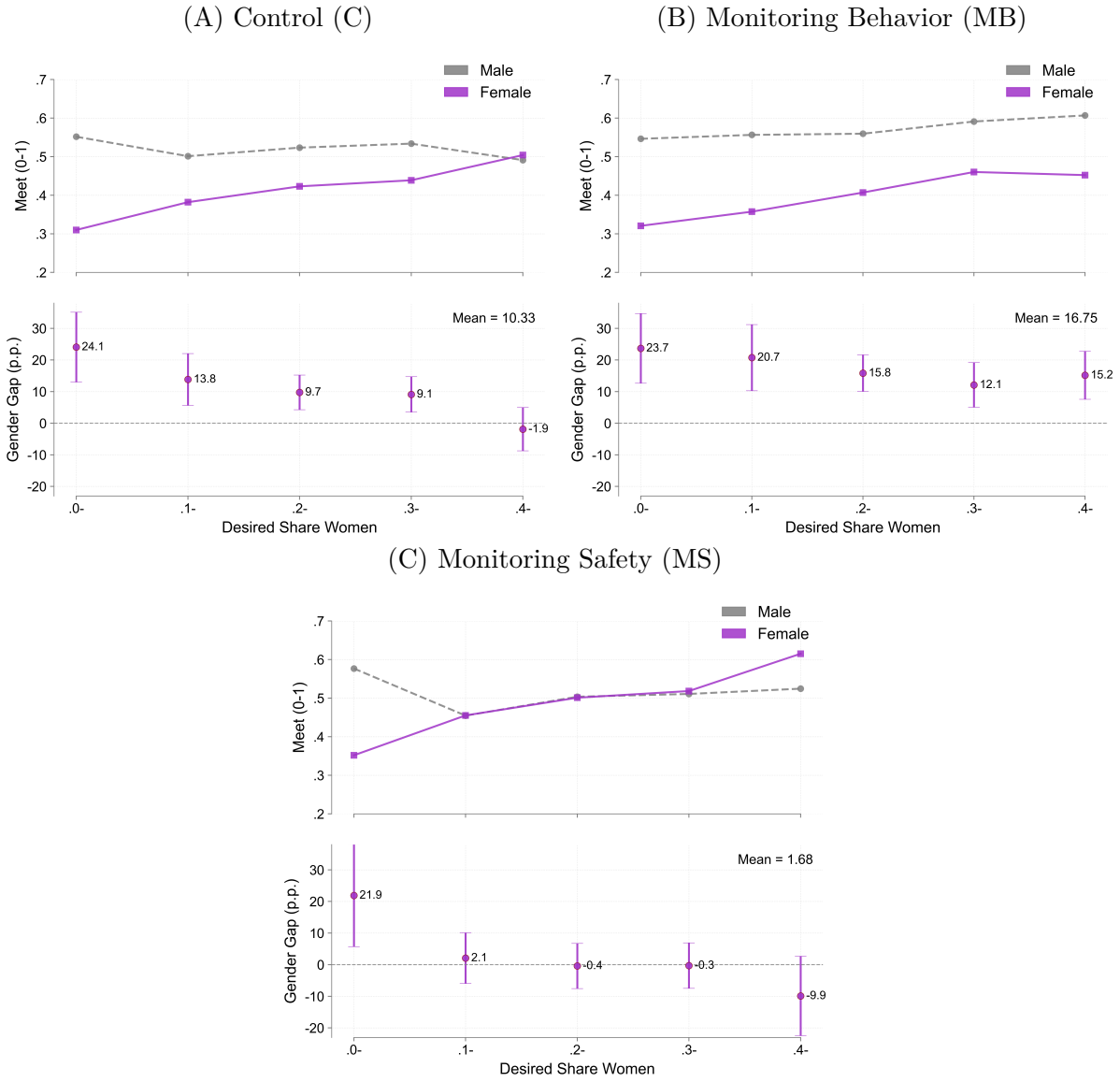


(C) Internship



Photo credit: © Mariajose Silva-Vargas.

Figure A3: Hiring Gender Gap by Treatment Arm and by Stated Preferences for Hiring Women (Raw Data)



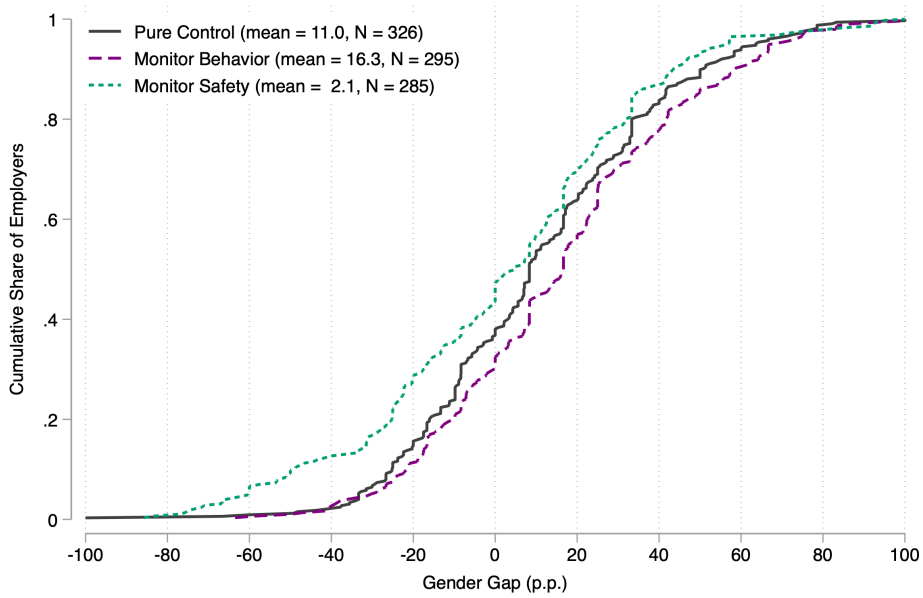
Notes: The figures show the heterogeneity in the gender gap by stated preferences for workforce gender mix, by treatment arm. Panel A presents descriptive statistics for the Control group, while panels B and C present the corresponding statistics for the Monitoring Behavior and Monitoring Safety groups, respectively. The top graph of each panel presents the raw data average of the employer's interest in meeting the candidate by profile gender by the share of female workers preferred at baseline, while the bottom graph displays the heterogeneous treatment effect of a profile being assigned to a female candidate, estimated with our main specification from Equation 2. Confidence intervals are at the 95% level.

Figure A4: Hiring rates by gender and trainee performance, by treatment arm.



Notes: Each panel reports regression-adjusted hiring rates for male and female candidates carrying either an average-performance or a top-performance CV signal, separately by treatment arm. Lighter bars correspond to male candidates; darker bars to female candidates. The bracket spanning each panel reports the p-value on the main effect of trainee performance (pooled across gender), from a regression of the hiring indicator on gender and performance indicators with the standard fixed effects and clustering. "Female × Performance" reports the p-value on the gender × performance interaction term from the fully interacted specification. Confidence intervals are shown for all groups except the reference category (Male, Avg Performance). The null interaction term indicates that top-performance CVs raise hiring rates equally for male and female candidates across all three arms.

Figure A5: Distribution of employer-level gender gaps by monitoring arm (*raw data*).



Notes: Lines show the empirical CDF of the within-employer gender gap in hiring (male minus female selection rate, in percentage points) for employers in Control (solid grey), Monitor Behavior (dashed purple), and Monitor Safety (dotted green). Behavior audits shift the distribution rightward relative to Pure Control; safety audits shift it leftward. The Monitoring-Safety CDF lies strictly above the Monitoring-Behavior CDF at every point and does not cross the Control CDF, confirming that safety dominates scrutiny for every employer subgroup under MS.

Figure A6: Theory Technical Exam — An Example (Motor Mechanics)

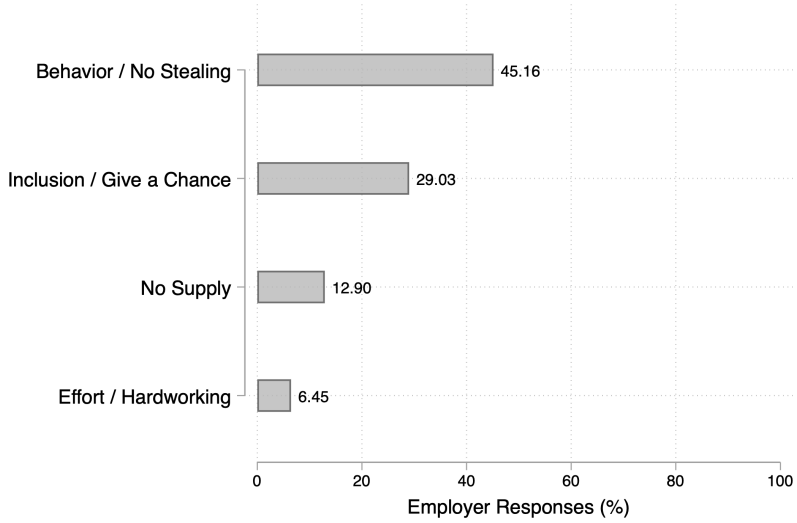
FULL NAME:_____ ☐ MAN

ID:_____ ☐ WOMAN

MOTOR-MECHANICS

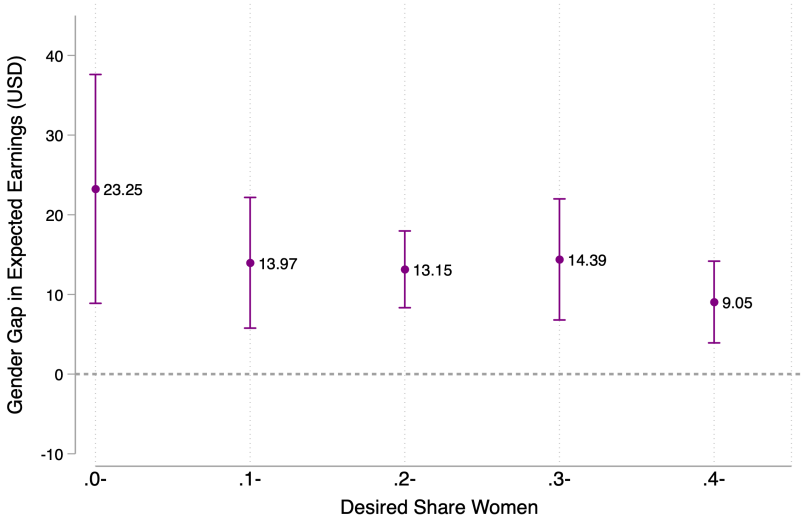
	Question	Answers
1	*multiple-choice* What are you advised to do when servicing the engine by changing oil?	A. Top up lubricating oil B. Replace oil filter C. Over hand engine D. Over hand cylinder head
2	*multiple-choice* What immediate remedy can you give to a vehicle with a problem of excessive tyre wear in the center more than other parts?	A. Increase tyre pressure B. Reduce tyre pressure C. Inflate pressure D. Remove the vehicle tire
3	*Multiple-choice* If a customer reports to you that his/her vehicle charging system works at lower rate, how can you help him?	A. Replacing the charging system B. Adjusting the alternator tension C. Replacing alternator housing D. Renewing wire insulator
4	*Multiple-choice* Which of the following set of systems or component call for mechanical adjustment during general vehicle service?	A. Tyres, cooling system, master cylinder B. Break shoes, alternator, and valve clearance C. Distributor, radiator, propeller shaft D. Tank, crank shaft, Turbo charger
5	*Multiple-choice* What solution would you give a customer with a vehicle engine producing blue smoke?	A. Top up lubricant B. Time the engine C. Replace piston rings D. Remove carbon deposits
6	*Matching* What should you do to stop the following vehicle troubles?	1. Battery over charging — A. Leaking fuel tank 2. Engine over heating — B. Renew regulator 3. Lubricant leakage — C. Reduce oil to the correct level 4. Smoke in exhaust — D. Renew piston rings 5. Engine fails to start — E. Charge the battery ____ ; ____ ; ____ ; ____ ; ____ ; ____ .
7	*Order* When changing engine oil, in which order should you perform the following steps?	A. Drain oil through drain plug B. Remove oil filter cup C. Run engine to check leaks D. Fill new oil through filler cup to level E. Remove oil filter F. Warm up the engine 1____ ; 2____ ; 3____ ; 4____ ; 5____ ; 6____ .

Figure A7: Motivation for Selecting Female Workers in Experiment if No Stated Preferences



Notes: Data from employers who express a preference for male workers only and currently do not employ any women, yet selected at least one female CV in the experiment ($N = 32$). We ask an open-ended question: "Can you explain why you were choosing women in the exercise with the profiles before?". Responses were re-coded into standardized categories, with 9.68% falling under "Other". "No Supply" indicates question misunderstanding (e.g.: "There are no women workers that have come to ask for jobs").

Figure A8: Beliefs About Gender Gap in Labor Market Outside Options



Note: Data from the experiment, focusing on employers in the Control group. The figure reports the predicted gender gap in monthly earnings (USD) of the candidates a year from the hire by stated preferences for workforce gender mix. The average gender gap is USD 14, with men expected to earn an average of USD 117.9 monthly (12.3%).

A.4 Appendix Tables

Table A1: Attention Checks and Attrition

	Monitor Treat		Female Treat
	(1) C vs. MB Sample	(2) C vs. MS Sample	(3) C Sample
Main Sample	0.140	-0.092	-0.032
	[0.125]	[0.058]	[0.022]
Observations	14,954	14,916	7,812
R-squared	0.001	0.002	0.000
p-value	0.264	0.113	0.155

Notes: The table reports the tests for differential attrition by monitoring treatment assignments due to attention checks. The dependent variable is *Main Sample*, a binary indicator equal to 1 if the evaluation of a given CV is included in the main sample. An evaluation is not included in the main sample if all the preregistered attention checks are not met: the respondent understood the IRR exercise, and a given block of eight profiles has some variation in the evaluations. The dependent variables are a binary indicator equal to 1 if the respondent is randomly assigned to: Monitoring Behavior (MB) arm in column (1); Monitoring Safety (MS) arm in column (2), and Female profile in column (3). Samples used to estimate the regressions are restricted to Control (C) and MB, C and MS, and C only in columns (1)-(3), respectively. Standard errors in brackets are clustered at the firm level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A2: Hiring Gender Gap by Performance Signal and by Treatment Arm

			Stated Preferences for Workforce Gender Mix				
	(1) Main Sample	(2) Gender-Mix Pref. > 0	(3) Bottom QT	(4) 2nd QT	(5) 3rd QT	(6) 4th QT	(7) Top QT
Panel A: **Control**							
Female	-0.087***	-0.058**	-0.233***	-0.148***	-0.048	-0.083**	0.034
	[0.022]	[0.021]	[0.052]	[0.051]	[0.031]	[0.037]	[0.039]
Female x Top Performance	-0.033	-0.042	0.004	-0.008	-0.103***	-0.002	-0.016
	[0.032]	[0.029]	[0.062]	[0.061]	[0.033]	[0.053]	[0.052]
Top Performance	0.118***	0.121***	0.105**	0.121**	0.141***	0.117***	0.093*
	[0.018]	[0.019]	[0.044]	[0.053]	[0.025]	[0.040]	[0.047]
Observations	7,365	6,206	1,159	870	2,340	1,764	1,232
R-squared	0.134	0.134	0.212	0.204	0.160	0.142	0.144
Control mean	0.464	0.459	0.491	0.445	0.448	0.481	0.455
Panel B: **Monitor Behavior**							
Female	-0.153***	-0.148***	-0.169***	-0.249***	-0.147***	-0.094**	-0.140***
	[0.024]	[0.025]	[0.053]	[0.064]	[0.036]	[0.038]	[0.050]
Female x Top Performance	-0.028	-0.015	-0.117**	0.077	-0.021	-0.063	-0.021
	[0.023]	[0.023]	[0.048]	[0.057]	[0.037]	[0.048]	[0.054]
Top Performance	0.111***	0.107***	0.147***	0.010	0.099***	0.190***	0.103**
	[0.021]	[0.020]	[0.040]	[0.044]	[0.032]	[0.037]	[0.046]
Observations	6,830	5,847	983	1,070	2,134	1,620	1,023
R-squared	0.148	0.150	0.205	0.190	0.185	0.132	0.182
Control mean	0.516	0.523	0.475	0.555	0.510	0.499	0.556
Panel C: **Monitor Safety**							
Female	-0.005	0.027	-0.228**	-0.029	0.000	0.046	0.109
	[0.025]	[0.025]	[0.091]	[0.042]	[0.040]	[0.041]	[0.071]
Female x Top Performance	-0.024	-0.029	-0.011	0.008	0.005	-0.084**	-0.019
	[0.025]	[0.027]	[0.047]	[0.037]	[0.043]	[0.040]	[0.068]
Top Performance	0.081***	0.090***	0.058	0.017	0.084*	0.131***	0.070
	[0.016]	[0.016]	[0.047]	[0.023]	[0.044]	[0.022]	[0.055]
Observations	6,530	5,695	835	1,062	1,997	1,860	776
R-squared	0.102	0.103	0.219	0.178	0.111	0.116	0.103
Control mean	0.468	0.452	0.556	0.437	0.454	0.446	0.484

Notes: The table reports the treatment effects from estimation augmented regression model 2 with triple interaction with technical performance signal, separately for the sample of respondents in Control (C) arm (Panel A), the Monitoring Behavior (MB) arm (Panel B) and in the Monitoring Safety (MS) arm (Panel C), and by quintiles distribution of preferred gender workforce composition of the employer. Column (1) shows the effects from the main sample; column (2) excludes employers with preferences for an all-male workforce. Columns (3) to (7) restrict the sample to each quintiles distribution of preferred gender workforce composition. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire them on probation. *Female* is a binary variable indicating whether the profile corresponds to a female candidate. *Top Performance* is a dummy indicating whether the profile has a top GPA score (5/5) within their vocational training program. Profile and strata fixed effects are included (not reported in the table). Standard errors are clustered by respondent and profile levels. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: Hiring Gender Gap by Treatment Arm and Performance Index

			Stated Preferences for Workforce Gender Mix				
	(1) Main Sample	(2) Gender-Mix Pref. > 0	(3) Bottom QT	(4) 2nd QT	(5) 3rd QT	(6) 4th QT	(7) Top QT
Panel A: **Control**							
Female	-0.104***	-0.078***	-0.231***	-0.138***	-0.100***	-0.090***	0.026
	[0.016]	[0.016]	[0.050]	[0.039]	[0.025]	[0.026]	[0.033]
Female x Performance Index	-0.009	-0.010	-0.010	-0.029	0.021	-0.043*	0.000
	[0.011]	[0.012]	[0.010]	[0.032]	[0.017]	[0.024]	[0.030]
Performance Index	0.133***	0.131***	0.141***	0.170***	0.104***	0.167***	0.107**
	[0.017]	[0.018]	[0.044]	[0.053]	[0.033]	[0.038]	[0.046]
Observations	7,365	6,206	1,159	894	2,340	1,740	1,232
R-squared	0.133	0.133	0.212	0.195	0.157	0.146	0.144
Control mean	0.478	0.480	0.466	0.460	0.503	0.477	0.451
Panel B: **Monitor Behavior**							
Female	-0.168***	-0.155***	-0.228***	-0.210***	-0.158***	-0.126***	-0.150***
	[0.017]	[0.018]	[0.051]	[0.050]	[0.028]	[0.033]	[0.038]
Female x Performance Index	0.001	0.010	-0.038*	0.022	0.002	-0.019	0.045
	[0.013]	[0.014]	[0.022]	[0.038]	[0.024]	[0.019]	[0.029]
Performance Index	0.121***	0.121***	0.128***	0.050	0.110***	0.210***	0.094
	[0.020]	[0.021]	[0.045]	[0.048]	[0.027]	[0.042]	[0.057]
Observations	6,830	5,847	983	1,070	2,134	1,620	1,023
R-squared	0.148	0.150	0.204	0.189	0.185	0.131	0.184
Control mean	0.538	0.545	0.500	0.540	0.502	0.539	0.648
Panel C: **Monitor Safety**							
Female	-0.017	0.013	-0.234***	-0.025	0.002	0.004	0.099
	[0.022]	[0.021]	[0.079]	[0.038]	[0.035]	[0.035]	[0.060]
Female x Performance Index	-0.017	-0.019	-0.042	-0.009	-0.004	-0.027	-0.027
	[0.012]	[0.013]	[0.030]	[0.018]	[0.023]	[0.023]	[0.033]
Performance Index	0.095***	0.104***	0.085	0.030	0.110***	0.125***	0.090
	[0.016]	[0.015]	[0.058]	[0.035]	[0.034]	[0.026]	[0.063]
Observations	6,530	5,695	835	1,062	1,997	1,860	776
R-squared	0.102	0.104	0.221	0.178	0.111	0.115	0.104
Control mean	0.451	0.447	0.480	0.382	0.458	0.458	0.485

Notes: The table reports the treatment effects from estimation of the same regression model as in A2 for the sample of respondents in the Monitoring Behavior (MB) arm (Panel A) and in the Monitoring Safety (MS) arm (Panel B), and by quintiles distribution of preferred gender workforce composition of the employer. Column (1) shows the effects from the main sample; column (2) excludes employers with preferences for an all-male workforce. Columns (3) to (7) restrict the sample to each quintiles distribution of preferred gender workforce composition. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire them on probation. *Female* is a binary variable indicating whether the profile corresponds to a female candidate. *Performance Index* is a standardized index that combines all high-quality trainee characteristics in the CVs with equal weights: completion of secondary education, a Directorate of Industrial Training (DIT) certification, a 12- (vs. 6-month) study period, and a high GPA. Profile and strata fixed effects are included (not reported in the table). Standard errors are clustered by respondent and profile levels. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A4: Hiring Gender Gap by Performance Signals and Monitoring

	(1)	(2)
Monitor Behavior	0.021	0.055***
	[0.014]	[0.018]
Monitor Safety	0.046***	0.006
	[0.013]	[0.019]
High Performance	0.101***	0.118***
	[0.013]	[0.019]
Monitor Behavior × High Performance	-0.004	-0.007
	[0.017]	[0.021]
Monitor Safety × High Performance	-0.032*	-0.037*
	[0.018]	[0.022]
Female		-0.087***
		[0.023]
Female × Monitor Behavior		-0.067**
		[0.027]
Female × Monitor Safety		0.082**
		[0.030]
Female × High Performance		-0.033
		[0.032]
Female × Monitor Behavior × High Performance		0.005
		[0.030]
Female × Monitor Safety × High Performance		0.009
		[0.029]
Observations	20,725	20,725
Control Mean (median-performance, male)	0.419	0.464

Notes: The table reports treatment effects for the main sample. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire them on probation. *Female* is a binary variable indicating whether the profile corresponds to a woman. *Top Performance* is a dummy indicating whether the profile has a top GPA score (5/5) within their vocational training program. *Monitor Behavior* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' behavior. *Monitor Safety* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' safety. Column (1) tests whether employers respond to performance signals independently of gender. Column (2) adds gender interactions and tests whether treatment effects on the gender gap differ by candidate performance. The control mean is that of male candidates with median performance (i.e. median GPA score within their vocational training program) in the *Control* arm. Profile and strata fixed effects are included (not reported). Standard errors are clustered by respondent and profile levels and reported in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A5: Hiring Gender Gap by Treatment Arm: Secondary Outcomes

	(1) Quality	(2) Trust-worthiness	(3) Effort	(4) Expected Earnings
Female	-0.169***	0.058**	-0.209***	-12.395***
	[0.026]	[0.026]	[0.028]	[1.578]
Monitor Behavior	-0.013	-0.034	-0.012	2.267
	[0.041]	[0.049]	[0.042]	[3.193]
Monitor Safety	-0.030	-0.035	-0.016	-1.611
	[0.048]	[0.053]	[0.044]	[3.200]
Female x Monitor Behavior	-0.043	-0.012	-0.054	-0.933
	[0.028]	[0.035]	[0.037]	[2.394]
Female x Monitor Safety	0.034	0.059	0.019	-0.556
	[0.047]	[0.042]	[0.044]	[2.414]
Observations	20,724	20,613	20,684	20,725
R-squared	0.226	0.083	0.173	0.196
Control Mean	0.085	-0.028	0.106	114.913

Notes: The table reports the treatment effects for the main sample, by pre-registered secondary outcomes. Columns (1)-(3) reports standardized outcomes relative to C group. Column (1) shows estimates for the perceived quality and skills of candidates: "Based on your first impression, how would you rate the worker's skills and work quality? Please rate on a scale from 0 to 10, where 0 is very low quality and 10 is very high quality.". Column (2) shows estimates for the perceived trustworthiness of candidates: "Based on your first impression, how would you rate the workers' behavior (trustworthiness and honesty)? Please rate on 0 to 10, where 0 is not at all trustworthy/honest and 10 is very trustworthy/honest.". Column (3) shows estimates for the perceived effort of candidates: "Based on your first impression, how likely is this worker to put in effort (hardworking, not lazy, concentrated, punctual)? Please rate on a scale from 0 to 10, where 0 is very unlikely and 10 is very likely.". Column (4) shows estimates for the expected monthly earnings of the candidates: "What is your best guess of the monthly earnings of this worker a year from now?". Profile and strata fixed effects are included (not reported in the table). Standard errors are clustered by respondent and profile levels. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Effect of Audit Visits on Number of Selected Profiles

	(1) Meet (0-1)
Monitor Behavior	0.019*
	[0.011]
Monitor Safety	0.030**
	[0.011]
Observations	20,725
R-squared	0.114
Control Mean	0.470

Notes: The table reports the treatment effects for the main sample. We estimate the following regression model: $\text{Meet}_{ijs} = \beta_0 + \beta_1 \text{MB}j + \beta_2 \text{MS}j + \delta_i + \sigma_s + u_{ijs}$. *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate for a probation period at the firm. *Monitoring Behavior* is a binary indicator equal to 1 if the firm was randomly assigned to behavior audits. *Monitoring Safety* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' safety. The control mean corresponds to the *Control* arm. Profile and strata fixed effects are included (not reported). Standard errors are clustered at the respondent and profile levels and reported in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A7: Hiring Gender Gap by Treatment Arm and by Resume Characteristics

Meet (0-1)	(1) Age ≥ Median	(2) Married	(3) Second. Educ.	(4) English	(5) Trained 1+ year	(6) DIT Certified
CHRS	-0.094***	-0.209***	0.007	0.067***	0.209***	0.145***
	[0.012]	[0.011]	[0.012]	[0.018]	[0.011]	[0.013]
Monitor Behavior	0.012	0.009	0.025*	0.016*	0.029**	0.029***
	[0.014]	[0.012]	[0.015]	[0.009]	[0.012]	[0.010]
Monitor Safety	0.037***	0.022*	0.034**	0.033***	0.040***	0.038***
	[0.014]	[0.012]	[0.015]	[0.009]	[0.012]	[0.010]
CHRS x Monitor Behavior	0.010	0.019	-0.010	0.016	-0.019	-0.035*
	[0.017]	[0.016]	[0.018]	[0.025]	[0.016]	[0.018]
CHRS x Monitor Safety	-0.008	0.019	-0.003	-0.009	-0.019	-0.021
	[0.017]	[0.017]	[0.018]	[0.026]	[0.017]	[0.018]
Observations	20,725	20,725	20,725	20,725	20,725	20,725
Control Mean	0.470	0.574	0.466	0.462	0.365	0.428

Notes: The table reports the treatment effects for the main sample, by resume characteristics (CHRS). Estimates are shown in Columns (1)–(6), respectively, for whether the candidate: is above the median age (22.5 years), is married, has attended secondary education, speaks English, attended VTI one- or two-year training relative to 6-month training, holds a Directorate of Industrial Training (DIT) certification. Strata fixed effects are included (not reported in the table). Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A8: Hiring Gender Gap by Treatment Arm – Heterogeneous Treatment Effects (Preregistered)

	Gender-Mix Pref. > 0		Employer Gender		VTI Search	
	(1) Low	(2) High	(3) Female	(4) Male	(5) Yes	(6) No
Female	-0.146***	-0.041*	0.001	-0.105***	-0.086***	-0.174***
	[0.021]	[0.022]	[0.111]	[0.017]	[0.018]	[0.042]
Monitor Behavior	0.035*	0.080***	0.149	0.049***	0.067***	-0.027
	[0.019]	[0.020]	[0.100]	[0.014]	[0.017]	[0.032]
Monitor Safety	-0.021	-0.006	0.280***	-0.018	-0.014	-0.008
	[0.018]	[0.024]	[0.075]	[0.016]	[0.017]	[0.041]
Female x Monitor Behavior	-0.043	-0.092***	-0.206	-0.061**	-0.086***	0.027
	[0.031]	[0.032]	[0.138]	[0.023]	[0.024]	[0.065]
Female x Monitor Safety	0.098***	0.075*	-0.218*	0.092***	0.081**	0.096
	[0.033]	[0.041]	[0.125]	[0.028]	[0.032]	[0.069]
Observations	12,450	8,275	727	19,998	17,108	3,545
R-squared	0.147	0.112	0.173	0.130	0.127	0.172
Control Mean	0.528	0.520	0.465	0.524	0.513	0.566

Notes: The table reports the treatment effects for the main sample, by pre-registered heterogeneity dimensions: Columns (1)-(2) show estimates for above- (high) and below-median (low) optimal gender composition of the workforce; Columns (3)-(4) split the sample by the employers' gender; Columns (5)-(6) split the sample by whether employers typically hire from vocational training institutes or not. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire on probation. *Female* is a binary variable indicating whether the profile corresponds to a woman. *Monitoring Behavior* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' behavior. *Monitoring Safety* is a binary indicator equal to 1 if the firm was randomly assigned to audit visits to monitor trainees' safety. Profile and strata fixed effects are included. Standard errors are clustered by respondent and profile levels. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A9: Robustness to Experimenter Demand

	(1) Baseline	(2) Excl. employers who believe we prefer women
Female	-0.103^{***}	-0.118^{***}
	[0.016]	[0.016]
Monitor Safety	-0.012	-0.014
	[0.016]	[0.017]
Monitor Behavior	0.051^{***}	0.058^{***}
	[0.016]	[0.017]
Female × Monitor Safety	0.088^{***}	0.098^{***}
	[0.026]	[0.026]
Female × Monitor Behavior	-0.064^{***}	-0.070^{***}
	[0.023]	[0.024]
Observations	20,725	19,302
R-squared	0.119	0.127
Control mean	0.522	0.528

Notes: The table replicates the main treatment effect regression under two specifications. Column (1) is the baseline on the full main sample. Column (2) excludes the 6.8% of employers who believe the research team would prefer they hire women. All columns include CV profile fixed effects interacted with trainee performance, sector, survey-wave, and enumerator fixed effects. Standard errors clustered at the employer level in brackets. The gender gap and both treatment effects are stable, ruling out experimenter demand as a driver. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table A10: Customer Discrimination Channel Test

	(1) Full sample	(2) Restricted sample
Female	-0.118***	-0.129*
	[0.022]	[0.072]
Female × Monitor Behavior	-0.074**	-0.092
	[0.030]	[0.093]
Female × Monitor Safety	0.040	0.101
	[0.035]	[0.095]
Female × *Customer channel*	0.038	0.050
	[0.032]	[0.075]
Female × MB × *Customer channel*	0.033	0.050
	[0.044]	[0.101]
Female × MS × *Customer channel*	0.113**	0.050
	[0.050]	[0.101]
Observations	20,629	9,166
Control Mean (male)	0.522	0.544
Employer FE × Performance	Yes	Yes
Sector, Year, Enumerator FE	Yes	Yes

Notes: The dependent variable is an indicator for meeting the applicant (= 1). *Customer channel* is a binary variable coded from open-text responses to the survey question: "If the share of female workers at your firm were to increase, what do you expect to happen to the profits of your firm? Can you explain why?" It equals 1 if the employer cited customer attraction, customer care, or customer trust as the reason why profits would increase (86.5% of coded responses among employers who expected profits to rise). Column (1) uses the full analysis sample: employers who did not expect profits to rise and employers who cited non-customer reasons are both assigned *Customer channel* = 0. Column (2) restricts to employers who expected profits to rise from hiring more women. A null on Female × MB × *Customer channel* and Female × MS × *Customer channel* in both columns indicates that the monitoring treatment effects are not driven by customer demand for female workers. Standard errors clustered at the business and enumerator level in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A11: Workplace Social Acceptance Channel Test

	(1) Full sample	(2) Restricted sample
Female	-0.086***	-0.102***
	[0.028]	[0.029]
Female × Monitor Behavior	-0.023	-0.020
	[0.038]	[0.040]
Female × Monitor Safety	0.033	0.047
	[0.042]	[0.044]
Female × *Full acceptance*	-0.027	-0.011
	[0.034]	[0.036]
Female × MB × *Full acceptance*	-0.067	-0.071
	[0.049]	[0.051]
Female × MS × *Full acceptance*	0.080	0.066
	[0.048]	[0.052]
Observations	20,725	20,040
Control Mean (male)	0.522	0.529
Employer FE × Performance	Yes	Yes
Sector, Year, Enumerator FE	Yes	Yes

Notes: The dependent variable is an indicator for meeting the applicant (= 1). *Full acceptance* is a binary variable equal to one if the employer reports that all current workers at the firm would accept a female colleague. Column (1) uses the full analysis sample: employers who did not answer the acceptance question are assigned *Full acceptance* = 0. Column (2) restricts to employers who answered the question. Standard errors clustered at the business and enumerator level in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A12: Gender Gap by Treatment Assignment and Lin. Interaction with Gender Pref.

Meet (0-1)	(1) Pure Control	(2) Monitor Behavior	(3) Monitor Safety	(4) Main Sample
Female	-0.213***	-0.216***	-0.141***	-0.214***
	[0.034]	[0.033]	[0.044]	[0.034]
Monitor Behavior				-0.002
				[0.027]
Monitor Safety				-0.026
				[0.029]
Diversity	-0.107	0.135	-0.051	-0.115
	[0.086]	[0.079]	[0.100]	[0.079]
Female x Monitor Behavior				-0.001
				[0.046]
Female x Monitor Safety				0.073
				[0.054]
Female x Diversity	0.495***	0.221*	0.573***	0.499***
	[0.122]	[0.108]	[0.168]	[0.122]
Monitor Behavior x Diversity				0.246**
				[0.101]
Monitor Safety x Diversity				0.065
				[0.123]
Female x Monitor Behavior x Diversity				-0.281*
				[0.161]
Female x Monitor Safety x Diversity				0.077
				[0.208]
Observations	7,365	6,830	6,530	20,725
R-squared	0.142	0.157	0.112	0.133
Baseline Mean	0.522	0.572	0.522	0.552

Note: The table reports treatment effects on employer interest to meet candidates, estimated as a function of stated preferences for workforce gender diversity. Columns (1)–(3) report results for employers randomly assigned to Control (C), Monitor Behavior (MB), and Monitor Safety (MS) arms in the between-subject design (main specification). Column (4) includes all respondents in the main sample and estimates a fully interacted model with candidate gender, monitoring treatment, and employer stated gender diversity preferences. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate for a probation period. *Female* is a binary variable indicating whether the resume corresponds to a woman. *Monitor Behavior* is a binary indicator equal to 1 if the firm was assigned to audit visits monitoring trainee behavior. *Monitor Safety* is a binary indicator equal to 1 if the firm was assigned to audit visits monitoring trainee safety. *Diversity* is a continuous variable (ranging from 0 to 1) measuring the share of female workers the employer prefers in their ideal workforce composition. All models include profile and strata fixed effects (not reported). Standard errors are clustered at the employer and profile levels (reported in brackets: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$).

Table A13: Hiring Gender Gap by Treatment Arm: Within-Subject Design

			Stated Preferences for Workforce Gender Mix				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Meet (0-1)	Main Sample	Gender-Mix Pref. > 0	Bottom QT	2nd QT	3rd QT	4th QT	Top QT
Female	-0.115***	-0.096***	-0.236***	-0.122**	-0.100***	-0.122***	-0.050**
	[0.015]	[0.015]	[0.055]	[0.049]	[0.024]	[0.026]	[0.024]
Monitor Behavior	0.092***	0.103***	0.037	0.076**	0.121***	0.083***	0.106***
	[0.013]	[0.013]	[0.038]	[0.032]	[0.017]	[0.025]	[0.031]
Monitor Safety	-0.046***	-0.045***	-0.018	-0.092***	-0.041*	-0.050**	-0.027
	[0.013]	[0.014]	[0.043]	[0.027]	[0.024]	[0.021]	[0.025]
Female x Monitor Behavior	-0.122***	-0.125***	-0.119*	-0.149**	-0.129***	-0.096**	-0.123***
	[0.020]	[0.020]	[0.064]	[0.059]	[0.029]	[0.039]	[0.036]
Female x Monitor Safety	0.149***	0.163***	-0.019	0.179***	0.163***	0.174***	0.166***
	[0.024]	[0.024]	[0.085]	[0.057]	[0.042]	[0.040]	[0.046]
Observations	20,800	18,409	2,391	2,447	6,521	5,714	3,727
R-squared	0.221	0.214	0.314	0.249	0.237	0.208	0.191
Control Mean	0.529	0.529	0.536	0.522	0.513	0.550	0.526
p-value MB vs. MS	0.000	0.000	0.240	0.000	0.000	0.000	0.000

Note: The table reports the treatment effects for the sample for which we implemented the within-subject randomization. The table also reports the treatment effects by quintile distribution of preferred gender workforce composition of the employer. Column (1) shows the effects from the main sample; column (2) excludes employers with preferences for an all-male workforce. Columns (3) to (7) restrict the sample to each quintile's distribution of preferred gender workforce composition. The dependent variable *Meet* is a binary indicator equal to 1 if the employer wants to meet the candidate to hire them on probation. *Female* is a binary variable indicating whether the profile corresponds to a woman. *Monitoring Behavior* is a dummy indicating whether the firm was randomly assigned to audit visits to monitor trainees' behavior. *Monitoring Safety* is a dummy indicating whether the firm was randomly assigned to audit visits to monitor trainees' safety. We report results for the primary outcome variable: interest of the employer to meet the candidates to hire them on probation (0-1). Respondent and profile-by-ability fixed effects are included (not reported in the table). Standard errors are clustered by respondent and profile-by-ability levels. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A14: Descriptive Statistics: Trainee Sample

	Mean	SD	P25	P75	Min	Max	*N*
Panel A: Demographics							
Female (share)	0.385	0.488	0.000	1.000	0.000	1.000	182
Age (years)	20.8	2.2	19.0	22.0	18.0	27.0	182
Married (share)	0.016	0.128	0.000	0.000	0.000	1.000	182
Completed secondary, S4+ (share)	0.962	0.193	1.000	1.000	0.000	1.000	182
Panel B: Training							
Mechanics (share)	0.330	0.471	0.000	1.000	0.000	1.000	182
Carpentry (share)	0.198	0.399	0.000	0.000	0.000	1.000	182
Welding (share)	0.280	0.450	0.000	1.000	0.000	1.000	182
Other programs (share)	0.192	0.395	0.000	0.000	0.000	1.000	182
Girls With Tools VTI (share)	0.297	0.458	0.000	1.000	0.000	1.000	182
Training duration (months)	24.8	7.3	24.0	24.0	3.0	60.0	182
24-month program (share)	0.758	0.429	1.000	1.000	0.000	1.000	182
Panel C: Skills and Work							
Theory exam score (share correct)	0.527	0.201	0.429	0.714	0.143	1.000	182
Practical skill, self-reported (share)	0.923	0.267	1.000	1.000	0.000	1.000	182
Worked last month (share)	0.209	0.408	0.000	0.000	0.000	1.000	182
Expected monthly income, 1yr (USD)	268.0	268.6	135.1	270.3	40.5	1891.9	182

Notes: The table reports summary statistics for the 182 vocational trainees surveyed across seven training centers in the Kampala metropolitan area. *Female* is a binary indicator equal to 1 for female trainees. *Completed secondary, S4+* indicates completion of at least Senior 4. Sector shares reflect the trainee's primary training program. *Other programs* includes hairdressing/barbering, tailoring, electrical installation, ICT, and plumbing. The latter three also report being interested in job in the mechanics and welding sectors. *Girls With Tools VTI* indicates enrollment at the Smart Girls Foundation (GWT), the primary provider of female candidates in male-dominated sectors. *Training duration* is the total program length in months; 76% of trainees are enrolled in 24-month programs. *Theory exam score* is the share of correct answers on a sector-specific technical exam. *Practical skill* is a binary self-reported indicator. *Worked last month* equals 1 if the trainee performed any work in the month before the survey. *Expected monthly income* is the trainee's expected earnings in USD one year after training.

Table A15: Trainee Outcomes and Employer's Beliefs

Panel A: **Trainees**

	Social Preferences				Skills		Supervision & Honesty Game				Dictator Game	Trust Game		Cooperation Game
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Patience	Altruism	Pos. Recipr.	Trusting	Theory	Practice	Task Completed Unsupervised	Task Completed Supervised	Lying Unsupervised	Lying Supervised	Share	Trust Pl. 1	Reciprocate Pl. 2	Cooperate
Female	0.089	0.067	0.064	0.041	0.234**	0.031	0.021	0.009	0.096	0.029	0.177*	-0.375***	-0.005	0.131
	[0.073]	[0.071]	[0.045]	[0.059]	[0.097]	[0.047]	[0.031]	[0.031]	[0.084]	[0.020]	[0.106]	[0.093]	[0.099]	[0.099]
Observations	171	171	171	171	187	182	182	182	182	182	182	182	182	182
R-squared	0.028	0.038	0.064	0.034	0.125	0.021	0.097	0.106	0.032	0.083	0.133	0.096	0.088	0.059
Control Male	0.696	0.681	0.768	0.450	0.752	0.920	0.989	0.989	0.071	0.018	0.723	0.679	0.875	0.830

Panel B: **Employers**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Female	-0.132***	-0.129**	0.069	0.481***	-0.121***	-0.154***	0.047***	0.000	-0.115***	-0.057***	-0.089***	-0.011	-0.035***	-0.018*
	[0.048]	[0.051]	[0.045]	[0.042]	[0.015]	[0.016]	[0.010]	[0.007]	[0.010]	[0.010]	[0.012]	[0.010]	[0.010]	[0.010]
Observations	919	919	920	921	1,205	1,206	1,842	1,829	1,831	1,826	1,838	1,835	1,829	1,831
R-squared	0.012	0.010	0.046	0.312	0.093	0.120	0.016	0.007	0.077	0.025	0.032	0.002	0.008	0.020
Control Male	0.435	0.449	0.253	0.130	0.580	0.607	0.646	0.881	0.466	0.256	0.573	0.534	0.602	0.571

Notes: The table reports gender differences in trainees' outcomes (Panel A) and the corresponding employer beliefs (Panel B). Columns (1)–(4) present standardized survey measures of social preferences following Falk et al. (2018): patience, altruism, positive reciprocity, and trust, respectively. In Panel A, the coefficient on *Female* captures the difference between female and male trainees. In Panel B, *Female* captures the difference in employer beliefs about female versus male trainees. Columns (5)–(6) present the share of correct answers to sector-specific theory and practical skill questions, respectively. Theory questions are randomly drawn from the technical exam taken by trainees prior to the survey. Practical skills are measured through a self-reported binary indicator on the performance to perform a specific technical task, designed by VTI instructors. The remaining columns shows results of four behavioral games. Columns (7)–(8) report the share of tasks completed in a novel lab-style task — Supervision & Honesty Game — by trainees (Panel A), and employers' beliefs about the same task outcomes under conditions without and with supervision (Panel B). Columns (9)–(10) report the share of lying behavior in the same game. Column (11) reports sharing behavior in a dictator game. Columns (12)–(13) correspond to player 1 (trusting) and player 2 (reciprocating) behavior in a trust game. Column (14) reports decisions to cooperate in a cooperation game. Standard errors are clustered at VTI level in Panel A and at the sector level in Panel B. Standard errors in brackets * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.