The Illusion of Time:
Gender Gaps in Job Search and Employment *

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Abstract

Even in traditional societies, men and women graduate from college at increasingly similar rates. Yet their paths diverge upon labor market entry: men work while most women stay home. What drives this divergence? Tracking 2,400 college students in Pakistan, we show that men and women hold similarly high work aspirations at graduation and subsequently apply to jobs and receive offers at comparable rates. Yet a 27 pp gender employment gap emerges within six months, driven by women rejecting offers far more often than men. A key predictor of women's job acceptance decision is the timing of search: those who apply within two months of graduation are much more likely to be employed later. To test causality and uncover mechanisms, we randomize a modest incentive to apply early. The intervention shifts search earlier for both genders, raises women's employment by ∼ 20% while leaving men's unaffected, thereby closing a third of the gender gap. Employment gains are concentrated among women who underestimate how soon marriage activities arise, revealing that they delayed job search under an "illusion of time." For these women, early job search can initiate a self-reinforcing cycle: by entering the labor force before the marriage market, they attract more progressive suitors, which in turn can create a more supportive environment for sustained employment.

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I Introduction

Over the past century, the early-life trajectories of men and women have become increasingly similar. Even in societies with conservative gender norms, boys and girls now spend much of their youth in school. In Pakistan – the setting of this study – this parity extends through college, with graduation rates now largely comparable across gender. Yet the symmetry ends abruptly upon labor market entry: men transition into paid work, while most women move directly into homemaking. This stark contrast motivates our research question: What happens around graduation that sets men and women on such distinct paths?

To study this question, we partner with two universities – a large, mid-tier private institution and the country's oldest and largest public university – and track the full job search of ~2,400 students from one month before graduation through to the following year. Our research design unfolds in two phases: diagnostic and experimental. In the diagnostic phase, we study the pipeline from education to employment to identify when and how women and men diverge. In doing so, we uncover a key barrier to female graduates' labor market access and, in the experimental phase, design an intervention to address it.

We first examine the formation of labor market expectations before graduation, and whether those differ by gender. In South Asia, female education can serve purposes beyond the labor market– most notably, to enhance marriage prospects (Andrew & Adams, 2025). This raises the possibility that many women pursue higher education not in preparation for future employment, but as a strategy to secure better marriage prospects. Our data, however, do not substantiate this view: one month before graduation, the vast majority of men *and* women expect to be working shortly thereafter. On average, women report a 71.8% likelihood of working within six months of graduation, only 5.2 percentage points (pp) lower than men. Yet six months later, only 36.9% of women are employed, compared to 64.2% of men. Importantly, the mismatch between women's expectations and their realized employment does not reflect misperceptions about the broader labor market: women's beliefs about their male and female peers' job prospects are broadly consistent with actual outcomes, and mirror those of men.

Next, we examine the preferences and job search behavior of men and women at labor market entry and find that, at this stage, women resemble men far more than they do later in life. Preferences over job flexibility are largely gender-neutral: the vast majority of both men and women express a preference for full-time, on-site employment. If anything, the observed differences should favor women in the labor market—they have higher GPAs and report lower reservation wages. Further, women are just as likely as their male peers to apply for jobs in the months following graduation. This rules out differences in job search effort as the source of the gender employment gap and confirms that women's stated expectations for work at baseline were more than cheap talk. Finally,

women receive more job offers than men, ruling out limited employer demand as an explanation for their lower employment rates. Instead, the gender employment gap arises when decisions about job offers are made: women reject them at much higher rates than men.

The data point to the job offer stage as the critical juncture of divergence between men and women. We therefore examine what predicts men and women's employment choices at this stage. We find that women who search early, i.e., women who begin applying within two months of graduation, are 20.4 pp more likely to accept a job offer. The observed association between early applications and employment could arise because early applicants differ on unobservables such as motivation, or because early applications themselves make a difference. Even if earlier search has a causal impact on women's employment, the implications depend on whether women anticipate it. If women are aware that applying early increases their chances of employment, then observed differences in application timing likely reflect intentional trade-offs made to maximize expected utility. If not, women may be operating under an "illusion of time" – delaying job search under the false belief that later search does not reduce employment prospects. This distinction is important: if early search has a causal effect that women do not anticipate, it uncovers a tractable policy lever for increasing female employment, and motivates deeper investigation into the mechanism.

To distinguish between these possibilities, we design an experiment that encourages early job search by offering a small cash reward to students who apply to at least four jobs within a month of graduation. The incentive induces a substantial acceleration in search: the treatment increases the share of women applying by August 15 from 32.5% to 54.8%. A similar shift is observed for men.

Our intervention has a large and persistent effect on women's employment. Intent-to-treat estimates reveal that, at the six-month follow-up, 41.1% of women assigned to treatment are working, compared to 33.6% in the control group (a 22.3% increase, difference p-value = 0.015). Given that unemployment often disguises as self-employment in low-income countries (Breza, Kaur, & Shamdasani, 2021), we also consider the impact of our treatment exclusively on firm or public-sector employment and find even stronger results: 35.5% of treated women are working in a firm at six months, compared to 25.3% of control women (a 40.3% increase, difference p-value = 0.001). These effects persist in the fourteen-month follow-up. In contrast, and consistent with our diagnostic findings, we observe no treatment effects on male employment. Consequently, the incentive reduces the gender employment gap by about a third. Finally, we show that treated women's employment gains primarily arise from higher job offer acceptance rates.

The sizable impact of our intervention on women's employment raises a puzzle: if the majority of women, as they express at baseline, would prefer to work, and applying early so strongly improves employment chances, why do treated women delay search absent the financial incentive? We argue that the answer lies in women's lack of foresight about the effect of timing on employment. At baseline, after introducing the incentive, we ask students when they expect to apply and how likely

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they are to be employed six months after graduation. While treated women adjust their expected application date earlier, there is no treatment effect on their own employment expectations. This disconnect reinforces that women fail to anticipate the importance of timing for employment, and thus operate under an "illusion of time".

Next, we examine why job search timing matters, and why women do not anticipate it. Since employment increases only for women, we seek a plausibly gender-specific explanation. Although men and women have similar work preferences and exert similar search effort, their outside options differ: women marry earlier, and marriage – typically arranged by parents – can restrict women's labor supply. In line with this, we find that marriage offers to women surge soon after graduation: ~ 40% of them receive at least one marriage offer within two months. Additionally, women in our sample recognize that marriage is a key barrier to female labor force participation: at baseline, when asked why some of their *female peers* might not work, 91% of women cite marriage as an obstacle.

For marriage market activities to explain the illusion of time, their timing and/or effect must be unanticipated. Otherwise, forward-looking women who intend to work would begin searching for a job prior to the rise in marriage market demands. Consistent with a lack of anticipation, we find that, when asked why they *themselves* may not work, only 20% of women in our sample think that marriage could be a constraint. This pattern echoes the "exceptionalism bias" we observe in employment expectations: women are aware of the barriers that bind for others but think they will personally overcome them. We also find that some women do not expect the rapid onset of the marriage market. Women who initially expect to marry late (i.e., after the national median age of marriage, age 25) revise their expectations downward within six months of their graduation. Those who expect at baseline to marry at 26, for example, revise that estimate down to 25 by the six-month follow-up. This one-year change is substantial: given a mean age at graduation of ~ 22, it represents a 25% reduction in the expected time until marriage. We infer from this that the group of women who initially expected to marry late is surprised by the rapid onset of marriage activities. In contrast, those already expecting early marriage maintain stable expectations.

If misperceptions about the marriage timeline explain why earlier search raises female employment in our experiment, then treatment effects should be driven by the women who do not anticipate the rapid onset of marriage activities. Our data confirms this: our treatment only impacts the employment of women who believe, at baseline, that they will marry late (11.6 pp vs. 0.2 pp, difference p-value = 0.030).

Finally, we show why searching for a job before the marriage market begins can put women on a lasting employment path: marriage offers respond endogenously to women's labor force participation. Specifically, women whose employment rises in response to our treatment—those surprised by the early onset of marriage market activity—receive a similar number of marriage

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offers as women in the control group, but of a different kind. Their marriage offers are significantly more likely to come from more progressive men (as proxied by education). This points to a self-reinforcing cycle: entering the labor force before the marriage market helps these women signal their type ("working woman") and endogenously leads them to match with more progressive men. This in turns can create a more supportive environment for sustained work.

We further rule out alternative explanations. One possibility is that women who do not start working soon after graduation gradually lose interest in employment, perhaps as their focus shifts toward marriage. The data do not support this view. Six months after graduation, 87.6% of all women—including 83.4% of those unemployed—report wanting to work, and this share is unaffected by treatment. Many unemployed women also continue to search actively even after the critical window around graduation has passed. Together, these patterns indicate that women's preferences for work do not decrease over time.

Both our descriptive and experimental results point to the same underlying structure: women and their families play distinct roles in shaping women's labor market outcomes. Our descriptive evidence shows that the gender gap in employment arises not from differences in job search, which women undertake as actively as men, but from differences in job acceptance. This asymmetry reflects the division of decision-making authority: most women in our sample report that they decide whether to search independently, but that parents are involved in deciding whether they may accept a job offer. Our experimental findings reveal a parallel dynamic. Women control when to begin searching for jobs, a margin our treatment successfully shifts, but parents determine when marriage offers arrive and whether employment is permissible once those offers materialize. We argue that the treatment works precisely because it exploits this structure: by inducing women to search early, it allows them to signal their preference for work, thereby attracting more progressive suitors, and plausibly relaxing parental resistance to continued employment.

Together, our findings show that, at the first critical juncture of labor market entry – college graduation – women hold the same labor market aspirations and preferences as men. Women are also aware of prevailing gender norms and barriers to female employment, but they do not anticipate how quickly and directly these forces will limit their own labor supply. As a result, when marriage-related constraints emerge, they do so unexpectedly, creating a wedge between women's expectations and outcomes. Our intervention narrows this wedge by shifting women's job search before marriage market activities intensify. Our evidence suggests that this sequencing matters because applying for jobs early influences the composition of marriage offers women attract.

This paper contributes to an extensive literature on barriers to female labor force participation and interventions to reduce them. At later life stages, female labor force participation is quite inelastic. Interventions that successfully increase it are often on the demand-side, providing women with jobs that are adapted to their household constraints: remote jobs, part-time jobs,

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jobs with more secure transportation and better childcare availability (Halim, Perova, & Reynolds, 2023; Jalota & Ho, 2024; Bjorvatn et al., 2025; Garlick, Field, & Vyborny, 2025; Ho, Jalota, & Karandikar, 2025). These interventions hold tremendous promise but, in the absence of a broader labor market shift in the provision of jobs tailored to women, they may be hard to scale. Our paper identifies a critical juncture where women's labor supply is elastic and increasing female labor force participation does not require changing labor demand or the amenity mix jobs offer. Instead, we show that women's preferences mirror those of men at the time of labor market entry, and firms appear willing to recruit women.[1]

Our evidence further builds on related works highlighting the powerful role gender norms, and the beliefs individuals hold about them, play in shaping labor market outcomes (Fernández, Fogli, & Olivetti, 2004; Bertrand, Goldin, & Katz, 2010; Bursztyn, Fujiwara, & Pallais, 2017; Bursztyn, González, & Yanagizawa-Drott, 2020; Jayachandran, 2021; Kleven, 2022; Bursztyn et al., 2023; Agte & Bernhardt, 2024; Cortés et al., 2024; Boelmann, Raute, & Schönberg, 2025). In this paper, we identify a mechanism that helps sustain the influence of gender norms: the belief among women that these norms constrain others but not themselves. This exceptionalism bias makes women less prepared for and more vulnerable to the very constraints they underestimate, contributing to persistent gender gaps in employment. A particularly important norm in lower-income settings concerns early marriage for women. In this paper, we build on prior and contemporaneous work documenting how marriage market dynamics, and the beliefs about them, shape women's labor supply decisions (e.g., Heath & Mobarak, 2015; Afridi et al., 2025; Andrew & Adams, 2025; Mangal & Singh, 2025). Our results highlight how the marriage and labor markets are intertwined: early labor market decisions can influence the nature of marriage offers, and, in turn, marriage prospects can shape women's employment trajectories.

Our paper finally complements a growing literature on behavioral job search, which highlights the role of biased beliefs about labor market prospects in shaping employment and wages. Recent survey and experimental evidence reveals an optimistic bias among job seekers regarding their job-finding rate (Spinnewijn, 2015; Mueller, Spinnewijn, & Topa, 2021; Banerjee & Sequeira, 2023; Kelley, Ksoll, & Magruder, 2024; Abebe et al., 2025; Bandiera et al., 2025). Our closest links are to Kuziemko et al. (2018) and Costa-Ramón et al. (2025), who show that in the U.S. and Switzerland, respectively, women underestimate the long-term career costs of motherhood, leading to overoptimistic expectations about their future labor supply prior to childbirth.[2] We extend this

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[1]Our findings also suggest that gender differences in preferences for job attributes, such as part-time or remote work, are not intrinsic: most women in our sample want full-time, onsite jobs at college graduation. Instead, women's preferences for flexibility later in life are likely shaped by household or family constraints. This is consistent with Beerli, Hofer, and Schaede (2025), who show that a decline in the availability of part-time jobs reduces labor supply among mothers but not among non-mothers.

[2]Similarly, Boneva et al. (2025) collect a wide range of women's beliefs about maternal labor supply and show that information provision can shape women's employment intentions.

insight to a markedly different context and an earlier stage in women's lives. In our setting of urban college graduates in Pakistan, women systematically overestimate their near-term labor force participation. Our paper also builds on Cortés et al. (2023), which highlights the gendered role of timing in employment among U.S. college graduates. They find that women accept jobs earlier than men because they are more risk-averse and less over-optimistic. We extend this literature by showing that application timing plays a pivotal role in a lower-income context, where college-educated women's labor supply decisions occur not only at the intensive margin of job choice but also at the extensive margin of whether to work at all.

II   Graduation and Labor Market Entry

In this section, we examine the formation of labor market expectations before graduation, and whether those differ between men and women. In South Asia, female education often serves purposes beyond its labor-market returns—most notably, enhancing women's standing in the marriage market (Andrew & Adams, 2025). This raises the possibility that many women pursue higher education not as preparation for future employment, but as a strategy to secure better marriage prospects, implying that gender gaps in employment could originate from differences in preferences and expectations that precede college completion.

II.A   Background

Pakistan Figure A.1 uses data from the Pakistan Labour Force Survey to illustrate the tension between Pakistan's remarkable progress in women's education and the persistently low employment rates among educated women. Panel (a) shows the share of 22–35 year-olds with a college degree. Between 1999 and 2018, this share nearly doubled for women—from 4.9% to 9.7% —while rising modestly for men, from 10.8% to 12.4%. As a result, the gender gap in college attainment has narrowed substantially. Panel (b) plots labor force participation among college-educated individuals in the same age range. Despite rapid educational gains, women's participation has remained flat—around 34%—compared to ~ 85% for men, underscoring the weak link between rising female education and labor market engagement in Pakistan.

As the world's 5th most populous nation, Pakistan is interesting to study in its own right. However, the disconnect between a narrowing gender gap in education and a persistent gender gap in labor force participation is far from unique: many countries across South Asia, North Africa, and the Middle East face similar challenges (see Figure A.2 for cross-country evidence on female labor force participation, as well as Jayachandran (2021), Dinkelman and Ngai (2022) and Heath et al. (2024) for comprehensive reviews).

College Graduates We study the labor supply decision of women and men at college graduation — a critical juncture where their employment paths diverge. Figure A.3 illustrates this divergence by plotting labor force participation by gender and age in 2018, for the U.S. in Panel (a) and for Pakistan in Panel (b). In high-income countries, women's participation rates are similar to men's around labor market entry and fall during childbearing years. In contrast, women's labor supply in Pakistan is essentially flat over the life cycle: rather than exiting in childbearing ages, women rarely enter the labor market in the first place. This pattern persists even when restricting to college graduates (Panels (c) and (d) of Figure A.3). Since most women in Pakistan do not enter the labor market at any point during their adulthood, understanding their labor supply decision right at the point of college graduation is first-order.

II.B   Diagnostic Sample

Recruitment The timeline of our diagnostic survey is shown in blue in Figure A.4. In June 2022, one month before graduation, we invited all 2,872 graduating students (1,146 female and 1,726 male) at a private university to participate. A total of 2,238 students completed the baseline survey, yielding a response rate of 77.9%.[3] Since we are interested in labor market beliefs and outcomes, we exclude students who reported that they had already registered for a graduate program. This leaves us with 1,493 students in our final baseline sample.

Attrition Of the 1,493 students in our baseline sample, 1,029 respond to our six-month follow-up survey, and 910 to our nine-month follow-up, yielding a response rate of 68.9% and 61.0%, respectively. These response rates are considerably higher than those typically reported in the phone survey literature.[4] Table B.1 shows that the baseline, six-month, and nine-month samples are similar along observable characteristics measured at baseline.[5] Since our analysis systematically compares baseline beliefs with later realized outcomes, we define our diagnostic sample as the 1,029 students who responded to both the baseline and the six-month surveys.

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[3]The response rate for our baseline survey is high relative to other surveys conducted in university settings. For instance, the response rate is 20% among Boston University Questrom graduates in Cortés et al. (2024), 31% among University of Chicago MBAs in Bertrand, Goldin, and Katz (2010), and 10–12% in the Global COVID-19 Student Survey across 28 universities in Jaeger et al. (2021). We attribute this high response rate to the incentive we offered: a KFC meal. See Figure A.5 for a picture of our food stand.

[4]We achieve this by calling students multiple times (at least three) and systematically varying the day/hour of calls to maximize chances of response.

[5]A few differences are statistically significant but economically negligible. For example, the average GPA is 3.09 among six-month respondents versus 3.04 among attritors. Further, attrition patterns are not systematic across waves: variables that differ at six months do not differ at nine months, and vice versa. For readability, we exclude the two-month follow-up from the table, as we used only one variable from this survey in our analysis. The two-month response rate is higher than that of later follow-ups, and its attrition patterns are no different.

Table I: Descriptive Statistics for the Diagnostic Sample

	All (1)	Male (2)	Female (3)	Diff. (4)	P-value (5)
Nb. Obs.	1,029	590	439		
Age	22.5	22.7	22.2	0.5	0.00
GPA	3.1	3.0	3.2	-0.3	0.00
Married	4.3	2.4	6.8	-4.5	0.00
Engaged	6.6	5.9	7.5	-1.6	0.32
Majors:					
Engineering / Computer Science	26.2	39.2	8.9	30.3	0.00
Life Sciences / Pharmacy	12.1	5.1	21.6	-16.6	0.00
Sciences	13.2	5.8	23.2	-17.5	0.00
Humanities / Languages / Education	15.5	13.4	18.5	-5.1	0.03
Social Sciences	32.8	36.6	27.8	8.8	0.00
Parental Background:					
College-Educated Mother	41.0	40.7	41.5	-0.8	0.80
College-Educated Father	53.2	52.0	54.7	-2.6	0.40

Notes: This table presents baseline descriptive statistics for respondents in the diagnostic sample (see Section II.B). Column 1 presents statistics for all respondents; Columns 2 and 3 present statistics separately for men and women. Column 4 reports male–female differences, and Column 5 reports *p*-values from tests of equality of means. Age and GPA are continuous; all other variables are binary indicators. Age is winsorized at the 2% level.

Descriptive Statistics Table I presents baseline characteristics for our diagnostic sample, with the last column showing *p*-values from a test of equal means between genders. Women constitute 42.7% of the sample. Men and women are both about 22 years old on average. Women have significantly higher (6.7%) GPAs than men. Men are more likely to major in Engineering and Computer Science (39.2% vs. 8.9%), while women are more concentrated in Life Sciences (21.6% vs. 5.1%) and Sciences (23.2% vs. 5.8%). Humanities, Languages and Education attract somewhat more women (18.5% vs. 13.4%), while Social Sciences have a higher proportion of men (36.6% vs. 27.8%). Only 6.8% of women and 2.4% of men are married at graduation, with a similar fraction engaged (7.5% of women and 5.9% of men). Finally, parental education is comparable across genders: 41.0% of students have a college-educated mother, and 53.2% have a college-educated father, with no significant gender differences.

II.C Baseline Beliefs about Labor Market Outcomes

Beliefs about Self: Elicitation At baseline, we elicit students' beliefs about their future labor force participation using two questions. The first asks for their reservation wage for their preferred job title across four work schedules (Full-time Onsite, Part-time Onsite, Full-time Remote, Part-time Remote). For each schedule, respondents have the option to indicate that they are not willing to
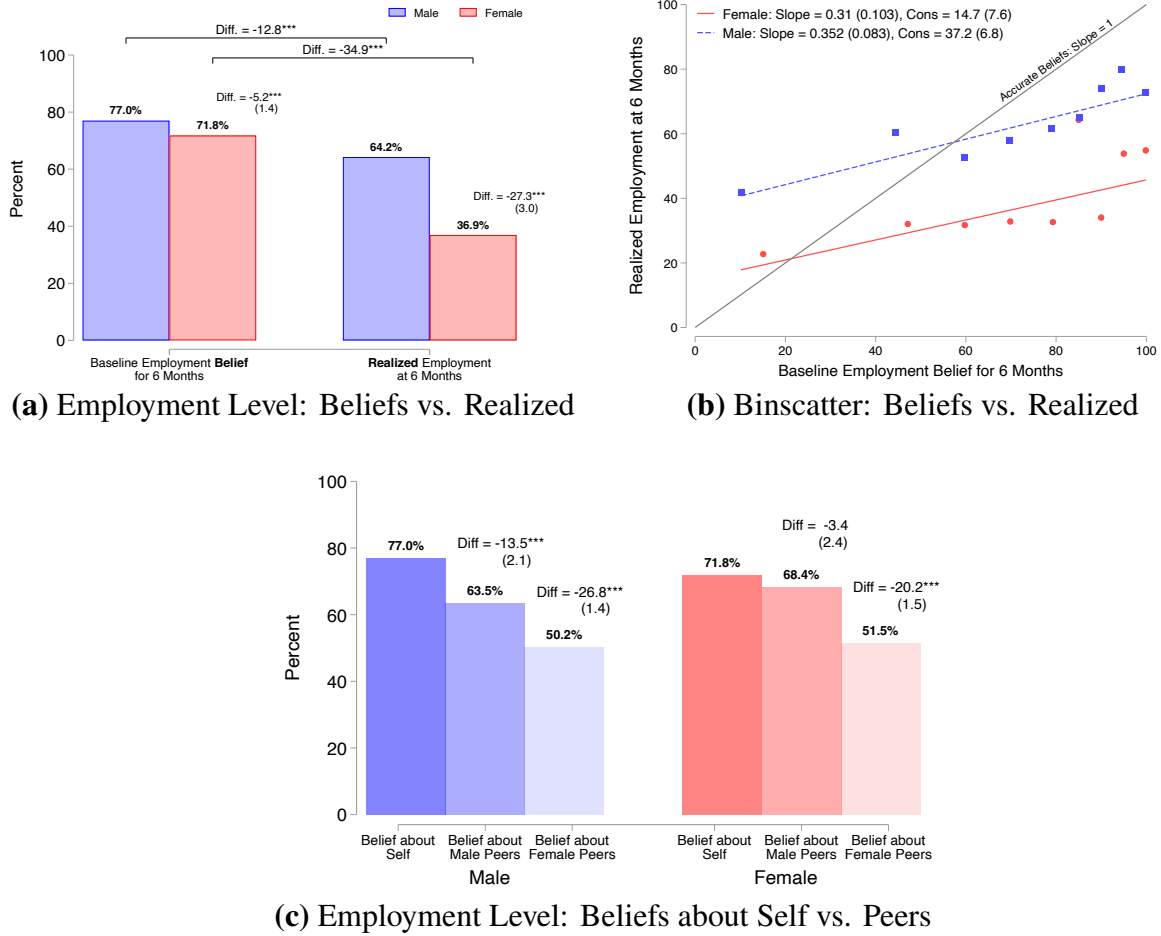
work for any wage.[6] The second question is probabilistic: "On a scale from 0 (very unlikely) to 100 (very likely), how likely is it that you will be working within six months of graduating?" Students were told by the enumerator that work includes working for a private firm or government, running your own business or working for your family business.

Beliefs about Self: Results Across a wide range of measures, we reject the hypothesis that men and women's expectations about work diverge before graduation. Virtually all students report a reservation wage for at least one work schedule, and 95.0% of women do so for the full-time, onsite schedule. Further, as shown in Figure A.6, the distribution of women's reservation and expected wages lies to the left of men's, even after controlling for GPA, major, and preferred occupation. Hence, women do not expect higher compensation for working outside the home. Turning to the probabilistic question, Figure I Panel (a) shows that women report a 71.8% likelihood of working within six months of graduation, only 5.2 pp lower than men. One potential concern is that such stated intentions may reflect cheap talk or demand effects. Two pieces of evidence mitigate this concern. First, women's post-graduation actions align with the intentions they stated at baseline: Figure A.7 Panel (b) shows that 78.4% of women apply for at least one job within six months of graduation, a rate similar to men's (80.4%). Second, we find no systematic differences in women's reported employment expectations or in their responses to questions about traditional gender norms by the gender of the enumerator. This suggests demand effects, such as tailoring responses to appear more traditional to a male enumerator, are unlikely to be driving our results. Finally, in Appendix C, we use data from our experimental sample to show that women not only expect to work after graduation but also want to: 97.6% report at baseline that they would *prefer* to be employed within six months of graduating.

Beliefs about Peers: Elicitation Since beliefs about the broader labor market may shape job search behavior, we test whether men and women differ in their beliefs about their peers' employment prospects. To do so, we ask: "Think of women in your cohort at [the university] who are not pursuing further education right after graduating. Out of 10 randomly selected female students in this sample, how many of them do you think will be employed within six months after graduating?"

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[6]The exact wording of the question is: Imagine that you have graduated from your current degree and are offered a job with 4 possible schedules, which corresponds to [preferred job title]. The four possible schedules are: Full-time (40 hours per week, 9am to 5pm, Monday to Friday) onsite, Part-time (25 hours per week, 9am to 2pm, Monday to Friday) onsite, Full-time remote, Part-time remote. There are no additional jobs currently available that are of interest to you so if you reject this job, you will be unemployed for the foreseeable future. What is the minimum monthly starting salary for which you would be willing to work for any of the following work schedules? Note: you may reject any or all schedules if you would not work on that schedule for any salary. Consider that in all options, the job and the employer are identical in all respects except the schedule, and the job is located in your preferred city. The job is a 20-minute drive away from your house and is representative of other similar jobs in the industry in terms of career growth opportunities, non-wage benefits, etc.

Figure I: Baseline Employment Beliefs and Realized Employment Outcomes

(a) Employment Level: Beliefs vs. Realized

(b) Binscatter: Beliefs vs. Realized

(c) Employment Level: Beliefs about Self vs. Peers

Notes: This figure presents students' baseline beliefs about their employment prospects vs. realized employment outcomes, and beliefs about their peers' employment prospects. The sample consists of respondents from the diagnostic sample (see Section II.B). Panel (a) contrasts students' average baseline belief about their employment likelihood six months post-graduation with their average realized employment at the six-month mark, separately for men (blue) and women (red). Female-male differences are shown above the female bar; average within-gender differences between baseline beliefs and realized employment are shown above the horizontal brackets. Panel (b) is a binned scatterplot of baseline employment beliefs against realized employment, separately by gender. Panel (c) reports respondents' average baseline beliefs about their own employment likelihood vs. their beliefs about their peers' employment likelihood. Male (female) responses are represented by the blue (red) cluster of bars. For each cluster, the leftmost bar shows beliefs about one's own employment likelihood; the middle bar shows beliefs about male peers; and the rightmost bar shows beliefs about female peers. Average differences between beliefs about oneself and beliefs about male (female) peers appear above the middle (rightmost) bar in each cluster. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

We repeat the question replacing "women/female" with "men/male."

Beliefs about Peers: Results Figure I Panel (c) shows that men and women share the same beliefs about the employment prospects of their female and male peers, and both expect women to be much less likely to work than men. Men estimate that 63.5% of their male peers will be employed six months after graduation, compared to 50.2% of their female peers. Women report almost identical expectations: 68.4% for male peers and 51.5% for female peers. Against this backdrop, women's expectations about their own chances of working (71.8% on average) are strikingly high: well above their estimate for other women and essentially on par with their estimate for men.

II.D Beliefs Meet Reality

Beliefs About Self Meet Reality Although men and women hold similar beliefs about their likelihood of working, Figure I Panel (a) reveals a large gender gap in realized employment: 64.2% of men, compared to just 36.9% of women, are employed six months after graduation. This figure for women closely aligns with the national labor force participation rate for young college-educated women in Pakistan (33.9% in 2018, Figure A.1 Panel (b)). Comparing realized outcomes to baseline beliefs, men overestimate their likelihood of working by 12.8 pp (16.6%) on average, while women overestimate it by 34.9 pp (48.6%).

Figure I Panel (b) plots realized employment six months post-graduation against baseline employment beliefs. The 45-degree line represents the benchmark of accurate beliefs. Both men and women deviate substantially from this benchmark: the slope of the relationship between baseline beliefs and realized outcomes is similar and far below one (0.35 for men; 0.31 for women). The intercept, however, is markedly different across genders: 37.2 pp for men and only 14.7 pp for women. Taken together, the slopes and intercepts imply that women overestimate their employment chances across most of the belief distribution, and to a far greater extent than men. For example, among students who report an 80.0% chance of working at baseline, only 32.6% of women end up working six months later, vs. 61.7% of men.[7]

Beliefs About Peers Meet Reality Both men and women accurately predict the employment level for men. Men predict a 63.5% employment rate for other men, and women predict 68.4% — both close to the actual male employment rate of 64.2%. For female peers, men predict 50.2% employment and women predict 51.5%. Although these estimates exceed women's realized employment

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[7]We run a shorter survey nine months after graduation. Figure A.8 shows that female employment rises from 29.4% to 36.9% between the two- and six-month follow-ups but increases only modestly thereafter, reaching 40.1% at nine months, still well below the baseline expectation of 71.8%. By contrast, male employment rises sharply at both intervals, reaching 75.1% at nine months, close to their baseline expectation of 77.0%.

rate of 36.9%, they are far closer to the truth than women's beliefs about their own likelihood of working, which average 71.8%.

Taking Stock Upon graduation, women hold similar expectations about their own chances of working as men and invest in job search accordingly. These patterns suggest that women do not pursue college degrees solely to improve their marriage prospects. However, when we compare beliefs to realized outcomes, women substantially overestimate their own likelihood of working in the months following graduation. Importantly, these incorrect expectations are not due to misperceptions about overall female labor force participation, as women's beliefs about the employment prospects of their female (and male) peers are broadly consistent with realized outcomes. We later show that this result fits into a broader pattern observed among the women in our sample: they experience an *exceptionalism bias*, i.e., they recognize the barriers to employment faced by their female peers, but overestimate their own ability to overcome them.[8]

III Diagnosing the Gender Employment Gap

Section II demonstrates that the gender employment gap does not stem from pre-graduation differences in work expectations or preferences. In this section, we explore alternative explanations.

A vast literature has identified structural, behavioral, and institutional barriers as key drivers of the gender employment gap. They include gender differences in preferences for job attributes such as flexibility (Mas & Pallais, 2017; Wiswall & Zafar, 2018; Maestas et al., 2023), job search (Cortés et al., 2023; Fluchtmann et al., 2024), household and childcare responsibilities (Halim, Perova, & Reynolds, 2023), as well as discrimination in hiring and pay (Goldin & Rouse, 2000; Bertrand, 2011; Kuhn & Shen, 2013; Goldin, 2014; Delavande & Zafar, 2019; Brown, 2022; Kline, Rose, & Walters, 2022; Gentile et al., 2023; Buchmann, Meyer, & Sullivan, 2024). Together, these factors help explain women's higher exit rates, slower wage growth, and greater selection into part-time or informal employment later in life.

In this section, we examine whether these factors also shape the gender employment gap at the point of labor market entry. Following the logic of a Oaxaca decomposition, we first examine gender differences in relevant, observable endowments (e.g., GPA, major, or search effort) and evaluate whether these differences explain the gender employment gap. We then test whether men and women receive different returns to their endowments (e.g., whether labor market returns to a

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[8]This concept is closely related to overplacement bias, also called the "better-than-average" or "Lake Wobegon" effect (Santos-Pinto & de la Rosa, 2020). Overplacement refers to individuals overestimating their relative skills or performance (Taylor & Brown, 1988; Myers, 1998). For instance, most managers (Larwood & Whittaker, 1977) and college professors (Cross, 1977) rate themselves as above average. Our notion of exceptionalism bias differs in that we separately measure beliefs about oneself and beliefs about others: women in our sample hold relatively accurate beliefs about others but substantially overestimate their own likelihood of working.

high GPA differ by gender), and whether such differences in returns further explain the observed employment gap. Before proceeding further, we emphasize that all analyses in this section are diagnostic and correlational, we do not make causal claims.

III.A   Gender Differences in Traditional Factors

Preferences for Job Amenities A leading explanation for low female labor force participation is that women are primarily responsible for household management (Veerle, 2011), raising the opportunity cost of market work and potentially increasing reservation wages. However, we find that these patterns are not operative at labor market entry. As Figure A.6 shows, women report lower reservation and expected wages than men, both unconditionally and conditional on covariates. Turning to non-wage amenities, prior work finds that women may place greater value on flexibility or remote work (Jalota & Ho, 2024; Ho, Jalota, & Karandikar, 2025). However, this is not the case for our sample of college graduates. Figure A.9 shows that there is no gender difference in preferred work hours and location: both men and women want 6.4 hours per day on average, and both overwhelmingly prefer on-site jobs, with about three-fourths favoring full-time, on-site work. This likely reflects that the household and childcare responsibilities that later constrain many women's schedules are not yet present for our sample of mostly single women without children.

Human Capital We assess whether disparities in academic performance contribute to employment gaps. Figure A.7 Panel (a) shows that women have higher GPAs than men, a pattern that persists after controlling for academic major. As documented in Table I, the distribution of majors differs substantially across men and women. However, we later show in Figure II that gender differences in major choices do not drive the gender employment gap.

Job Search Another common explanation for the gender employment gap in is differences in job search: if women apply to fewer jobs, they may be less likely to secure employment. Our data does not support this. Figure A.7 Panel (b) shows that women are just as likely as men to apply to at least one job, and both groups submit a median of four applications. Although women apply to three fewer jobs on average, this gap disappears after controlling for GPA, major, and other observables. In terms of timing, women are equally likely to apply early – defined as applying within two months of graduation (Row 7, Table B.2). Overall, job search behavior among college-educated men and women is remarkably similar, suggesting that women's stated intentions to work at baseline were not mere "cheap talk."

Firm Demand To assess whether demand-side factors contribute to women's lower employment rates, we collect detailed data on interviews, job offers, and salary offers for both men and women. Figure A.10 shows cumulative distributions of interviews and offers by gender. Men and women are equally likely to receive at least one interview or job offer, and there are no significant gender differences in the number of either. After adjusting for baseline observables (e.g., GPA, major, preferred occupation, and job preferences), women in fact receive 0.5 more offers than men. However, consistent with Brown (2022), a clear gender gap emerges in salary offers: as shown in Panel (c), women receive lower wage offers even after conditioning on GPA, major, and preferred occupation.[9] These lower offers align with women's lower expected wages, implying that women are no more likely than men to receive an offer below their expectations. Overall, while firm-side factors may help explain gender gaps later on, they do not appear to drive the employment gap in our sample of recent college graduates.

A Window where Women Resemble Men Taken together, these results suggest that leading explanations for later-life gender gaps in employment, such as preferences for part-time work, flexible hours, or remote arrangements, do not bind for our sample of college graduates. This further suggests that such preferences and behaviors are not innate but rather emerge gradually as women adapt to household constraints and prevailing social norms. Meanwhile, college graduation appears to mark a brief window in which women's labor supply and preferences align closely with men's, yet their employment trajectories diverge soon after. We investigate predictors of this divergence in the following section.

III.B   The Limited Role of Traditional Factors in Explaining the Gender Employment Gap

Differences in Levels To formally examine how student characteristics affect the gender employment gap, we regress a six-month employment indicator on a female dummy while progressively adding controls for the observable characteristics described above. Results are presented in Figure II. The raw gender employment gap — at 27.3 pp — decreases by no more than 1.7 pp as we sequentially add controls for GPA and major (Row 2), preferred occupation (Row 3), reservation and expected wages (Row 4), preferences for work hours and remote work (Row 5), and baseline employment beliefs (Row 6). In the final model of supply-side factors (Row 7), adding search effort and past internship experience shrinks the gap only moderately, to 24.0 pp. These results show that supply-side factors play a limited role in explaining the gender employment gap. We next turn to demand-side factors. Adding controls for number of interviews (Row 8), number of job offers (Row

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[9]The offered wage is defined as the highest salary offer received by a student, regardless of acceptance.

9), and offered wage (Row 10) leaves the gender gap largely unchanged.[10] Overall, including all observable supply- and demand-side variables only explains 6.2% of the raw gender employment gap, leaving a large unexplained gender gap at 25.6 pp. In other words, even after holding constant job preferences, search behavior, and the number and quality of offers, women remain substantially less likely than men to be employed.

The gender employment gap thus arises at a later stage—when decisions about job offers are made, with women rejecting offers at much higher rates than men. Figure A.11 confirms this conjecture: among students who receive a job offer, women are 27.7 pp less likely than men to be employed six months after graduation. Even after controlling for the supply-side factors detailed above, the number of interviews and offers, and the offered wage, women remain 21.3 pp less likely than men to accept a job. In short, while men and women search similarly, women are much more likely than men to turn down the offers they receive.[11]

Differences in Returns While controlling for student characteristics does little to shrink gender gaps in a pooled regression, it remains possible that individual characteristics differentially predict men's or women's future employment. To test for this, we regress employment outcomes at six months post-graduation, separately for men and women, on the same supply-side variables used as controls in Figure II. Figure III presents the multivariable results, where each row includes all other variables as controls. Figure A.12 shows the bivariate version, where each row regresses employment on the variable of interest without control.[12] None of the traditional supply-side factors — including GPA, wage and non-wage preferences, baseline employment beliefs, or number of job applications — exhibits statistically different predictive power by gender. For example, keeping other supply-side factors constant, a one-standard-deviation increase in baseline belief about employment probability is associated with a 6.9 pp increase in men's likelihood of working six months later, compared to a 5.4 pp increase for women, a statistically insignificant difference (p-value = 0.648).

III.C   The Role of Search Timing in Explaining the Employment Gap

Thus far, we have shown that factors commonly invoked in the literature as key drivers of gender employment gaps — such as different preferences, constraints from household responsibilities, and employer discrimination — have limited explanatory power at the point of labor market entry.

Prompted by this, we delve deeper into our survey data to explore explanations that extend beyond traditional accounts. In doing so, we uncover a critical, but previously overlooked, predictor

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[10]While these variables do not substantially reduce the gender employment gap, they do increase the adjusted R^2, confirming their relevance to predicting students' labor market outcomes.

[11]This result is consistent with Caria et al., 2025, who find, in Egypt, that an intervention that provides women with job-matching services does not lead to greater female employment as women turn down the offers they receive.

[12]Means and standard deviations for the independent variables shown in the figure are provided in Table B.2.

Figure II: Explaining the Gender Employment Gap
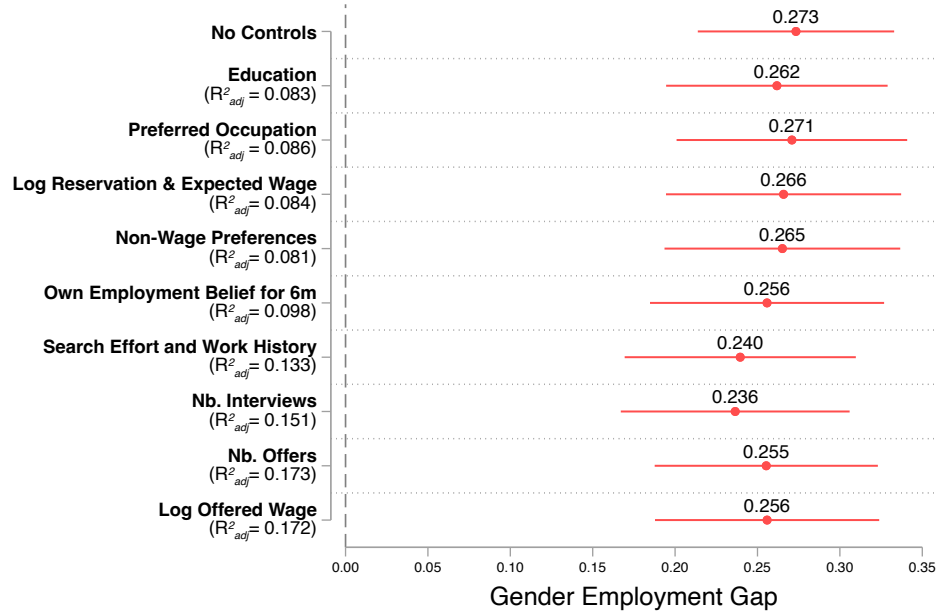
Notes: This figure reports the gender employment gap six months post-graduation and the extent to which characteristics account for it. Each row reports the coefficient, its 95% confidence interval, and the adjusted R^2 from a regression of employment on gender and the control set listed in that row and above. The sample consists of respondents in the diagnostic sample (see Section II.B). Education controls include GPA and major. Preferred Occupation controls are the Standard Occupational Classification (SOC) code of students' preferred job. Non-Wage Preferences controls capture baseline preferences over onsite vs. remote work and preferred daily work hours. Own Employment Belief for 6 Months is the respondent's baseline belief about their own employment likelihood six months later. Search Effort and Work History controls include an indicator for submitting at least one job application by the two-month follow-up, the total number of applications submitted by the six-month follow-up, and an indicator for internship experience. The Nb. Interviews (Offers) control includes the number of interviews (offers) received by the six-month follow-up. Log Offered Wage is the highest offered log wage reported (regardless of acceptance). Missing values (e.g., for respondents who did not receive an offer) are set to a constant and flagged with an indicator. All unbounded continuous variables are winsorized at the 2% level. The mean employment level for men at six months is 64.2%.

of women's employment: the timing of job search. To quantify timing, we define "applying early" as sending at least one job application before our second survey wave, i.e., within two months of graduation. Men and women are equally likely to apply early, with about two-thirds of both groups doing so. As a result, controlling for early application in Figure II (Row 7) has little effect on the gender employment gap. However, Figure III reveals that early application is the only variable that differentially predicts employment for men and women. For women, applying early is associated with a 20.4 pp increase in employment probability six months later, keeping all else equal. In contrast, applying early has no statistically significant effect on men's employment (difference p-value = 0.044). The magnitude is economically large: women who apply early are more than twice as likely to be employed six months after graduation as those who do not.

This finding suggests that job search timing, rather than traditional demand- or supply-side

Figure III: The Determinants of Gender-Specific Labor Supply
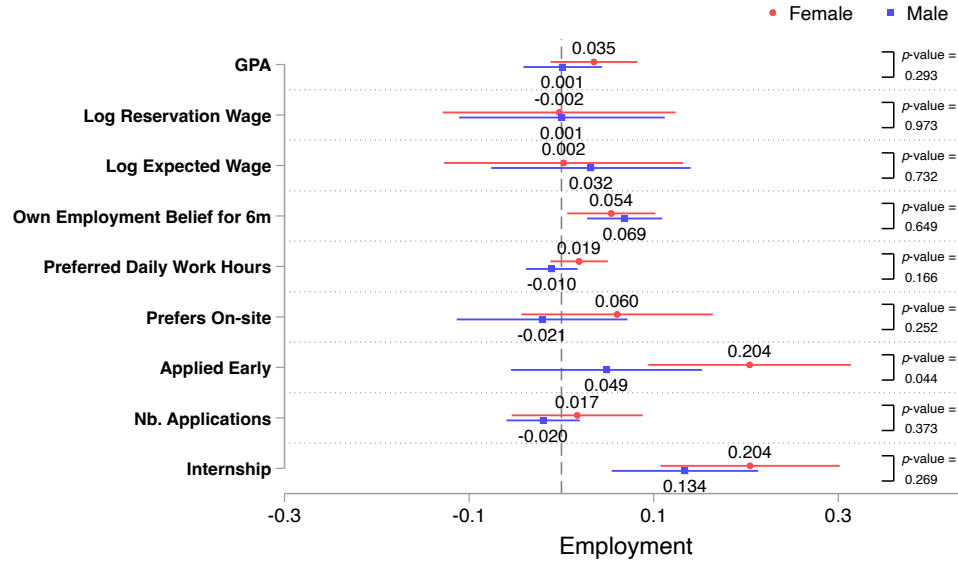
Notes: This figure reports regression estimates of students' employment status six months after graduation on a set of independent variables, separately for women (red) and men (blue). Each row reports the coefficient on the specified variable, with variables in all other rows included as controls. The sample consists of respondents in the diagnostic sample (see Section II.B). Independent variables include GPA (in standard deviations), log baseline reservation wage, log baseline expected wage, baseline belief about one's own employment likelihood (scaled to 0–1 and reported in standard deviations), preferred daily work hours, preference for onsite vs. remote work, an indicator for applying early, the number of applications submitted by the six-month follow-up (in standard deviations), and an indicator for internship experience. All unbounded continuous variables are winsorized at the 2% level. Horizontal bars show 95% confidence intervals. Vertical brackets report *p*-values from tests of equality of coefficients across gender. Means and standard deviations for the independent variables appear in Table B.2.

factors, may play a critical role in the decision to enter the labor market. One obstacle to this interpretation is that the observed relationship between application timing and employment could reflect selection on unobservables (e.g., more motivated women apply first), rather than a causal effect of timing itself. Even if the relationship is causal, its interpretation hinges on women's beliefs. If women accurately perceive that timing influences employment, then differences in application timing likely reflect deliberate trade-offs to maximize expected utility. But if women misperceive this relationship, they may fall prey to an "illusion of time" — delaying job search under the false assumption that job application timing does not matter, thereby inadvertently reducing their chances of employment. The distinction matters: if early application timing causally and unexpectedly raises female employment, it offers a tractable policy margin whose underlying mechanism warrants closer examination. To distinguish between these possibilities, and to understand *how* application timing may influence women's employment, we implement an experiment that shifts application timing through a financial incentive for early job search.

IV Experimental Evidence on the Timing of Job Search

IV.A Experimental Design

Design We randomly assign students to treatment and control groups and incentivize early applications among treated students through a modest monetary reward. The reward is conditional on applying to jobs early, rather than working. This ensures that any observed treatment effect on employment cannot be mechanically driven by students who apply solely to claim the financial incentive. A potential concern with this design is that the incentive may simply heighten the salience of the relationship between early applications and employment, implicitly signaling to treated students that applying, and therefore working, early is socially desirable. As shown in Section IV.C, in the paragraph "The Illusion of Time", our data rule out this interpretation.

The Test Our null hypothesis is that inducing students to apply early has no effect on women's subsequent employment. There are two scenarios under which the null would hold. First, application timing may have no causal impact on employment, in which case the correlation documented earlier simply reflects unobserved heterogeneity affecting both timing and employment. Second, there *is* a causal link between timing and employment, but it is fully internalized by students. In this case, some students may apply to jobs earlier to claim the incentive, but the incentive should not alter their optimal search timing, and thus their employment. Rejecting the null thus implies two things: timing matters for employment, and some women misperceive this link such that, absent treatment, they would apply too late. To test directly for misperceptions, we also elicit students' beliefs about the causal effect of application timing on employment.

Parameters of Interest and Identification Assumptions The experiment allows us to estimate two parameters of interest: the causal effect of the experimental incentive on employment, β_{ITT}, and the causal effect of early applications on employment for compliers, β_{LATE}.[13] The identification of β_{ITT} rests on two assumptions: (i) treatment assignment is orthogonal to individual characteristics correlated with employment, and (ii) the stable unit treatment value assumption (SUTVA). A successful randomization ensures assumption (i), and Table B.3 (Columns 1–4) confirms that treatment and control groups are balanced on all key baseline characteristics. Violations of SUTVA are unlikely: students from both treatment and control groups apply to jobs along with graduates from all over the country, making our study sample atomistic in the broader national labor market. In addition, the treatment does not convey any explicit or implicit information about the benefits of

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[13]Our experiment does not identify the average causal effect of application timing on employment. Doing so would require randomly assigning students to different application timings—including forcing some to apply later than they otherwise would—which would be both unethical and uninformative for real-world policy.

early applications, further ruling out information spillovers to the control group.

Identification of β_{LATE} requires an additional assumption: treatment affects employment only through its effect on the timing of applications. This exclusion restriction is necessary for the treatment to serve as a valid instrument for early applications. This assumption is plausible since the financial reward was deliberately kept small enough to avoid income effects on labor supply.

Implementation We field the experiment at a public university in Lahore in June 2023. The timeline of our experimental survey is illustrated in yellow in Figure A.4. The experimental sample consists of 1,947 students scheduled to graduate in mid-July 2023. We randomly assign 50% of the sample to a treatment group and offer them a monetary reward conditional on applying to at least four relevant jobs by August 15th, one month after graduation.[14] A job is considered relevant if it matches the student's skill set. To claim their reward, students must submit a brief online form with proof of their applications to the research team through a brief online questionnaire, including screenshots showing the application date and job title.[15]

The incentive amount is PKR 5,000 (~ 18 USD or 89 USD after adjusting for Purchasing Power Parity), equivalent to two days of pay at the median monthly salary in our diagnostic sample at the six-month follow-up.[16] We offer a much higher reward of PKR 20,000 to 10% of the sample to insure against the possibility of low take-up. In practice, take-up was high across both treatment arms, and point estimates on applications and employment are similar. Therefore, we pool the two treatment groups in the analysis that follows.

To ensure that students do not perceive treatment assignment as a signal of their labor market prospects, we tell them explicitly that the assignment is random. Students are told: "You have now reached the last part of the survey which is experimental. At this stage, whether you are shown two modules or just one module will be randomly determined by a lottery." A spinning wheel then appears on the tablet, with the outcome jointly observed by the student and the enumerator (see Figure A.13). If the student is not selected into treatment, they are told: "The lottery has decided that you will skip directly to the last module of the survey."

We conduct three follow-up surveys. The first, in early September 2023, i.e., shortly after the incentive deadline, allows us to verify the "first-stage" effect of the treatment on early job search. The second, in early January 2024, measures treatment effects on our main outcome of interest: employment. The final follow-up, in September 2024, fourteen months after graduation, assesses

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[14]We chose to require at least four applications, as four was the median number of applications among appliers by the two-month follow-up in the diagnostic sample.

[15]Our research team reviewed all submitted screenshots and confirmed that all applications were to real jobs consistent with students' skills.

[16]The Purchasing Power Parity conversion uses estimates from the World Bank: https://data.worldbank.org/indicator/PA.NUS.PPP?year=2023

the persistence of these employment effects.

Alternative Design Before presenting results from our experimental design, we note that we also considered an alternative intervention: an information campaign highlighting the low employment rates of college-educated women and their correlation with application timing. This idea was motivated by a growing body of work that uses information experiments to correct misperceptions about labor market outcomes (Altmann et al., 2018; Belot, Kircher, & Muller, 2019; Aloud et al., 2020; Jäger et al., 2024; Roussille, 2024). For such an intervention to be effective, however, applicants have to hold inaccurate beliefs about aggregate employment rates. This is not the case in our context. As shown in Section II.C, women overestimate their own employment prospects, but they hold much lower, and more accurate, expectations about other women in their cohort. As a result, providing aggregate statistics may fail to induce behavioral changes if women do not view these statistics as relevant to themselves. Spillover risks are much higher, too. For these reasons, we decided against a purely informational campaign.

IV.B   Our Experimental Sample

Recruitment Based on budget and power calculations, we target a sample of about 2,000 students for our baseline survey. We stratify our sample by academic major and gender, over-sampling women (65%) as they are the primary focus of the experiment. For majors, we sample to reflect the full distribution at the university, excluding only very small fields (fewer than 25 students) and imposing caps of 200 women and 100 men per major to ensure broad representation. These caps bind in a few majors, in which case subgroups of students are randomly and incrementally invited until targets are met. Within this sampling frame, each student, male or female, has a 50% chance of being assigned to treatment. We receive 2,468 responses at baseline. Since our focus is on labor market beliefs and outcomes, we exclude 223 students (9.0%) enrolled in graduate school and another 299 students (12.1%) who have secured a job.[17] After these adjustments, we obtain a final baseline sample of 1,947 students.

Balance and Attrition We test for balance across treatment arms on a wide range of baseline characteristics.[18] Table B.3, Columns 1–4 show that treatment and control groups are balanced

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[17]The share of students that secured a job before graduation (12.1%) is much lower than in the U.S., where many college students interview and receive job offers in the year preceding graduation (Cortés et al., 2023). This low rate in our setting underpins our experimental design: offering financial incentives to apply in the month before graduation can meaningfully shift application timing because most students have not yet begun their job search.

[18]For readability, we exclude the two-month follow-up from the attrition and balance tables, as this wave is not used beyond some descriptive evidence on the shift in application behavior right after the application deadline. Its response rate is higher than in later waves, and balance test results are consistent with those from later waves, too.

at baseline on all key variables (gender composition, GPA, major distribution, marital or family backgrounds, and key employment-related beliefs), confirming the success of our randomization procedure. Columns 5–8 and 9–12 of Table B.3 show that this balance is maintained in the six-month and fourteen-month follow-ups.

Table B.4 further investigates whether attrition is systematically correlated with treatment status or baseline characteristics. We define the six-month sample as respondents who respond to both the baseline and the six-month surveys; and for the fourteen-month sample, we further restrict to respondents who also answer the fourteen-month survey. Attrition is 25.9% and 37.4% in the six- and fourteen-month samples, yielding sample sizes of 1,442 and 1,218 students, respectively. Table B.4, Row 2, Columns 2–9, show that there is no differential attrition by treatment status in either the six- or fourteen-month follow-ups. Nor is attrition systematically driven by baseline characteristics like major, family background, or key employment-related beliefs. One exception is that women are slightly overrepresented among attritors. However, Table B.3 confirms that the share of women remains balanced between treatment and control in both waves, suggesting this pattern is unrelated to treatment status. GPA is the only other variable that consistently differs between attritors and non-attritors in both waves: on average, students who remain in the panel have GPAs ~0.05 points higher. This difference is economically small (~1.5%) and unlikely to affect our results.

Descriptive Statistics Table II presents descriptive statistics for the six-month experimental sample, which includes students who respond to both the baseline and six-month follow-up surveys. The final column reports *p*-values from a test of equal means between genders. Women make up 64.2% of the sample, with 926 female and 516 male respondents. The average age is around 23 for both men and women. As in the diagnostic sample, women's average GPA is slightly higher (6.3%) than men's. However, unlike the diagnostic sample, where men and women tend to major in different fields, the experimental sample shows no systematic gender differences in the distribution of majors. Women have, on average, more educated parents than men and appear to come from slightly wealthier households, as reflected in higher rates of family car ownership and internet access. Marriage and engagement rates are low for all: only around 4% of both men and women are married at graduation, with a similar share engaged (4.3% of women and 3.1% of men).

External Validity of Diagnostic Findings Appendix C shows that the diagnostic findings of Section III, derived from private university students, replicate using the control group of the experimental sample, drawn from a large public university. This confirms that our diagnostic insights are relevant to a diverse population of college graduates.

Treatment Take-up Take-up, defined as the share of respondents in the treatment group that claim

21

Table II: Descriptive Statistics for the Experimental Sample

	All (1)	Male (2)	Female (3)	Diff. (4)	P-value (5)
Nb. Obs.	1,442	516	926		
Age	22.7	23.2	22.5	0.7	0.00
GPA	3.3	3.2	3.4	-0.2	0.00
Married	4.4	4.3	4.4	-0.2	0.88
Engaged	3.9	3.1	4.3	-1.2	0.23
Majors:					
Engineering / Computer Science	7.1	6.4	7.5	-1.1	0.44
Life Sciences / Pharmacy	12.6	10.1	14.0	-4.0	0.02
Sciences	27.0	29.7	25.6	4.1	0.10
Humanities / Languages / Education	26.3	27.9	25.4	2.5	0.30
Social Sciences	27.0	26.0	27.5	-1.6	0.52
Parental Background:					
College-Educated Mother	27.9	18.9	33.0	-14.1	0.00
College-Educated Father	42.8	36.5	46.3	-9.8	0.00
Working Mother	6.7	5.4	7.5	-2.0	0.13
Working Father	66.9	63.2	68.9	-5.8	0.03
Family Owns Car	49.3	44.4	51.9	-7.4	0.02
Family Owns Motorbike	93.3	93.0	93.5	-0.5	0.73
Family has Internet	86.7	80.3	90.1	-9.8	0.00
Family has Laptop	84.9	84.7	85.0	-0.3	0.88
Family has Smartphone	99.6	99.5	99.6	-0.1	0.81

Notes: This table presents baseline descriptive statistics for respondents in the six-month experimental sample (see Section IV.A). Column 1 presents statistics for all respondents; Columns 2 and 3 present statistics separately for men and women. Column 4 reports male–female differences, and Column 5 reports *p*-values from tests of equality of means. Age and GPA are continuous; all other variables are binary indicators. Age is winsorized at the 2% level.

and receive the financial award, is 53.5% for women and 48.5% for men. To test the "relevance" assumption, i.e., that the incentive induces earlier applications, we ask respondents in both the six- and fourteen-month surveys to report the date of their first job application. Table III, Column 1, shows that 58% of treated women have sent at least one job application by August 15th (the deadline for the monetary reward), compared to 32.5% of control women. Similarly, 54.8% of treated men have sent at least one early application, compared to 37.8% of control men. Figure A.14 further examines whether treatment take-up is correlated with students' baseline characteristics. First, for both genders, students who take up treatment are more likely to major in engineering or computer science and less likely to major in the humanities. Second, being already engaged or married is associated with lower treatment take up. Third, for women, compliance is positively correlated with baseline beliefs about one's own employment, while for men the association is stronger with beliefs about other men's employment. Finally, take-up is not correlated with gender norms, as measured by questions from the World Value Survey, for either gender.

IV.C   Results

Intent-to-Treat: Specification To estimate the effect of our intervention on students' labor market outcomes, we run the following intent-to-treat specification:

$$Y_{it} = \alpha_0 + \alpha_1 Male_i + \alpha_2 T_i + \alpha_3 (T_i \times Male_i) + \alpha_4 X_i + \epsilon_{it} \tag{1}$$

where Y_{it} denotes the outcome of interest (e.g., employment) for individual i at time t. The co-efficient α_1 captures gender differences within the control group, quantifying how outcomes for male students differ from those of female students. The coefficient α_2 is the primary parameter of interest: it measures the intent-to-treat effect of the intervention on women assigned to treatment ($T_i = 1$). The coefficient α_3 represents the additional effect of the treatment on men. For interpretational ease, our results tables show the treatment effect on men, that is $\alpha_2 + \alpha_3$. Additionally, we include X_i, a vector of individual baseline covariates selected via the post-double selection Lasso procedure to improve statistical power.[19] We estimate Equation (1) separately at two times t: six months and fourteen months post-graduation. All standard errors are robust to heteroskedasticity.

Intent-to-Treat: Results Table III reports results from estimating Equation 1. Panel A presents treatment effects for women, while Panel B does so for men. Panel A Column 2 shows that treated women are 7.5 pp (22.3%, p-value = 0.015) more likely to be employed six months post-graduation than control women. Column 4 shows that this employment effect persists in the fourteen-month follow-up, where treatment increases women's likelihood of working by 7.0 pp (p-value = 0.036).

We also examine effects exclusively on "firm work", defined as working for a positive wage at a private firm or in the public sector, as opposed to self-employment, unpaid work, or work in a household enterprise.[20] This outcome is important for two reasons. First, at baseline, women overwhelmingly prefer firm work: 90.7% report preferring it to self-employment or working in a family business.[21] Second, in low-income countries, self-employment or informal work is associated with lower labor force attachment and earnings potential. For instance, Breza, Kaur, and Shamdasani (2021) show that much of self-employment in India is in fact "disguised" unemployment due to labor rationing when demand is limited.[22] Given these considerations, our

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[19]We adapt the post-double-selection approach set forth by McKenzie (2012) and Belloni, Chernozhukov, and Hansen (2014). We show that our results are robust to estimating the model without these controls.

[20]Appendix Section D describes how the "firm work" indicator is constructed from survey questions.

[21]Women are asked: "What type of work would you prefer to do after you graduate?". Options include: Work for a private firm (or government); Work in my family-owned business; Be self-employed; and Be an intern at a firm.

[22]Based on extensive data and literature review, *The World Development Report* on Gender (World Bank, 2012) finds that women in low-income countries are predominantly employed in low-productivity, low-wage jobs, often home-based and driven more by "necessity" than by "opportunity". It concludes that the over-representation of women in these

Table III: Treatment Effects on Employment

| | August 15 | 6 Months | | 14 Months | |
| | Has Applied | Working | Working for Firm | Working | Working for Firm |
	(1)	(2)	(3)	(4)	(5)
Panel A: Female					
Treatment	0.255***	0.075**	0.102***	0.073**	0.101***
	(0.031)	(0.031)	(0.029)	(0.035)	(0.035)
Female Control Mean	0.325	0.336	0.253	0.521	0.416
Panel B: Male					
Treatment	0.170***	0.001	0.021	-0.017	0.002
	(0.042)	(0.042)	(0.042)	(0.040)	(0.045)
Male Control Mean	0.378	0.551	0.374	0.719	0.561
Nb. Obs.	1,442	1,442	1,442	1,218	1,218

Notes: This table presents the treatment effects on labor market outcomes for respondents in the six-month (Columns 1 to 3) and fourteen-month (Columns 4 and 5) experimental samples (see Section IV.A). Panel A (B) presents results for women (men). Column 1 reports the treatment effect on whether a respondent had applied to at least one job by August 15th. Column 2 reports the treatment effect on employment at six months. Column 3 reports the treatment effect on firm or public sector employment at six months. Columns 4 and 5 report the same outcomes as Columns 2 and 3, respectively, but at fourteen months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

intervention is explicitly designed to encourage job applications to private firms rather than business creation or self-employment, making firm employment a natural outcome of interest. In Panel A, Column 3, we find that our treatment increases women's probability of working for a firm (or in the public sector) six months after graduation by 10.2 pp (40.3%, p-value = 0.001). Column 5 shows this effect persists fourteen months after graduation, at 10.1 pp (p-value = 0.003), relative to a control mean of 41.6%.

The persistence of treatment effects more than a year after the incentive is awarded indicates that the intervention does more than simply accelerating job entry among women who would have worked eventually. Instead, it leads to a sustained increase in women's employment levels. Because employment is not an absorbing state, i.e., women can decide to revert to non-employment at any time, we interpret this persistence through a revealed-preference lens: women induced to work early *choose* to remain employed, indicating durable labor force attachment.

Turning to Panel B, we detect no treatment effect on men, whether in overall or firm employment. These results are consistent with our correlational findings in Section III.C, which show a positive association between early applications and employment for women, but not for men.[23] Given the

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"jobs" is a primary driver of gender gaps in earnings and productivity. Similarly, Ashraf et al. (2024) document that female entrepreneurs typically earn less and are concentrated in low-return industries. Together, these facts underscore the socioeconomic significance of shifting women into formal employment, especially for reducing gender disparities driven by the composition of work.

[23] Appendix Table B.5 shows results from estimating Equation (1) without Lasso-selected controls. The treatment effects for women are similar in magnitude to those in Table III and statistically significant. At six months, effects on employment and firm employment are significant at the 5% and 1% levels, respectively; at fourteen months, the

Figure IV: Explaining the Magnitude of our Treatment Effects

(a) Share Working for Firm by First App. Date

(b) Distribution of First App. Date
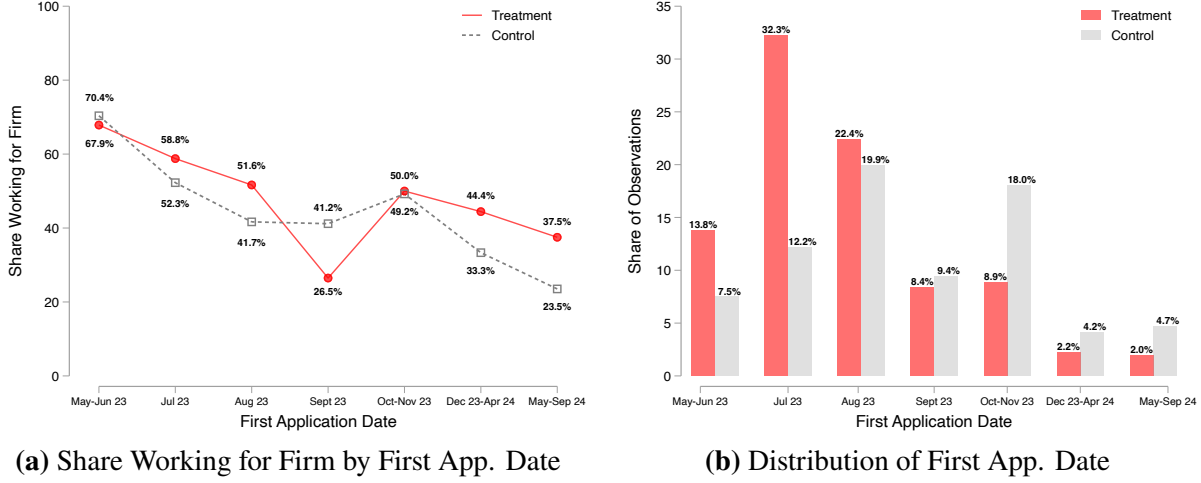
Notes: This figure shows the relationship between women's timing of first job applications and long-term firm employment. The sample consists of women in the fourteen-month experimental sample (see Section IV.A) who provided the date of at least one job application. Panel (a) shows the share of women employed at a firm at the fourteen-month follow-up, against the month of their first job application and Panel (b) shows the distribution of first application dates, both separately for treated (solid red) and control (dashed gray) women. 81 women reported having applied for jobs but did not provide a first job application date, such that they appear as having applied in Table B.7 but are not included in this Figure.

null effect on men, the positive treatment effect on women translates into a ~35% decrease in the gender employment gap both six and fourteen months after graduation.

A Pivotal Few Months Figure IV highlights that the months immediately following graduation play a pivotal role in shaping women's employment outcomes — and that our intervention shifts many women's job search into this critical window. Using self-reported dates of first job applications, we analyze employment outcomes as a function of the month of first application. Panel (a) reveals a sharp decline in employment rates among control group women as first application dates move farther from graduation. For instance, 70.4% of control women who applied in June 2023 are working for a firm by September 2024. This falls to 52.3% for women applying in July 2023, and further to 41.7% for those applying in August 2023.

While these patterns may partly reflect selection (e.g., more employable women applying earlier), they suggest that even modest shifts in application timing could meaningfully improve employment outcomes. Panel (b) confirms this by comparing first-application dates across treatment and control groups. The intervention more than doubles the share of women applying by July 2023—from 19.7% in the control group to 46.1% in the treatment group. Relative to the control distribution, these early applications come both from women who would otherwise have applied in

outcomes are statistically significant at the 10% and 5% levels. We again find no effect for men.

October–November of the same year and from women whose applications would have been delayed until the following year or not submitted at all. If earlier applications in the treatment group were driven purely by selection, we would expect treated early applicants to have lower employment rates than comparable early applicants in the control group. Instead, Panel (a) shows that, conditional on applying early (by July 2023), firm employment rates are similar in the treatment and control groups. Taken together, these findings – the large shift in application timing, the steep gradient in employment outcomes by application month, and the absence of selection-driven differences – suggest that our intervention improved women's employment by shifting their job search into the critical few months right after graduation.

Dynamics of Female Labor Supply: Early Gains, Lasting Effects While we have shown that early applications raise women's aggregate employment at the six- and fourteen-month follow-ups, exactly when these effects arise and how they evolve remains to be explored. Figure V plots treatment effects on firm employment on a monthly basis. Panel (a) shows the effect on having ever worked at a firm by a given date for women, and Panel (b) does so for men.[24] As expected from a successful randomization, treatment and control groups look identical through May 2023, just before the intervention. For women, treatment effects appear about a month after the intervention, reach marginal significance by late July (right before the incentive deadline), rise to about 10 pp by late September (two and a half months post-graduation), and plateau at 12-15 pp for the following 12 months. For men, the intervention produces a small uptick in early employment: around the incentive deadline (August 2023), treated men are ~ 5 pp more likely to work for a firm than control men, though this effect is imprecisely estimated. This pattern is short-lived: these modest effects dissipate in subsequent months, and the long-run point estimate is zero.

Because women's employment gains largely stabilize by six months post-graduation and persist thereafter, we cautiously interpret our fourteen-month horizon as sufficient to capture the medium-run effects of the intervention on women's labor supply — before life events such as marriage or childbirth may reshape work trajectories. Two additional pieces of evidence from the six-month survey support the view that women in our sample intend to keep working in the near future. First, working women report they expect to continue in their *current* job for an average of 3.6 years, with no sizable difference by treatment status. Second, we ask working women about their long-term labor supply intentions: "Do you intend to work (for a firm or in your own business) after getting married?". 85.0% of working women answer "Yes". While such self-reports may suffer from the same exceptionalism bias as our other measures of employment beliefs, they demonstrate that

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[24]This variable differs from "working for a firm" at a given date, as it captures whether someone has "ever worked for a firm" by a given date. We cannot capture the first object as it would require collecting the start and end dates of all jobs held by each respondent, which is cognitively challenging and prone to survey fatigue. In contrast, the "ever worked" indicator requires only the start date of the respondent's first job.

Figure V: Dynamic Treatment Effects on Firm Employment
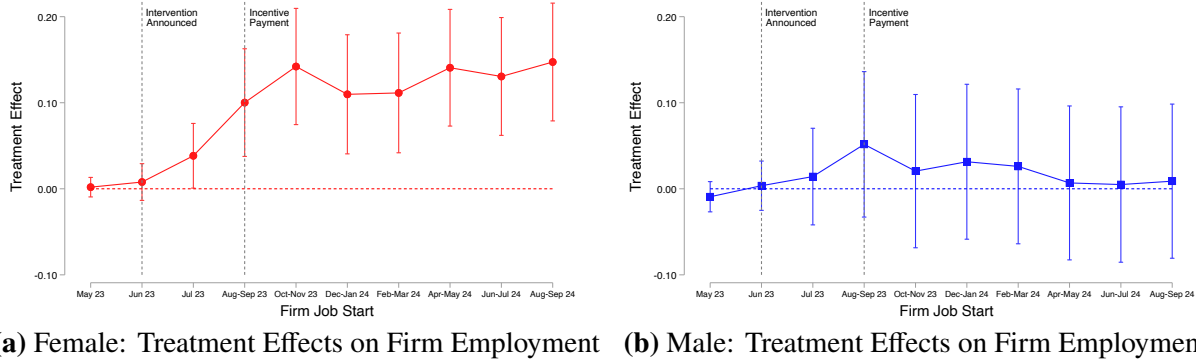
(a) Female: Treatment Effects on Firm Employment   **(b)** Male: Treatment Effects on Firm Employment

Notes: This figure presents dynamic treatment effects on having ever worked for a firm by a given date, separately for women (Panel (a)) and men (Panel (b)). The sample consists of respondents in the fourteen-month experimental sample (see Section IV.A). Each point represents the estimated treatment effect for whether students have held a firm job by the end of the time range indicated on the x-axis. The two dashed vertical lines denote the intervention announcement and the deadline for submitting proof of early applications. Error bars represent 95% confidence intervals.

women who enter the labor market view employment as a lasting commitment, not a temporary detour.

Even if labor supply decisions change after marriage, early labor market experience is valuable in its own right. Prior research shows that it can shape women's long-run participation, e.g., Jensen (2012) finds that working early increases Indian women's aspirations for post-marriage careers. Working early can also ease re-entry after childbearing (Henke, Schmieder, & vom Berge, 2021).

Selection into Take-up To test the extent of selection into treatment take-up, Table B.6 reports the effects separately for students who were offered the treatment and took it up and those who were offered but did not take it up, each relative to the control group. Panel A reports results for women. We find large and significant effects among those who took up the treatment: their employment rate is 13.6 pp higher (*p*-value = 0.000) than control six months post-graduation, and 11.8 pp higher (*p*-value = 0.003) at fourteen months. In contrast, women who were offered but did not take up the treatment have the same employment rates as control, suggesting minimal selection into treatment take-up among women. Panel B tells a different story for men. While effects are also positive (4.7-7.9 pp) among men who took up treatment, they are accompanied by *negative* effects of similar magnitude among non-treated men. This pattern suggests selection into take-up among men: those who chose to engage with the intervention may be more motivated or qualified for employment than those who did not. As a result, the overall intent-to-treat effect for men is close to zero.

Local Average Treatment Effects: Specification Beyond the intent-to-treat effects of our intervention, we are also interested in the effect of applying early itself. Not everyone selected by our

lottery ended up sending early applications, and some in the control group applied early, even without the financial incentive. Therefore, we use a standard instrumental-variable (IV) approach to estimate a local average treatment effect, using lottery assignment (interacted with gender) as an instrument for applying early. Formally, we estimate the following model with two-stage least squares (2SLS):

$$Early_i = \beta_0 + \beta_1 Male_i + \beta_2 T_i + \beta_3(T_i \times Male_i) + \epsilon_i, \qquad \text{(2: First stage)}$$

$$Y_{it} = \delta_0 + \delta_1 Male_i + \delta_2 \widehat{Early_i} + \delta_3 \left(\widehat{Early_i} \times Male_i \right) + v_{it}. \qquad \text{(3: Second stage)}$$

where T_i denotes treatment assignment, and $Early_i$ denotes whether the student applied early — defined as submitting their first application before August 15th.[25] In the first stage, the coefficients β_2 and $\beta_2 + \beta_3$ capture the effect of the treatment on the likelihood of applying early for women and men, respectively. The fitted value $\widehat{Early_i}$ and its interaction with gender, $\widehat{Early_i} \times Male_i$, are then used in the second stage to estimate gender-specific causal effects of early application on labor market outcomes such as employment. Specifically, δ_2 captures the causal effect for women, while $\delta_2 + \delta_3$ captures the corresponding effect for men.

Local Average Treatment Effects: Results Table IV compares ordinary least squares (OLS) and 2SLS estimates to gauge the relative importance of selection into early applications versus the causal effect of early applications. For women (Panel A), the OLS estimate in Column 1 shows that early applications are associated with a 23.7 pp higher firm employment six months after graduation. The 2SLS estimate in Column 2 is larger than the OLS, at 38.4 pp. These effects persist at fourteen months (Columns 3 and 4), with a 2SLS estimate of 32.8 pp. For men (Panel B), OLS estimates (Columns 1 and 3) are positive, but the 2SLS estimates (Columns 2 and 4) are small and statistically insignificant, ranging from 0.0 to 10.4 pp. The OLS and 2SLS coefficients can differ for several reasons. OLS would be biased upward if more motivated individuals selected into applying earlier, and biased downward due to measurement error. In contrast, 2SLS isolates the causal effect on compliers — individuals who apply early when offered the incentive but do not otherwise. Overall, the results show that early applications have large and persistent causal effects on firm employment for women who are induced to apply early, but no effect for male compliers.

Search Timing Impacts Job Acceptance Decisions Having established that the treatment incentivizes early applications and raises female employment, we now investigate *where* in the

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[25]Since it targets a specific application date, this definition is more granular than the one in Section III, where applying early was defined as sending an application by the second follow-up. In the experimental surveys, we explicitly ask for the date of first application, allowing us to define applying early based on the August 15th incentive deadline.

Table IV: OLS and IV Estimates of Early Applications on Firm Employment

| | 6 Months | | 14 Months | |
| | OLS Working for Firm | 2SLS Working for Firm | OLS Working for Firm | 2SLS Working for Firm |
	(1)	(2)	(3)	(4)
Panel A: Female				
Applied Early (by Aug. 15th)	0.234***	0.384***	0.189***	0.326***
	(0.030)	(0.112)	(0.035)	(0.110)
Female, Not Applied Early, Mean	0.187	0.187	0.353	0.353
Panel B: Male				
Applied Early (by Aug. 15th)	0.231***	0.106	0.117**	0.003
	(0.042)	(0.239)	(0.046)	(0.212)
Male, Not Applied Early, Mean	0.266	0.266	0.483	0.483
Nb. Obs.	1,442	1,442	1,218	1,218

Notes: This table presents OLS and 2SLS treatment effects of early job applications (by August 15th) on firm employment. Results are shown for the six-month and fourteen-month experimental samples (see Section IV.A). Panel A (B) shows results for women (men). Column 1 reports the OLS estimates from regressions of firm employment at six months on whether the respondent applied early. Column 2 reports 2SLS estimates that use the treatment as an instrument for early application. Columns 3 and 4 report the same outcomes as Columns 1 and 2, respectively, but at fourteen months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

education-to-employment pipeline the treatment operates. A natural hypothesis is that the treatment increases overall search effort, leading to more job offers and ultimately higher employment. To test this channel, Table V reports treatment effects on two intermediate outcomes: the number of applications and the number of job offers. Treated women apply more, at both six and fourteen months (Columns 1 and 3), but they do not receive more offers than women in the control group (Columns 2 and 4). Therefore, increased search effort, while real, is unlikely to explain the employment gains since it does not translate into improved access to job opportunities. By inducting, since both groups receive a similar number of offers, the lower employment rate among control women must stem from a lower job acceptance rate, rather than a lack of offers.[26]

Another possibility is that the treatment affects the composition of jobs offered to, or accepted by, women. Even if the number of offers is similar, treated women might secure more desirable or higher-paying offers than control women. Panel A of Table B.8 shows that women's occupational distribution at fourteen months is nearly identical across both groups. For example, teaching – the most common occupation among women and one plausibly sensitive to seasonal demand – is equally prevalent among treated (22.1%) and control (22.8%) women. Figure A.15 further compares the distributions of current wages (Panel (a)) and offered wages (Panel (b)) between treated

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[26]Appendix Table B.7 presents extensive-margin results, i.e., whether a student submits any application or receives any offer. Consistent with the intensive-margin patterns, the treatment increases the likelihood of submitting at least one application, even fourteen months after graduation, but has no long-term detectable effect on receiving at least one offer.

Table V: Treatment Effects on Applications and Offers

	6 Months		14 Months	
	Nb. Apps	**Nb. Offers**	**Nb. Apps**	**Nb. Offers**
	(1)	(2)	(3)	(4)
Panel A: Female				
Treatment	1.577**	0.188	1.727**	0.003
	(0.771)	(0.170)	(0.712)	(0.096)
Female Control Mean	8.847	2.179	4.713	0.897
Panel B: Male				
Treatment	-0.509	0.050	-0.370	-0.012
	(1.194)	(0.210)	(0.959)	(0.119)
Male Control Mean	11.478	2.134	6.457	0.955
Nb. Obs.	1,435	1,435	1,215	1,215

Notes: This table presents treatment effects on intermediate labor market outcomes. Results are shown for the six-month and fourteen-month experimental samples (see Section IV.A). Panel A (B) shows results for women (men). Column 1 reports the treatment effect on the number of job applications sent between graduation and the six-month follow-up. Column 2 reports the effect on the number of job offers received during the same period. Columns 3 and 4 report the same outcomes as Columns 1 and 2, respectively, but measured for the six months prior to the fourteen-month follow-up. The number of applications and offers are winsorized at the 2% level. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

and control at the six and fourteen-month follow-ups. Both distributions are similar and statistically indistinguishable between control and treatment groups. Taken together, these results indicate that employment effects are not driven by differences in the quantity or quality of job offers. Instead, the key margin of response is that treated women are more likely to accept the offers they receive.

The Illusion of Time Our treatment has large, positive effects on women's employment. As outlined in Section IV.A, this not only leads us to reject the null hypothesis that job search timing has no causal effect on women's employment, but it also implies women fail to anticipate this effect. In other words, women operate under "the illusion of time": they delay job search under the false belief that timing does not matter, thereby unintentionally lowering their employment chances. To confirm this interpretation, we gather direct survey evidence on women's lack of anticipation of the effect of timing. At baseline, after randomizing respondents into treatment and control, we ask them (i) when they expect to send their first application, (ii) how many applications they expect to send by August 15th, the incentive deadline, and (iii) what is their perceived likelihood of working six months post-graduation. The last question is worded the same way as in the diagnostic survey. Table VI reports intent-to-treat estimates for these variables. Treatment significantly shifts earlier women's expected start date for job search (Column 1, p-value = 0.000) and increases the expected number of applications sent by August 15th (Column 2, p-value = 0.070). However, we find no effect on women's perceived likelihood of working six months later (Column 3, p-value = 0.390).

Table VI: Treatment Effects on Labor Market Intentions

	Intended Search Start (Days)	Intended Nb. Apps by Aug. 15	Emp. Likelihood in 6 Mo.
	(1)	(2)	(3)
Panel A: Female			
Treatment	-20.457***	0.589*	-0.886
	(2.660)	(0.325)	(1.032)
Female Control Mean	50.280	5.586	79.802
Panel B: Male			
Treatment	-12.621***	-0.573	0.747
	(3.635)	(0.559)	(1.269)
Male Control Mean	43.748	7.366	81.618
Nb. Obs.	1,417	1,417	1,442

Notes: This table presents treatment effects on baseline job search intentions and beliefs about employment likelihood. Respondents are from the six-month experimental sample (see Section IV.A). For the treated group, responses were collected after they were informed about their eligibility for the financial incentive. Panel A (B) shows results for women (men). Column 1 reports the treatment effect on the intended job search start date, measured as the number of days from the baseline survey date to the intended first date of job search. Column 2 reports the treatment effect on the number of applications the respondent intends to submit by August 15th. Column 3 reports the treatment effect on the respondent's baseline belief about their likelihood of being employed in six months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Taken together, these results demonstrate that treated women do not anticipate timing to play a key role in determining employment.

These results also rule out that the treatment works by signaling that early employment is important or socially desirable.[27] If the incentive had shifted students' perceptions of the desirability of work, we would expect corresponding changes in stated employment intentions, i.e., treated students should have a higher perceived likelihood of working six months later. Yet we observe no such change. Two additional findings help rule out the social desirability explanation. First, the treatment has no impact on men's employment, meaning that any salience or messaging effects would have to operate exclusively on women, which is unlikely. Second, the vast majority of women in both groups already state at baseline that they intend to work, leaving little scope for the intervention to change attitudes towards work.

Taking Stock This section establishes that applying early has a large, positive causal effect on women's employment — and that women do not anticipate this effect. The next section explores why job search timing matters uniquely for women, and why they fail to foresee its consequences.

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[27]Although the use of a lottery helps mitigate concerns that treatment assignment boosts confidence or reflects favoritism, it does not eliminate the possible information asymmetry between treatment and control groups. Control students proceed to the final module without learning about the incentive, whereas treated students are encouraged to apply early. Because incentives are rarely offered for harmful actions, the reward could itself be interpreted as an implicit endorsement of early job search and labor market participation.

V   Why Does Job Search Timing Matter?

Since timing matters uniquely for women, we seek a gender-specific explanation. While men and women report similar preferences for work and follow comparable job search trajectories, their outside options differ: for young women, marriage comes earlier than for men, and can be presented to them as an alternative to employment. By contrast, men's marriage arrives later and does not come at the expense of their careers. As a result, social norms around marriage can pull women, but not men, out of the labor force. In this section, we provide evidence that this asymmetry helps explain why early applications raise employment for women but not for men.

V.A   The Rapid and Unexpected Rise of the Marriage Market

The Rapid Rise of the Marriage Market   In Pakistan, most marriages are arranged by parents.[28] College-educated women typically marry three to four years after graduation, yet we show that entry into the marriage market, i.e. receiving and evaluating marriage proposals, begins immediately after graduation. Figure VI illustrates this dynamic. The solid red line shows the cumulative share of women in the control group who have received (or sent) at least one marriage offer by a given date, while the solid blue line shows the same statistic for men. The share of women with a marriage offer almost quadruples in the two months following graduation, with 42.7% of women receiving at least one marriage offer during this window. This pattern is consistent with Andrew and Adams (2025), who show that women's value in the marriage market increases with education but declines with age, implying that graduation may coincide with a period of particularly high marriage-market returns for women. For men, marriage offers also increase over time, but the slope—and thus the speed at which the marriage market unfolds—is consistently and significantly shallower than women's. The consequences of this early onset also differ by gender. For men, the rising rate of marriage offer sent (or received) should not have a negative impact their employment prospects. For women, Afridi et al. (2025) shows that marriage can be conceived as an alternative, rather than a complement, to employment. This suggests that the arrival of marriage offers could restrain women's labor supply. In Section V.B, we explore how.

The Unexpected Rise in the Marriage Market For marriage market activities to explain the illusion of time, it must be that women do not fully anticipate the timing and/or the labor-market consequences of marriage. Otherwise, forward-looking women who intend to work would begin searching for a job prior to the rise in marriage market demands. Therefore, we test whether women's expectations about the marriage market are accurate.

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[28]According to a survey conducted by Gallup & Gilani Pakistan in 2024, among married Pakistanis, 4 out of 5 (81%) have an arranged marriage, with little heterogeneity by age or location (urban vs rural).

**Figure VI:** The Gender Gap in Marriage Offer Timing
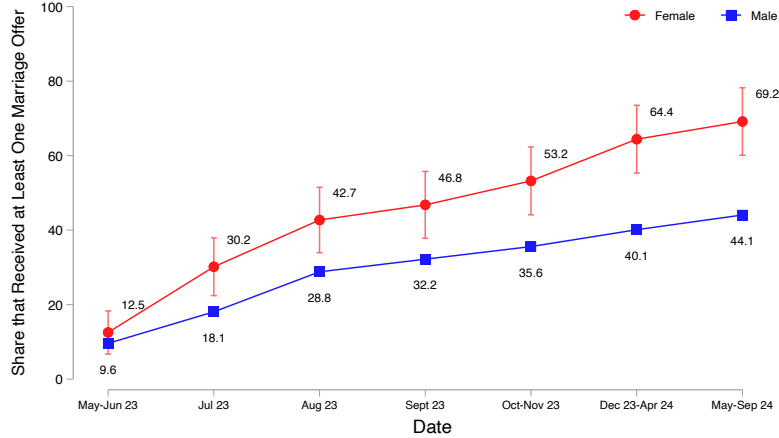
Notes: This figure presents the cumulative share of respondents who have received or sent at least one marriage offer over time, separately for women (red) and men (blue). The sample consists of control group respondents in the fourteen-month experimental sample (see Section IV.A), excluding those who were already married or engaged at baseline. Each point represents the share of respondents who have received or sent at least one marriage offer by the end of the time range on the x-axis. The error bars on the female line represent 95% confidence intervals for the female-male difference. 17 respondents in the control group reported having received or sent marriage offers, but did not provide a first marriage offer date, such that they are not included in this Figure.

First, we show that most women recognize that marriage and family can pose major constraints on employment for their female peers but believe that these barriers will not apply to them personally. When asked why there is a chance their female peers may not work, Panel (a) of Figure VII shows that 91% of women in our sample recognize that *other* women will face marriage/family-related barriers, such as lacking approval for working from their families or being pressured to prioritize marriage. In contrast, when asked why they themselves may not work, Panel (b) of Figure VII shows that only 20% of the same women report marriage/family-related constraints as a potential barrier.[29] Our observations show that women are aware of marriage/family as a common barrier to employment for the "typical" woman, but they do not think these barriers will apply to them personally. This contrast between beliefs about oneself and peers mirrors the exceptionalism bias women experience about their labor market outcomes.

Second, we find that some women are surprised by how quickly the marriage market unfolds.

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[29]The perception about their peers is consistent with a large and growing literature emphasizing the role of families in shaping women's labor supply but not men's (Dean & Jayachandran, 2019; Bursztyn, González, & Yanagizawa-Drott, 2020; Jayachandran, 2021; Bau & Fernández, 2023; Lowe & McKelway, 2024) Family influence is particularly prominent in Pakistan. In a representative sample of urban households, 79% of women report that the head of the family decides, either unilaterally or with them, whether they should work (Junaid et al., 2021). Several other papers have highlighted family constraints on women's labor supply in Pakistan. In an experiment on women in Lahore with similar age, marital, and educational profiles to our sample, Subramanian (2024) finds that making family discussions about job search more salient led to a 60% decrease in applications to jobs with male supervisors. Similarly, Field and Vyborny (2016) document that 40% of non-working women in Pakistan cite lack of permission from their husband or father as the main reason for not working.

Figure VII: Marriage: An Obstacle Perceived for Female Peers, but not Self

**(a)** Reasons Not to Work: Female Peers   **(b)** Reasons Not to Work: Self
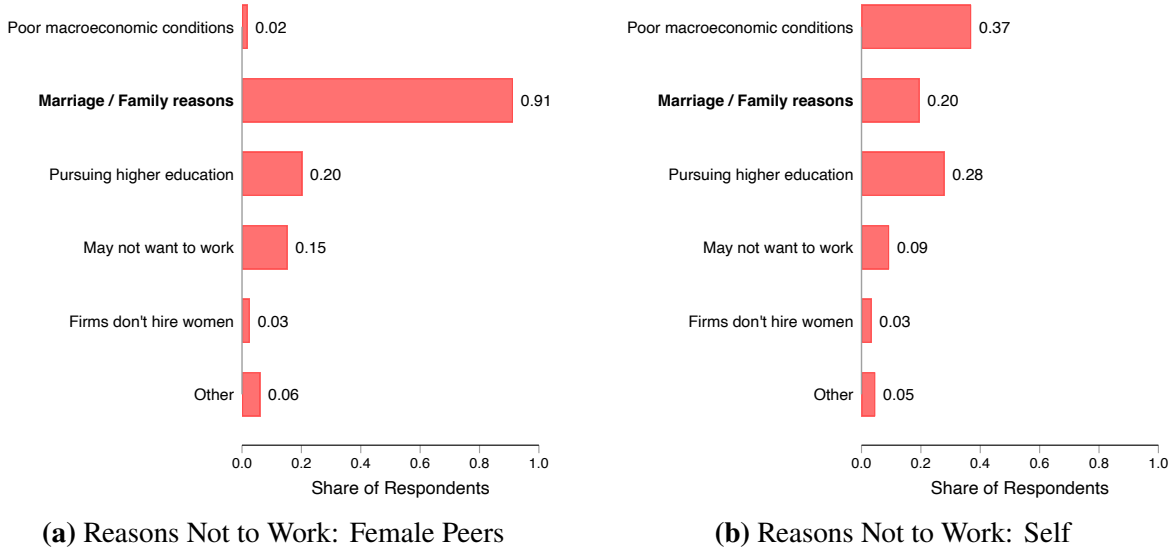
Notes: This figure presents women's baseline beliefs about why they and other women in the class may not work in the future. The sample consists of women in the control group of the six-month experimental sample (see Section IV.A). Panel (a) reports responses to: "Out of the remaining XX women, why do you think they are not working?", asked to all women who reported expecting a non-zero share of their female peers to be unemployed. Panel (b) reports responses to: "Why do you think there is a chance you may not work?", asked to all women who reported less than a 100% likelihood of being employed six months after graduation. Responses are from open-ended questions coded into predefined categories, with multiple categories allowed. Statements referring to family permission, marriage, childbirth, or household focus were coded as "Marriage / Family reasons."

Figure VIII plots women's baseline beliefs about age at marriage (x-axis) against updated beliefs six months post-graduation (y-axis), separately for treatment and control groups. The 45-degree line represents the benchmark of time-invariant beliefs. While the slope is positive (~ 0.6), it lies significantly below 1, suggesting that women who initially expected later marriages systematically update their beliefs downward (earlier). For instance, women who expected at baseline to marry at age 26 revise that estimate down to 25 by the six-month follow-up. This one-year change is substantial: given a mean age at graduation of ~ 22, it represents a 25% reduction in the expected time until marriage. We infer from this that the group of women who initially expected to marry late is surprised by the rapid onset of marriage activities. In contrast, women who initially expected to marry sooner (e.g., by age 24) have stable expectations.

Third, if misperceptions about the marriage timeline explain why earlier search raises female employment in our experiment, then treatment effects on employment should be driven by the women who do not anticipate the rapid onset of marriage activities.[30] Table VII reports the result of this test. Column (1) shows that both groups move their applications earlier by the same

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[30]Since belief updating is endogenous to treatment, we conduct our heterogeneity analysis using baseline beliefs about the marriage timeline, estimating treatment effects separately for women who expected to marry late (after the national median age of 25) and those who expected to marry earlier (by age 25).

Figure VIII: Women's Belief Updating About Expected Age at Marriage
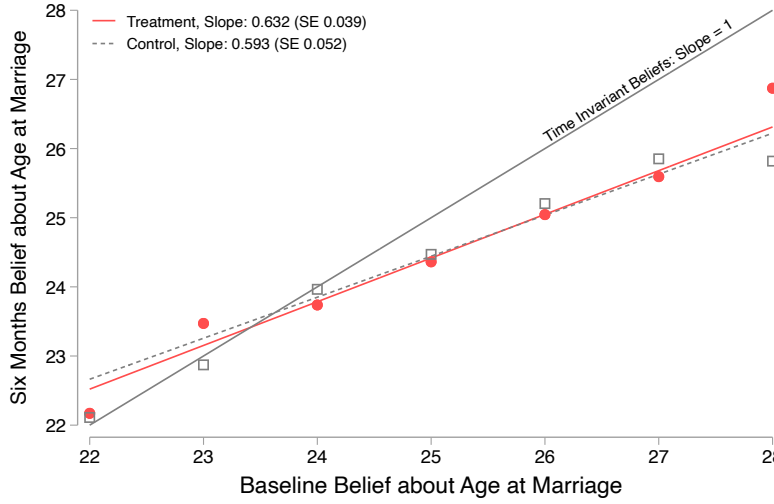
Notes: This figure presents a binscatter of women's expected age of marriage at baseline against their updated expectations six months post-graduation, separately for treated (solid red) and control (dashed gray) women. The sample consists of women in the six-month experimental sample (see Section IV.A), excluding those who were already married or engaged at baseline. Observations with expected age ≥ 28 at baseline are combined into a single group because they represent only 8.5% of the sample. Expected age of marriage is winsorized at the 2% level.

magnitude in response to treatment. Yet their employment responses diverge sharply. For women who expected to marry late, the likelihood of working rises by 33% (11.6 pp) at six months (Column (2)), and this effect persists at 14 months (Column (4)). In contrast, among women who expected to marry early, the treatment has no effect on employment. We observe similar, if stronger, patterns when studying employment in firms in Columns (3) and (5): treatment increases firm-based work by 50% for the late-marriage-expectations group both at six and fourteen months, while effects remain indistinguishable from zero for the early-marriage-expectations group. This heterogeneity reinforces the hypothesis that misperceptions about the marriage market can distort job search and employment. Section V.B explores how.

Finally, we must note that the groups that initially expect early vs. late marriage can differ along dimensions other than marriage beliefs. As shown in Table B.9, age is the most salient of these differences: women who expect to marry late are, on average, one year older. They also differ in their fields of study. Those anticipating later marriage are disproportionately enrolled in pharmacy and the life sciences, whereas those expecting to marry earlier are more often in social-science programs. One possible reason for the divergence in expectations is therefore that women anticipate marrying a fixed number of years after graduation, and because the length of degree programs varies—five years in some fields and four in others—the expected interval to marriage differs mechanically across disciplines. The two groups otherwise share similar family characteristics (same share of educated and working mothers and fathers), the same expectations

Table VII: Treatment Effects on Women's Employment by Baseline Expected Marriage Age

	August 15	6 Months		14 Months	
	Has Applied	**Working**	**Working for Firm**	**Working**	**Working for Firm**
	(1)	(2)	(3)	(4)	(5)
Panel A: Exp. Marriage Age > 25					
Treatment	0.229***	0.116**	0.138***	0.166***	0.216***
	(0.051)	(0.052)	(0.051)	(0.058)	(0.059)
Control Mean	0.312	0.351	0.273	0.542	0.417
Panel B: Exp. Marriage Age ≤ 25					
Treatment	0.274***	0.019	0.058	-0.034	-0.013
	(0.042)	(0.042)	(0.040)	(0.047)	(0.047)
Control Mean	0.340	0.340	0.254	0.551	0.453
Nb. Obs.	845	845	845	703	703

Notes: This table presents treatment effects on labor market outcomes for women in the six-month (Columns 1 to 3) and fourteen-month (Columns 4 and 5) experimental samples (see Section IV.A), excluding those who were already married or engaged at baseline. Panel A shows results for women expecting late marriage at baseline (> age 25), and Panel B shows results for women expecting earlier marriage at baseline (≤ age 25). Column 1 reports the treatment effect on whether a respondent has applied to at least one job by August 15th. Column 2 reports the treatment effect on employment at six months. Column 3 reports the treatment effect on firm employment at six months. Columns 4 and 5 report the same outcomes as Columns 2 and 3, respectively, but at fourteen months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

about wages, and comparable beliefs, at baseline, about their own chances as well as the chances of their female peers of working six months later.

Taking Stock The findings in this section are consistent with the hypothesis that failing to anticipate the early marriage market onset creates an "illusion of time" in women's job search. Next, we explore *how* the marriage market and the labor market interact, such that shifting application before the onset of the marriage market can alter employment outcomes.

V.B   The Interaction between the Labor and the Marriage Market

The Endogeneity of Marriage Offers Applying before the unexpected onset of the marriage market leads to large employment gains for women. Why? We provide evidence consistent with one channel: marriage offers respond endogenously to women's labor force participation. To study this channel, we collect data on both the number of marriage offers women receive and the grooms' education levels. Because education strongly predicts gender attitudes, we use the groom's highest education level as a proxy for progressive views on women's work.[31]

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[31] To establish the relationship between education and men's views on women's work, we use data from the World Values Survey (Wave 7, 2018) for Pakistan. We find that highly educated men (those with tertiary education) are 11.6 pp less likely than men with only primary schooling to agree that "being a housewife is as fulfilling as working for pay" (56.1% vs. 67.7%, p = 0.090). In our experimental sample, only 31.2% of young, university-educated men agree with this same statement, suggesting that more educated, urban men hold more progressive views.

Table VIII: Treatment Effects on Women's Marriage Market by Baseline Expected Marriage Age

	Married / Engaged (1)	Nb. Marriage Offers (2)	Bachelor's+ Educated Groom (3)	Master's+ Educated Groom (4)
Panel A: Exp. Marriage Age > 25				
Treatment	-0.004	0.219	0.093*	0.108**
	(0.027)	(0.216)	(0.053)	(0.050)
Control Mean	0.062	1.090	0.356	0.253
Panel B: Exp. Marriage Age ≤ 25				
Treatment	0.023	-0.020	0.018	0.003
	(0.031)	(0.226)	(0.046)	(0.046)
Control Mean	0.121	1.854	0.563	0.437
Nb. Obs.	806	752	791	791

Notes: This table presents treatment effects on marriage outcomes for women in the six-month experimental sample (see Section IV.A), excluding those who were already married or engaged at baseline. Panel A shows results for women expecting late marriage at baseline (> age 25), and Panel B shows results for women expecting earlier marriage at baseline (≤ age 25). Column 1 shows the treatment effect on whether a respondent is married or engaged by the six-month follow-up. Column 2 shows the treatment effect on the number of marriage offers received by six months. Column 3 shows the effect on whether the highest education level among all received offers is a Bachelor's degree or above, and Column 4 shows the same for a Master's degree or above. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table VIII reports treatment effects on the number and education level of marriage offers. Among women who expected to marry late, there is no treatment effect on the likelihood of being married or engaged (Column 1) or on the number of marriage proposals received, both measured six months post-graduation (Column 2).[32] Next, we consider whether treatment affects the *type* of offers received. Specifically, we consider the probability of receiving at least one highly-educated (i.e., progressive) marriage offer. Among women who experience employment gains, treatment increases the likelihood of receiving a proposal from a man with at least a bachelor's degree by 9.3 pp (26%; Column 3), and from a man with a master's or doctoral degree by 10.8 pp (43%; Column 4). Because men with higher education tend to hold more progressive views, these results indicate that early labor market entry does not increase the quantity of marriage offers but shifts their composition: women induced to work by our treatment attract proposals from more progressive men. In Appendix Table B.11, we show that, for women who do not anticipate the onset of the marriage market, using the treatment as an instrument for early applications yields even larger, albeit noisier, effects on the share of women with a progressive suitor.[33]

[32]The fourteen month results, in Appendix Table B.10, show the same null treatment effects on these variables.

[33]We also note that expectations about marriage age remain correlated with realized marriage outcomes. Six months after graduation, control women who expected to marry early are 5.9 pp more likely to be married or engaged compared to control women who expected to marry later, and they have received nearly twice as many marriage offers. Further, although the slope in Figure VIII is far from 1, it is also clearly above 0: women who initially expect to marry earlier still expect to marry relatively earlier six months later. Finally, these women are also 18.4 pp more likely to have received a proposal from a groom with a master's degree. However, this difference in the likelihood of receiving such an offer mirrors the overall difference in the probability of receiving any marriage offer, such that the composition of

These results point to a self-reinforcing cycle: by entering the labor force before the marriage market, women can signal their type ("working woman") and endogenously generate more progressive marriage offers. This in turn can create a more supportive environment for sustained employment. Conversely, women who do not enter the labor force immediately after graduation do not signal a preference for work. As a result, they are more likely to receive only conservative marriage offers, which reinforces barriers to later employment.[34]

Alternative Explanations One possibility is that women who do not start working soon after graduation gradually lose interest in employment, perhaps as their focus shifts toward marriage. To test for changes in preferences, at the six-month survey, we ask women directly about their preferences for work: "Do you want to work in the next year?".[35] We find that 87.6% of all women, and 83.4% of unemployed women, answer "yes", with no difference by treatment status. Consistent with this stated desire to work, Table B.12 shows that stated reservation wages *fall* substantially over time: by 14.5 log points at six months and 6.6 log points at fourteen months, relative to baseline. Again, there is no difference by treatment status. In short, a clear tension emerges: women lower their reservation wages; yet they become less likely to accept jobs. This underscores that the barrier lies not in their own preferences but in their ability to act on them autonomously, and points to the potential influence of marriage and parental pressures. We return to this interpretation in Section V.C.

Scaling We find that the women induced to work by our treatment receive as many marriage offers as the women in our control group, but from arguably more progressive men. Whether this result would persist if we scaled up the experiment nationwide is uncertain. Given that only a limited share of men hold progressive views about women's employment, a large influx of working women could initially exceed the "demand" for such partners in the marriage market. This could, in turn, discourage some women from remaining employed. However, there are also reasons to expect equilibrium adjustments. As the prevalence of dual-earner couples rises, social norms about women's work may shift, increasing the share of men who view female employment favorably (see, e.g., Fernández, Fogli, and Olivetti (2004), Bursztyn, González, and Yanagizawa-Drott (2020)). At the limit, if all women work, marriage to a working woman becomes the only option.

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the pool of potential grooms appears similar across the two groups.

[34]A priori, receiving a conservative marriage offer does not reduce women's likelihood of accepting jobs any more than receiving no offer at all. Indeed, receiving no offer can itself be interpreted as a negative marriage-market signal, which may also prompt precautionary restrictions on labor-market behavior. This is why, in Columns 4 and 5 of Table VIII, the dependent variable is equal to one if at least one progressive offer has been received, and zero if only conservative offers were received or no offer was received. That said, the coefficient remains positive and significant if we restrict the sample to women who have received at least one offer and compare progressive to conservative offers only.

[35]We purposefully framed the question in terms of preference rather than expectations to isolate desire for work from external constraints.

V.C   Interpretation

Both our descriptive and experimental results point to the same underlying pattern: women and their families play distinct roles in shaping women's labor market outcomes. Our descriptive evidence shows that the gender gap in employment arises not from differences in job search—which women undertake as actively as men—but from differences in job acceptance. This asymmetry reflects the division of decision-making authority: most women in our sample report that they decide whether to search independently, but that parents are involved in deciding whether they may accept a job offer. Indeed, Figure A.16 shows male and female responses to the following two questions: "Whom do you have to consult when applying to jobs?" (Panel (a)) and "Whom do you have to consult when deciding to accept a job offer?" (Panel (b)). We consider parents to be involved if the respondent answers that they have to consult their mother, father, or both.[36] We observe that most men decide on their job search and acceptance without consulting their parents. In contrast, while the majority of women report that they can search for a job without consulting their parents, 59% of them report having to consult their parents when deciding whether to accept a job offer (this share goes to 73% when considering all relatives instead of just the parents). Our experimental findings reveal a parallel dynamic. Women control when to begin searching for jobs – the margin our treatment successfully shifts – but parents influence when marriage offers arrive and whether employment is permissible once those offers materialize. We conjecture that the treatment works precisely because it exploits this structure: by inducing women to search earlier, the treatment allows them to signal their preference for work, thereby attracting more progressive suitors and plausibly relaxing parental resistance to employment. Consistent with this mechanism, treatment does not affect the chances of women getting job offers, since search is largely under women's own control. Instead, it affects job acceptance, which is negotiated with parents.

VI   Conclusion

The social norms that govern the division of labor within and outside the household create a systematic link between the marriage market and the labor market. As a result, decisions regarding marriage, fertility, employment, and occupational choice are interdependent. Where these norms are gendered — as they typically are — the degree of interdependence becomes asymmetric: women face a tighter set of constraints, and their choices across the marriage and labor domains are less readily separable than those faced by men. In particular, the relative timing of entry into these domains carries lasting consequences. In our study, we show that women induced to enter the labor force prior to the start of marriage market activities are significantly more likely to be

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[36]The list of options is Friends, Mother, Father, Brother(s), Sister(s), Cousin(s), Husband or fiancé, Rest of family, Teachers (or career office, career councilor, university website), Classmates, No one, Other.

employed. We show that this can occur through a self-reinforcing cycle: women induced to enter the labor force early attract marriage proposals from more progressive men, which in turn makes continued employment more feasible.

The extent to which constraints bind depends on whether women recognize the interdependence of choices across domains and whether they can strategically time these choices to preserve individual agency. In our study, college-educated women in Pakistan — a setting where the allocation of labor is strongly gendered — fail to anticipate that early job search can increase their chances of employment. This misperception, which we term the "illusion of time," can add up to persistent gender employment gaps. Despite having similar aspirations, preferences, and even more job offers than men, women are about half as likely to be employed six months after graduation. In this context, even a small behavioral nudge can yield sizable effects. Our experiment, which offers a modest financial incentive for applying early, leads to a ∼ 35% reduction in the gender employment gap. Further confirming the role of misperceptions, employment gains for women are driven by those who do not anticipate the early onset of the marriage market.

Our findings offer a different perspective on the absence of a child penalty in many lower-income settings, such as India, Pakistan, and parts of Africa (Kleven, Landais, & Leite-Mariante, 2025). The lack of a measurable penalty does not imply the absence of gendered labor market constraints. Instead, these constraints bind much earlier: gender norms begin shaping women's labor market trajectories at college graduation, leading many to forgo employment well before marriage or family formation.

Our results also point to new avenues for research and policy. Governments and firms can work to weaken the interdependence between career and family timelines. One promising avenue is to redesign career ladders so that major advancement opportunities do not coincide with personal life milestones for women. Decoupling career progression from marriage and fertility cycles can help mitigate the penalty women face when timing overlaps between competing life domains. Another avenue is to raise awareness among women about these critical junctures, helping them overcome their exceptionalism bias and prepare for the barriers they may face.

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Online Appendix

A   Appendix Figures

Figure A.1: College Education and Labor Force Participation in Pakistan

(a) Gender Gaps in College Education

(b) Gender Gaps in College-Educated Labor Force Participation
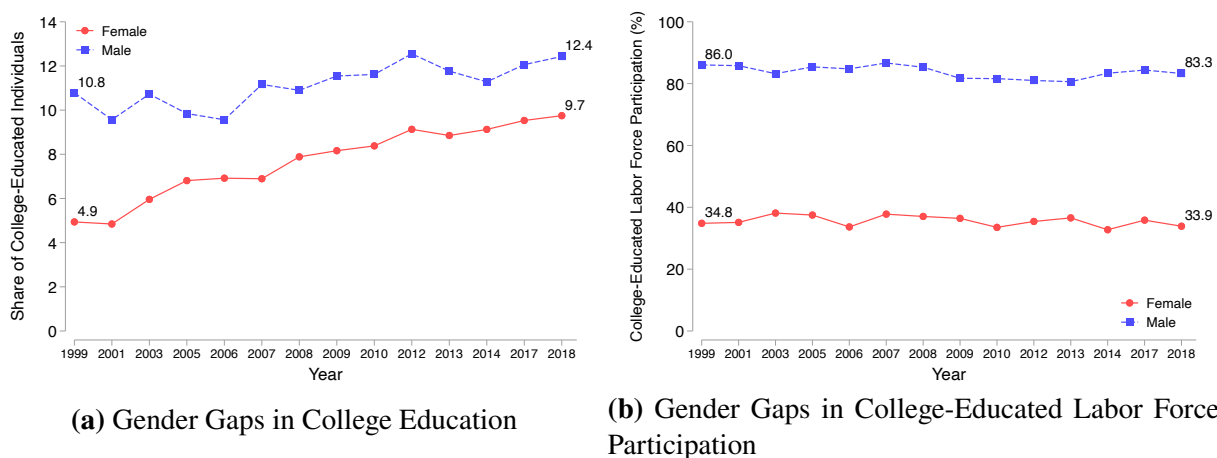
Notes: This figure presents trends in college education and labor force participation in Pakistan between 1999 and 2018, separately for men (dashed blue) and women (solid red). Panel (a) shows the share of individuals aged 22–35 who are college-educated. Panel (b) shows the labor force participation rates for college-educated individuals in the same age group. Data are from the Pakistan Labor Force Surveys.

Figure A.2: Female Labor Force Participation vs. (Log) GDP per Capita by Country (2018)
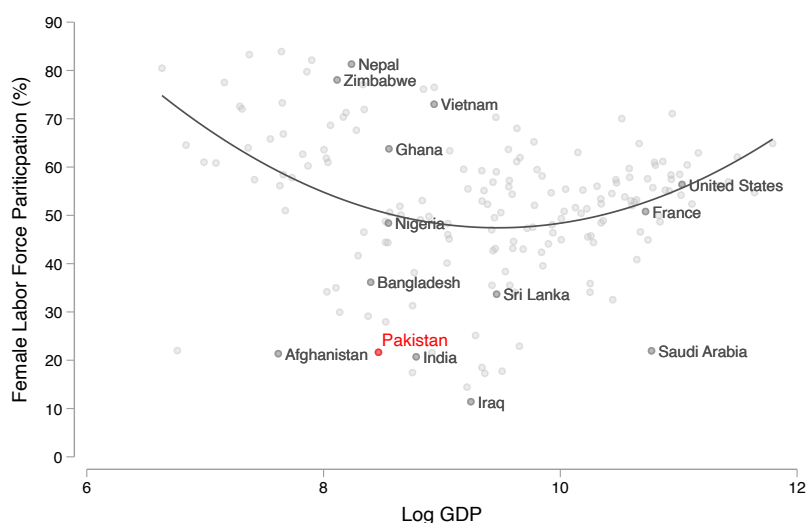
Notes: This figure compares log GDP per capita and female labor force participation across countries in 2018. Pakistan is highlighted in red. The solid black line shows the fitted U-shaped relationship between GDP per capita and female labor force participation. Selected countries with similar GDP or similar female labor force participation to Pakistan are labeled in gray. Data are from the World Bank (2018).

Figure A.3: Labor Force Participation by Age and Gender, US vs. Pakistan (2018)

(a) U.S. Overall

(b) Pakistan Overall

(c) U.S. College Graduates

(d) Pakistan College Graduates
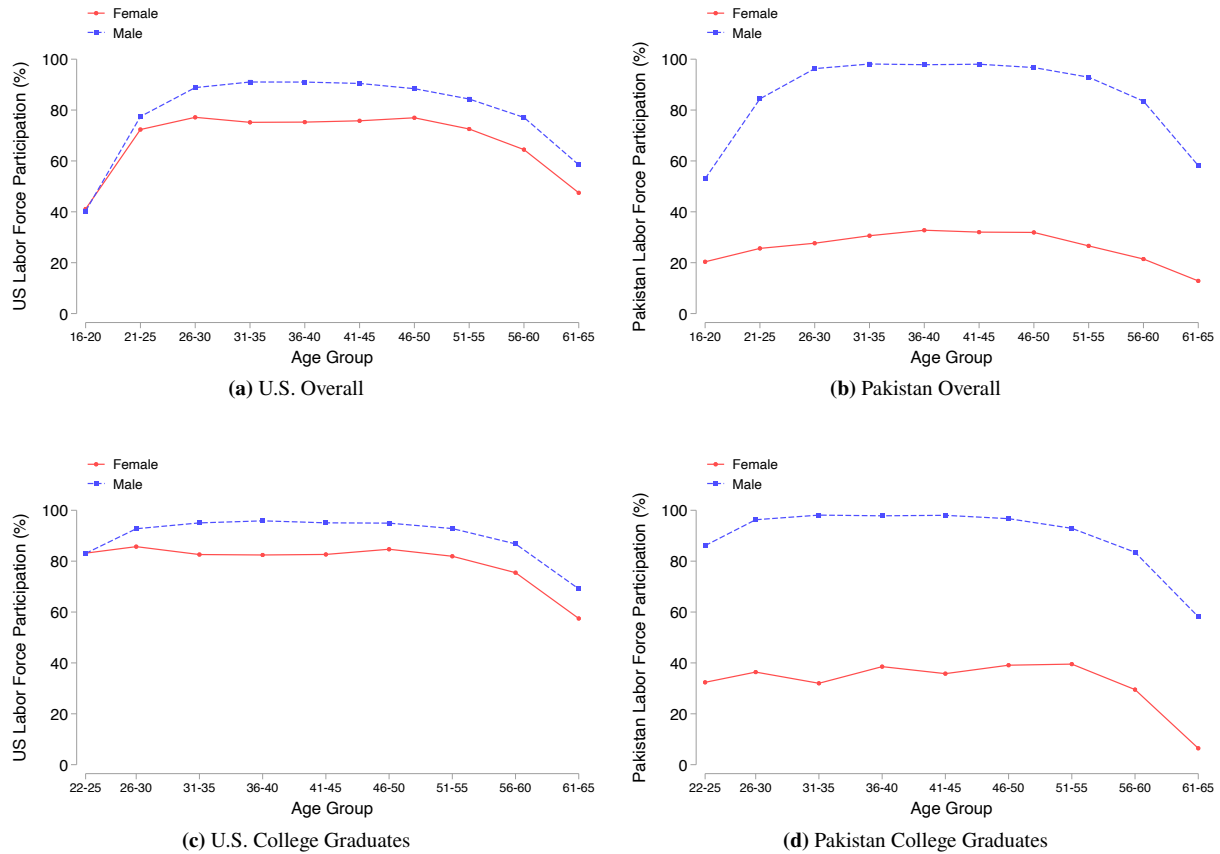
Notes: This figure compares age-specific and education-specific labor force participation rates in the United States and Pakistan, separately for men (dashed blue) and women (solid red). Panels (a) and (b) show labor force participation among all individuals aged 16 to 65 in the United States and Pakistan, respectively. Panels (c) and (d) show labor force participation among college-educated individuals aged 22 to 65 in the United States and Pakistan, respectively. Data for the United States are from the Current Population Survey (2018), and data for Pakistan are from the Pakistan Labor Force Surveys (2018).

Figure A.4: Research Timeline
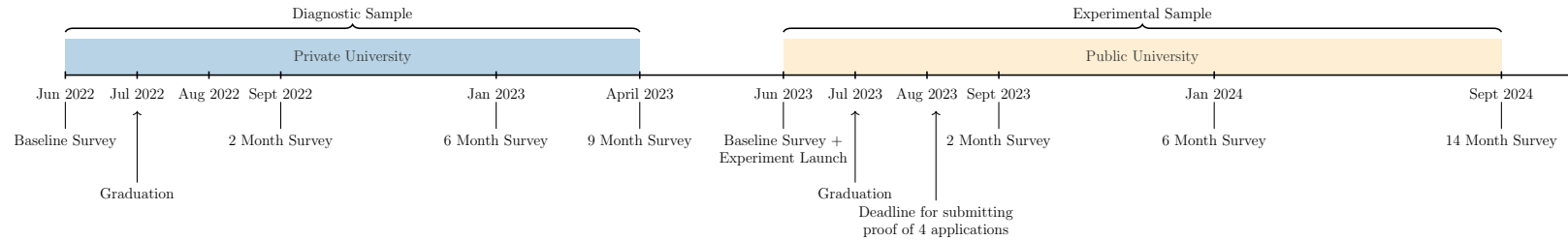
Notes: This figure presents the timing of research surveys relative to students' graduation dates in the diagnostic and experimental samples. Surveys for the diagnostic sample described in Section II.B at the private university were conducted in June 2022 (one month prior to the end of their academic term, although convocation ceremonies were scheduled at different times by different departments), followed by two-, six-, and nine-month follow-ups in September 2022, January 2023, and April 2023. Insights from these follow-ups informed the intervention implemented one year later in the experimental sample at the public university, as described in Section IV.A. The baseline survey and experiment for the experimental sample were fielded in June 2023 (one month prior to graduation), with follow-ups conducted two, six, and fourteen months later, in September 2023, January 2024, and September 2024. The deadline for the treatment group to submit proof of four applications was August 15, 2023.

Figure A.5: Survey Incentives

Notes: This figure presents a photograph taken on June 9, 2022 at the private university in Lahore, Pakistan. It shows the setup of one of our food stands during baseline data collection. All students who completed the survey were given vouchers to redeem KFC meals and a bakery item from the food stand.

Figure A.6: Supply-Side Factors I: Reservation Wage and Expected Wage

(a) Kernel Density: Log Reservation Wage

(b) Kernel Density: Log Expected Wage
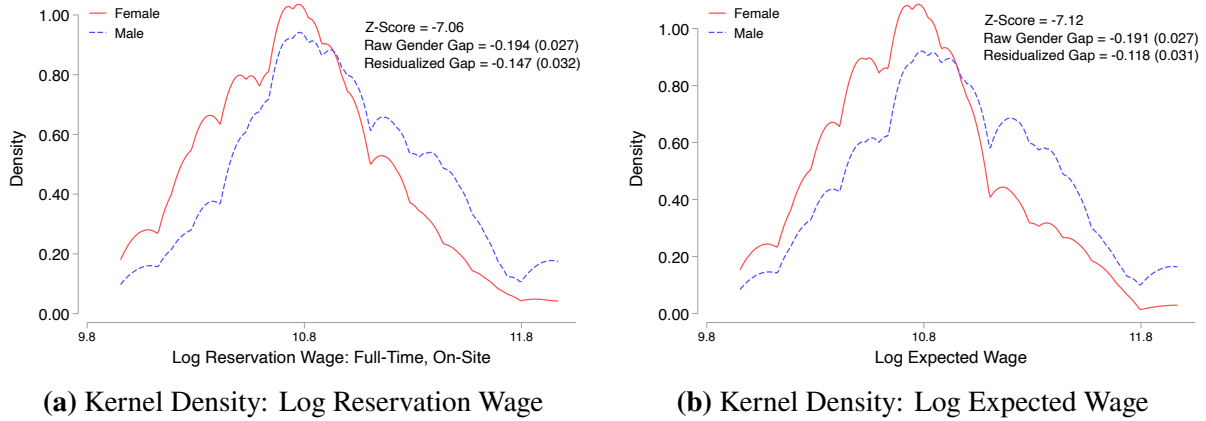
Notes: This figure presents the distribution of baseline reservation and expected wages for respondents in the diagnostic sample (see Section II.B), separately for men (dashed blue) and women (solid red). Panel (a) shows the kernel density of log reservation wages for a full-time, on-site job. Panel (b) shows the kernel density of log expected wages for a full-time, on-site job for the respondent's preferred job title. Both panels show raw and residualized gender gaps, calculated as the female-male difference, and the z-score for the raw difference between women and men. The residualized estimate controls for GPA, major, and preferred occupation. Reservation and expected wages are winsorized at the 2% level.

Figure A.7: Supply-Side Factors II: GPA and Search Effort

(a) Kernel Density: GPA

(b) CDF: Job Applications at Six Months
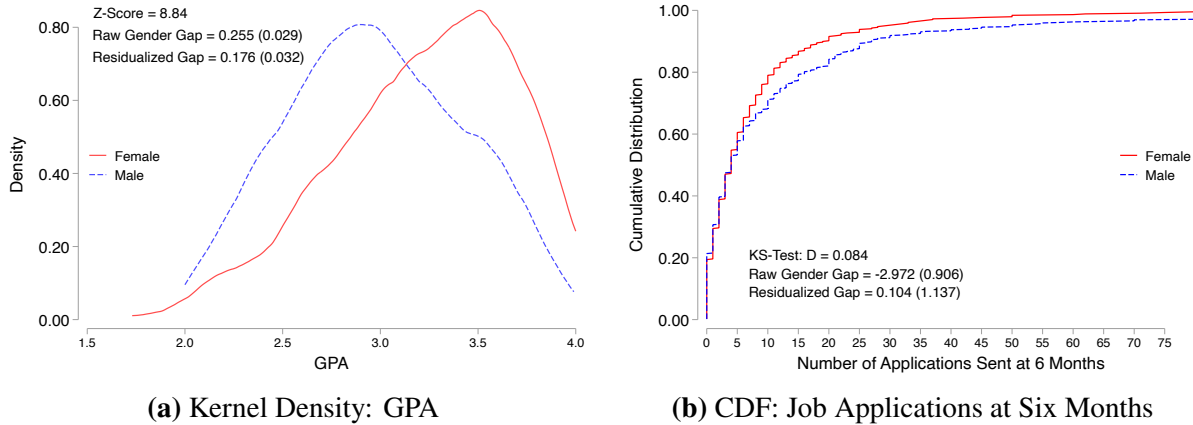
Notes: This figure presents the distribution of baseline GPA and number of job applications sent by the six-month follow-up for respondents in the diagnostic sample (see Section II.B), separately for men (dashed blue) and women (solid red). Panel (a) shows the kernel density of cumulative GPA. Panel (b) shows the cumulative distribution of the number of job applications sent by the six-month follow-up. Both panels show raw and residualized gender gaps, calculated as the female-male difference, and the z-score for the raw difference between women and men. The residualized estimate in Panel (a) controls for major. The residualized estimate in Panel (b) controls for GPA, major, preferred occupation, preference for onsite vs. remote work, preferred daily work hours, and internship experience. The number of job applications is winsorized at the 2% level.

Figure A.8: Employment Rates By Gender Across Survey Waves
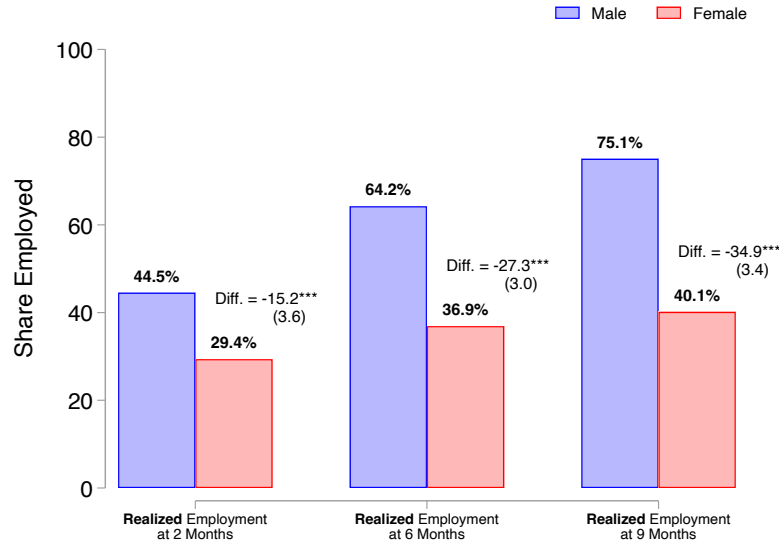
Notes: This figure presents realized employment rates by survey wave for respondents in the diagnostic sample (see Section II.B), separately for men (blue) and women (red). The left, middle, and right pairs of bars correspond to realized employment at the two, six, and nine-month follow-up surveys, respectively. The female-male employment difference is shown above the female bar in each pair. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure A.9: Supply-Side Factors III: Preferred Work Arrangements
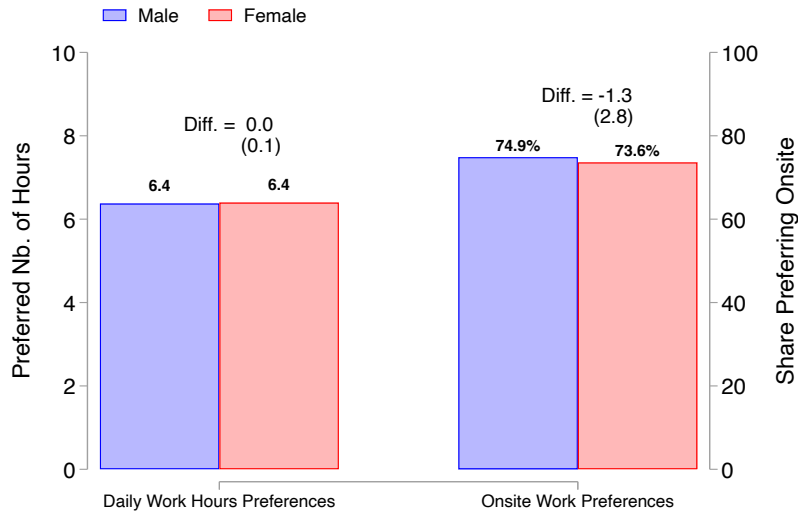
Notes: The figure presents information on baseline preferred work arrangements for respondents in the diagnostic sample (see Section II.B), separately for men (blue) and women (red). The left pair of bars shows the average number of preferred daily work hours. The right pair of bars shows the share of respondents who prefer to work onsite rather than remotely. The female-male difference is shown above the female bar in each pair. Preferred daily work hour is winsorized at the 2% level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

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Figure A.10: Demand-Side Factors: Interviews, Offers and Offered Wages
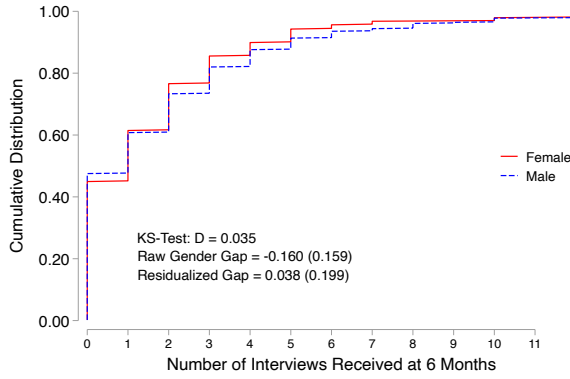
(a) CDF: Job Interviews at Six Months
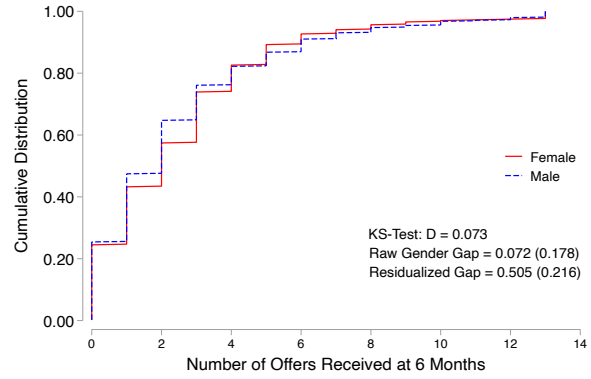
(b) CDF: Job Offers at Six Months
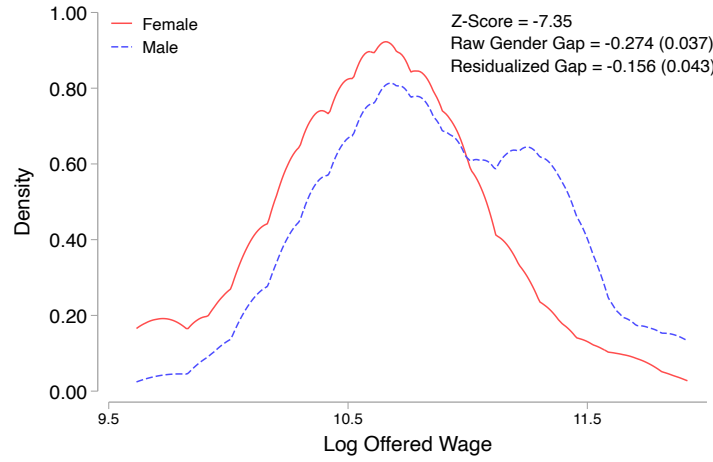
(c) Kernel Density: Log Offered Wages at Six Months

Notes: The figure presents the distribution of job interviews, job offers, and offered wages received by the six-month follow-up for respondents in the diagnostic sample (see Section II.B), separately for men (dashed blue) and women (solid red). Panel (a) shows the cumulative distribution of the number of job interviews received by the six-month follow-up. Panel (b) shows the cumulative distribution of the number of job offers received by the six-month follow-up. Panel (c) shows the kernel density of log offered wage (the highest offered wage reported, regardless of acceptance) at six months for respondents who reported at least one job offer. All three panels show raw and residualized gender gaps, calculated as the female-male difference. Panels (a) and (b) show the KS-test for differences in the raw distributions of female and male interviews and offers, respectively. Panel (c) reports the z-score for the raw difference in mean log offered wages between women and men. The residualized estimate in Panels (a) and (b) controls for GPA, major, preferred occupation, preference for onsite vs. remote work, number of preferred daily work hours, internship experience, reservation wage, and expected wage. The residualized estimate in Panel (c) controls for GPA, major, and preferred occupation. Number of interviews, number of offers, and offered wage are winsorized at the 2% level.

Figure A.11: Explaining the Gender Acceptance Gap Six Months After Graduation
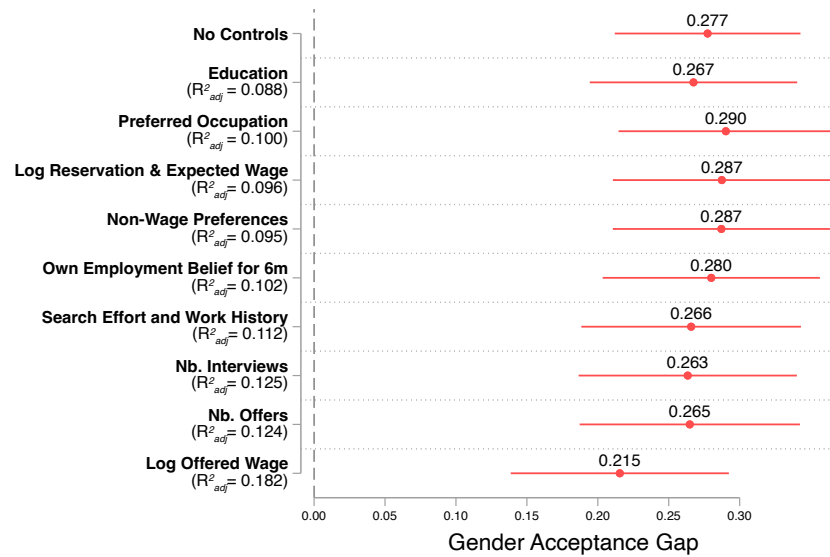
Notes: This figure reports the gender gap in job offer acceptance six months post-graduation and the extent to which baseline characteristics account for it. Each row reports the coefficient, its 95% confidence interval, and the adjusted R^2 from a regression of offer acceptance on gender and the control set listed in that row and above. The sample consists of respondents in the diagnostic sample (see Section II.B) who have received at least one job offer. In each row, the controls are the same as in Figure II. All unbounded continuous variables are winsorized at the 2% level. The mean acceptance rate for men is 76.0%.

Figure A.12: Timing Distinctively Predicts Women's Employment (Bivariate Estimates)
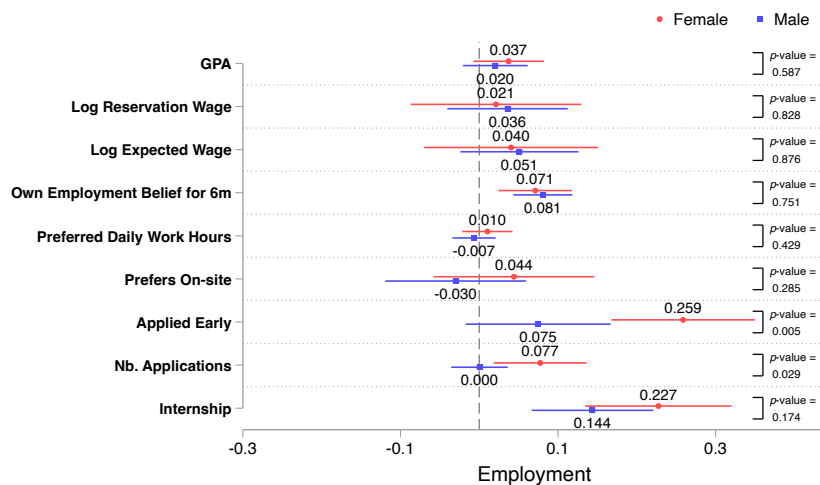
Notes: This figure reports regression estimates of students' employment status six months after graduation on a set of independent variables, separately for women (red) and men (blue). Each row reports the coefficient from a bivariate regression on the specified variable. The sample consists of respondents in the diagnostic sample (see Section II.B). In each row, the controls are the same as in Figure III. All unbounded continuous variables are winsorized at the 2% level. Horizontal bars show 95% confidence intervals. Vertical brackets report *p*-values from tests of equality of coefficients across gender. Means and standard deviations for the independent variables appear in Table B.2.

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Figure A.13: Wheel Shown to Students in the Experimental Sample
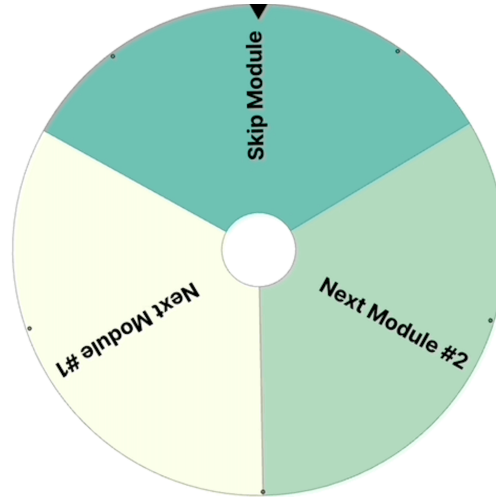
Notes: This figure presents the wheel shown to students during the baseline survey in the experimental sample described in Section IV.A at the public university. The wheel was spun on a tablet, with both the student and the enumerator able to observe the outcome. The wheel randomly assigned students to one of two treatment groups or the control group. Students in the control group were informed that the survey would proceed to the final module, while those in the treatment group were informed about the incentives for early application.

Figure A.14: Characteristics of the Treated
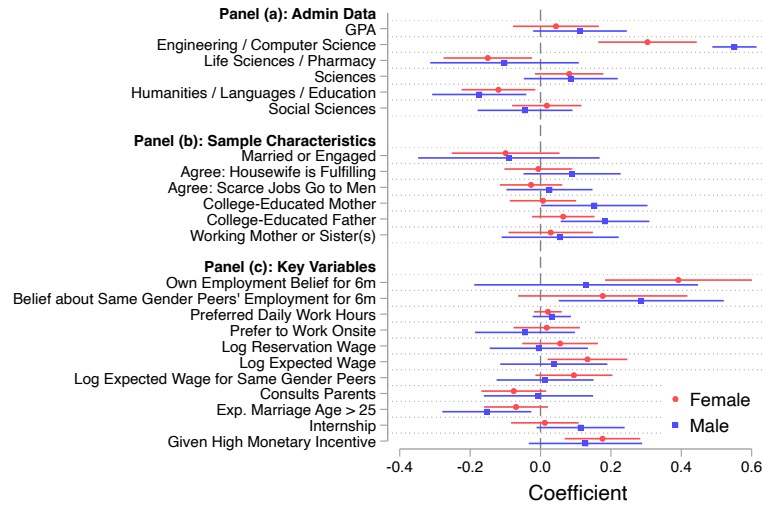
Notes: This figure compares baseline characteristics of students who were offered and took up the treatment, relative to those who were offered but did not participate, separately for women (solid red) and men (dashed blue). Each row reports the coefficient from a bivariate regression on the specified variable and an indicator for treatment take-up. The sample consists of respondents assigned to treatment in the six-month experimental sample (see Section IV.A). Panel (a) shows administrative characteristics, including GPA and college major. Panel (b) shows demographic and attitudinal characteristics, including marital status, agreement with two statements that reflect gender attitudes, parental education, and female family members' work status. Panel (c) shows variables plausibly related to labor force participation, such as employment beliefs about oneself and others, work arrangement preferences, wage expectations, and whether the student was offered the higher monetary incentive. All unbounded continuous variables are winsorized at the 2% level. The horizontal bars show 95% confidence intervals.

Figure A.15: Wage Distribution for Treated and Control Women

(a) Log Current Wage by Treatment

(b) Log Offered Wage by Treatment
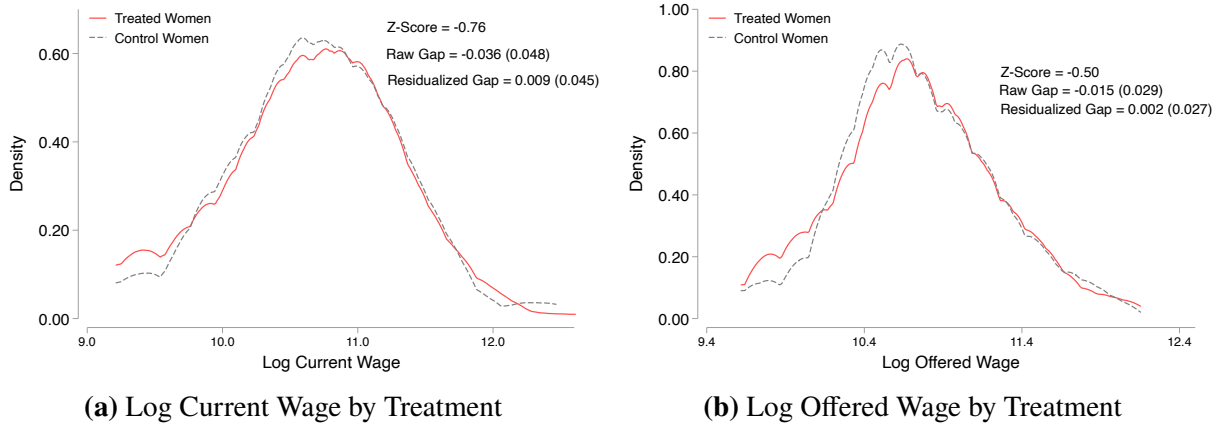
Notes: This figure presents the distribution of current and offered wages for women, separately for treated (red) and control (gray) respondents. The samples consist of respondents in the pooled six-month and fourteen-month experimental samples (see Section IV.A) who provided a current or offered wage, respectively. Panel (a) shows the kernel density of log current wage, and Panel (b) shows the kernel density of log offered wage. Both panels show raw and residualized gaps, calculated as the treatment-control difference, and the z-score for the raw difference between treated women and control women. The residualized estimate controls for GPA, major, and preferred occupation. Current and offered wages are winsorized at the 2% level.

Figure A.16: Consultation Patterns for Job Application and Job Offer Decisions

(a) Consultation of Job Application Decisions

(b) Consultation of Job Offer Decisions
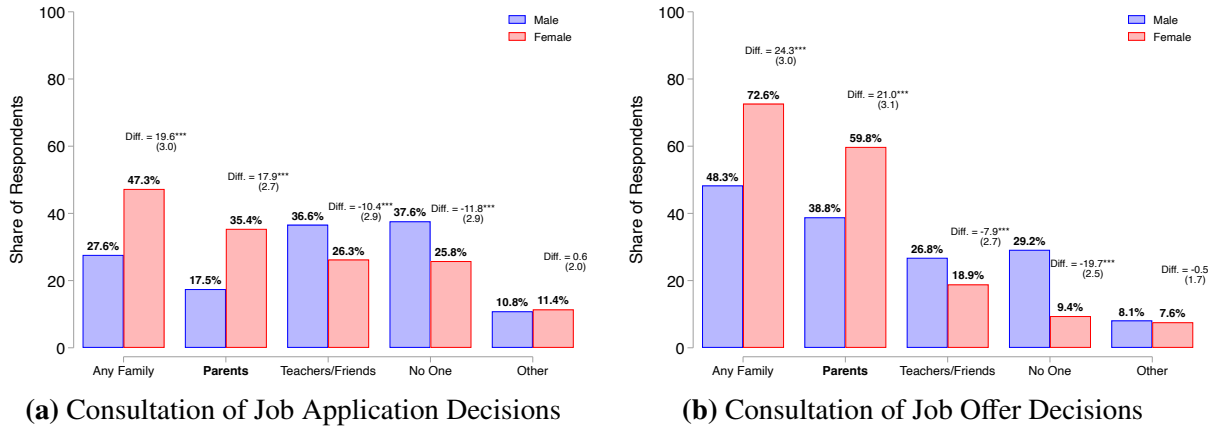
Notes: This figure presents self-report consultation patterns for job application decisions (Panel a) and job offer decisions (Panel b) at six months for respondents in the six-month experimental sample (see Section IV.A), separately for men (blue) and women (red). Panel (a) reports responses to: "Whom do you seek advice from when deciding to apply to jobs?", and Panel (b) reports responses to: "Whom do you seek advice from when deciding whether to accept a job offer?" Responses are chosen from predefined categories, with an additional "Other (specify)" option; multiple selections are allowed. The female-male consultation difference is shown above the female bar in each pair.

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B Appendix Tables

Table B.1: Attrition in the Diagnostic Sample: Baseline, Six-Month, and Nine-Month Follow-Ups

| | Baseline | 6m Follow-Up | | | | 9m Follow-Up | | | |
| | | Non-Attritors | Attritors | Diff. | P-value | Non-Attritors | Attritors | Diff. | P-value |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nb. Obs.	1,493	1,029	464			910	583		
Panel A: Administrative Data									
Female	43.87	42.66	46.55	-3.89	0.16	42.53	45.97	-3.44	0.19
GPA	3.07	3.09	3.04	0.04	0.05	3.07	3.07	-0.00	0.81
Age	22.42	22.47	22.31	0.16	0.01	22.45	22.38	0.07	0.31
Majors:									
Engineering / Computer Science	25.18	26.24	22.84	3.39	0.32	24.40	26.42	-2.02	0.16
Life Sciences / Pharmacy	14.00	12.15	18.10	-5.96	0.01	12.64	16.12	-3.49	0.11
Sciences	13.33	13.22	13.58	-0.36	0.88	15.71	9.61	6.11	0.00
Humanities / Languages / Education	13.40	15.55	8.62	6.93	0.00	11.65	16.12	-4.48	0.02
Social Sciences	34.09	32.85	36.85	-4.01	0.10	35.60	31.73	3.87	0.15
Panel B: Survey Responses (Sample Characteristics)									
Married	4.29	4.28	4.31	-0.03	0.92	3.96	4.80	-0.85	0.51
Engaged	6.90	6.61	7.54	-0.93	0.58	6.37	7.72	-1.35	0.37
College-Educated Mother	41.06	41.01	41.16	-0.15	0.94	39.23	43.91	-4.68	0.07
College-Educated Father	54.19	53.16	56.47	-3.31	0.25	52.75	56.43	-3.68	0.17
Panel C: Survey Responses (Key Variables)									
Own Employment Belief for 6m	74.43	74.78	73.66	1.12	0.46	74.88	73.73	1.15	0.41
Belief about Female Peers' Employment for 6m	50.94	50.78	51.31	-0.53	0.74	50.88	51.04	-0.16	0.95
Preferred Daily Work Hours	6.39	6.38	6.39	-0.01	0.97	6.40	6.37	0.02	0.74
Prefer to Work Onsite	72.49	74.33	68.41	5.92	0.02	74.58	69.22	5.36	0.03
Reservation Wage	54.70	55.37	53.20	2.17	0.22	54.39	55.19	-0.80	0.39
Expected Wage	54.42	55.12	52.88	2.24	0.20	55.06	53.42	1.64	0.37

Notes: This table compares attritors and non-attritors in the diagnostic sample (see Section II.B for details). Panel A shows administrative data such as GPA, age, and college major. Panel B shows baseline survey responses about demographic background, such as marital status and parental education. Panel C shows baseline survey responses that may determine labor force participation, such as employment beliefs about oneself and others, work arrangement preferences, and wage expectations. Column 1 presents statistics for the baseline diagnostic sample. Columns 2 and 3 present statistics for respondents who answered the six-month follow-up survey ("non-attritors") and for those who did not ("attritors"). Column 4 reports the differences between the two groups, and Column 5 reports *p*-values from tests of equality of means, controlling for gender, except for the Female row. Columns 6 through 9 show the same analyses as Columns 2 through 5, respectively, but for the nine-month follow-up survey. All unbounded continuous variables are winsorized at the 2% level.

Table B.2: Means and Standard Deviations for Diagnostic Predictors of Employment

	Female		Male	
	Mean	**SD**	**Mean**	**SD**
	(1)	(2)	(3)	(4)
GPA	3.23	0.46	2.98	0.45
Log Reservation Wage	10.70	0.42	10.90	0.46
Log Expected Wage	10.71	0.40	10.90	0.46
Own Employment Belief for 6m	0.72	0.22	0.77	0.24
Preferred Daily Work Hours	6.40	1.41	6.38	1.42
Prefers On-site	0.74	0.44	0.75	0.43
Applied Early	0.73	0.45	0.72	0.45
Nb. Applications	7.75	11.95	10.72	17.09
Internship	0.38	0.49	0.52	0.50

Notes: This table presents the mean and standard deviations for the diagnostic predictors of employment shown in Figure III and Figure A.12, separately for women and men, using respondents in the diagnostic sample (see Section II.B). The predictor set includes GPA (in standard deviations), log baseline reservation wage, log baseline expected wage, preferred daily work hours, preference for onsite vs. remote work, baseline belief about one's own employment likelihood (scaled to 0–1 and reported in standard deviations), an indicator for applying early, the number of applications submitted by the six-month follow-up (in standard deviations), and an indicator for internship experience. All unbounded continuous variables are winsorized at the 2% level.

Table B.3: Experimental Sample Treatment Balance: Baseline, Six-Month, and Fourteen-Month Follow-Ups

	Baseline				6m Follow-Up				14m Follow-Up			
	Control (1)	Treatment (2)	Diff. (3)	P-value (4)	Control (5)	Treatment (6)	Diff. (7)	P-value (8)	Control (9)	Treatment (10)	Diff. (11)	P-value (12)
Nb. Obs.	939	1,008			688	754			582	636		
Panel A: Administrative Data												
Female	65.07	66.27	-1.20	0.58	63.08	65.25	-2.17	0.39	62.03	63.84	-1.81	0.51
GPA	3.31	3.31	0.00	0.92	3.32	3.33	-0.01	0.90	3.33	3.33	0.00	0.74
Majors:												
Engineering / Computer Science	8.20	6.35	1.85	0.12	7.56	6.63	0.93	0.48	8.08	6.60	1.47	0.32
Life Sciences / Pharmacy	12.78	11.81	0.97	0.49	13.08	12.20	0.88	0.58	13.92	10.85	3.07	0.10
Sciences	25.13	27.38	-2.25	0.25	25.15	28.78	-3.63	0.11	25.77	29.87	-4.10	0.10
Humanities / Languages / Education	28.01	26.09	1.92	0.34	28.49	24.27	4.22	0.07	27.49	23.90	3.59	0.16
Social Sciences	25.88	28.37	-2.49	0.21	25.73	28.12	-2.39	0.31	24.74	28.77	-4.03	0.11
Panel B: Survey Responses (Sample Characteristics)												
Married	4.47	5.26	-0.79	0.43	3.92	4.77	-0.85	0.43	3.95	4.40	-0.45	0.69
Engaged	5.01	3.87	1.14	0.21	4.65	3.18	1.47	0.14	4.30	3.30	0.99	0.36
College-Educated Mother	28.56	28.60	-0.04	0.96	27.70	28.15	-0.46	0.94	26.72	28.03	-1.31	0.67
College-Educated Father	44.28	42.71	1.56	0.46	43.29	42.34	0.95	0.66	41.90	40.76	1.14	0.64
Panel C: Survey Responses (Key Variables)												
Own Employment Belief for 6m	79.96	79.58	0.38	0.71	80.47	80.14	0.33	0.82	80.43	80.26	0.16	0.94
Belief about Female Peers' Employment for 6m	51.22	50.68	0.53	0.53	51.15	50.08	1.07	0.28	51.37	49.91	1.47	0.19
Preferred Daily Work Hours	7.30	7.34	-0.03	0.45	7.29	7.36	-0.07	0.16	7.33	7.38	-0.05	0.37
Prefer to Work Onsite	69.29	67.49	1.80	0.44	69.95	67.81	2.14	0.45	70.14	66.83	3.31	0.26
Reservation Wage	53.50	52.51	0.99	0.41	53.02	52.72	0.30	0.92	52.56	52.57	-0.01	0.91
Expected Wage	62.10	60.50	1.60	0.23	62.47	60.85	1.63	0.33	62.34	61.10	1.24	0.49

Notes: This table compares treatment and control groups in the experiment (see Section IV.A). Panel A shows administrative data such as GPA, age, and college major. Panel B shows baseline survey responses about demographic background, such as marital status and parental education. Panel C shows baseline survey responses that may determine labor force participation, such as employment beliefs about oneself and others, work arrangement preferences, and wage expectations. Columns 1 and 2 present statistics at baseline for the control group and the treatment group. Column 3 reports the difference between the two groups, and Column 4 reports *p*-values from tests of equality of means, controlling for gender, except for the Female row. Columns 5 through 8 and Columns 9 through 12 show the same analyses as Columns 1 through 4, respectively, but for the six-month and fourteen-month follow-up surveys. All unbounded continuous variables are winsorized at the 2% level.

Table B.4: Attrition in the Experimental Sample: Baseline, Six-Month and Fourteen-Month Follow-Ups

| | Baseline | 6m Follow-Up | | | | 14m Follow-Up | | | |
| | | Non-Attritors | Attritors | Diff. | P-value | Non-Attritors | Attritors | Diff. | P-value |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nb. Obs.	1,947	1,442	505			1,218	729		
Percentage Treated	51.77	52.29	50.30	1.99	0.42	52.22	51.03	1.19	0.58
Panel A: Administrative data									
Female	65.69	64.22	69.90	-5.68	0.02	62.97	70.23	-7.26	0.00
GPA	3.31	3.33	3.27	0.05	0.00	3.33	3.28	0.05	0.00
Age	22.73	22.74	22.71	0.03	0.92	22.71	22.76	-0.05	0.15
Majors:									
Engineering / Computer Science	7.24	7.07	7.72	-0.65	0.63	7.31	7.13	0.17	0.89
Life Sciences / Pharmacy	12.28	12.62	11.29	1.33	0.34	12.32	12.21	0.11	0.78
Sciences	26.30	27.05	24.16	2.89	0.22	27.91	23.59	4.32	0.04
Humanities / Languages / Education	27.02	26.28	29.11	-2.83	0.22	25.62	29.36	-3.74	0.07
Social Sciences	27.17	26.98	27.72	-0.75	0.73	26.85	27.71	-0.86	0.66
Panel B: Survey Responses (Sample Characteristics)									
Married	4.88	4.37	6.34	-1.97	0.11	4.19	6.04	-1.85	0.08
Engaged	4.42	3.88	5.94	-2.06	0.10	3.78	5.49	-1.71	0.12
College-Educated Mother	28.58	27.94	30.42	-2.48	0.45	27.41	30.54	-3.13	0.30
College-Educated Father	43.47	42.80	45.40	-2.60	0.40	41.30	47.10	-5.80	0.02
Panel C: Survey Responses (Key Variables)									
Own Employment Belief for 6m	79.76	80.30	78.23	2.07	0.08	80.34	78.80	1.55	0.18
Belief about Female Peers' Employment for 6m	50.94	50.59	51.94	-1.35	0.25	50.61	51.50	-0.89	0.45
Preferred Daily Work Hours	7.32	7.33	7.30	0.03	0.99	7.36	7.26	0.10	0.28
Prefer to Work Onsite	68.36	68.83	67.01	1.82	0.60	68.40	68.29	0.11	0.78
Reservation Wage	52.99	52.86	53.36	-0.50	0.42	52.56	53.71	-1.14	0.11
Expected Wage	61.27	61.62	60.28	1.35	0.63	61.69	60.58	1.11	0.84

Notes: This table compares attritors and non-attritors in the experiment. The first row reports the number of observations at baseline, in the six-month experimental sample, and the fourteen-month experimental sample, separately by attrition status (see Section IV.A for details). Panel A shows administrative data such as GPA, age, and college major. Panel B shows baseline survey responses about demographic background, such as marital status and parental education. Panel C shows baseline survey responses that may determine labor force participation, such as employment beliefs about oneself and others, work arrangement preferences, and wage expectations. Column 1 reports the distribution of characteristics for the baseline experimental sample. Columns 2 and 3 report the distribution for respondents who answered the six-month follow-up survey ("non-attritors") and those who did not ("attritors"). Column 4 reports the differences between the two groups, and Column 5 reports *p*-values test of equality, controlling for gender, except for the Female row. Columns 6 through 9 show the same analyses as Columns 2 through 5, respectively, for the fourteen-month follow-up survey. All unbounded continuous variables are winsorized at the 2% level.

Table B.5: Treatment Effects on Employment (without LASSO Controls)

	August 15	6 Months		14 Months	
	Has Applied	Working	Working for Firm	Working	Working for Firm
	(1)	(2)	(3)	(4)	(5)
Panel A: Female					
Treatment	0.260***	0.066**	0.098***	0.063*	0.092**
	(0.032)	(0.032)	(0.030)	(0.036)	(0.036)
Female Control Mean	0.325	0.336	0.253	0.521	0.416
Panel B: Male					
Treatment	0.172***	0.006	0.023	-0.011	0.008
	(0.043)	(0.044)	(0.043)	(0.043)	(0.047)
Male Control Mean	0.374	0.551	0.374	0.719	0.561
Nb. Obs.	1,442	1,442	1,442	1,218	1,218

Notes: This table presents the treatment effects on labor market outcomes for respondents in the six-month (Columns 1 to 3) and fourteen-month (Columns 4 and 5) experimental samples (see Section IV.A), using pooled regressions without covariates selected via post-double-selection LASSO. Panel A (B) presents results for women (men). Column 1 reports the treatment effect on whether a respondent had applied to at least one job by August 15th. Column 2 reports the treatment effect on employment at six months. Column 3 reports the treatment effect on firm or public sector employment at six months. Columns 4 and 5 report the same outcomes as Columns 2 and 3, respectively, but at fourteen months. Table III presents results with LASSO-selected controls. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.6: Assessing Selection into Treatment Take-up

	6 Months		14 Months	
	Working	Working for Firm	Working	Working for Firm
	(1)	(2)	(3)	(4)
Panel A: Female				
Treatment on Treated	0.136***	0.173***	0.118***	0.152***
	(0.037)	(0.036)	(0.039)	(0.040)
Treatment on Non-Treated	0.002	0.019	0.010	0.013
	(0.038)	(0.036)	(0.046)	(0.045)
Female Control Mean	0.336	0.253	0.521	0.416
Panel B: Male				
Treatment on Treated	0.079	0.116**	0.047	0.088*
	(0.051)	(0.052)	(0.045)	(0.053)
Treatment on Non-Treated	-0.073	-0.069	-0.085	-0.096*
	(0.053)	(0.050)	(0.054)	(0.058)
Male Control Mean	0.551	0.374	0.719	0.561
Nb. Obs.	1,442	1,442	1,218	1,218

Notes: This table presents labor market outcomes, separately by whether the student was offered treatment and took it up or was offered treatment but did not take it up. The sample consists of respondents in the six-month (Columns 1 and 2) and fourteen-month (Columns 3 and 4) experimental samples (see Section IV.A). Panel A (B) shows results for women (men), separately for the two groups. Column 1 reports results for employment at six months. Column 2 reports results for firm or public sector employment at six months. Columns 3 and 4 report the same outcomes as Columns 1 and 2, respectively, but at fourteen months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. Table III shows the same table with overall treatment effects rather than by take-up status. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.7: Treatment Effects on Applications at the Extensive Margin

	6 Months		14 Months	
	Has Applied	**Has Offer**	**Has Applied**	**Has Offer**
	(1)	(2)	(3)	(4)
Panel A: Female				
Treatment	0.070***	0.057*	0.066***	0.043
	(0.023)	(0.029)	(0.018)	(0.026)
Female Control Mean	0.826	0.702	0.903	0.813
Panel B: Male				
Treatment	0.055**	0.025	0.015	-0.001
	(0.027)	(0.039)	(0.018)	(0.033)
Male Control Mean	0.866	0.700	0.955	0.851
Nb. Obs.	1,435	1,435	1,215	1,215

Notes: This table presents the treatment effects on job applications and job offers at the extensive margin for respondents in the six-month (Columns 1 and 2) and fourteen-month (Columns 3 and 4) experimental samples (see Section IV.A). Panel A (B) presents results for women (men). Column 1 reports the treatment effect on whether a respondent had applied to at least one job at six months. Column 2 reports the treatment effect on whether a respondent had received at least one job offer at six months. Columns 3 and 4 report the same outcomes as Columns 1 and 2, respectively, but at fourteen months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO.

Table B.8: Distribution Across Top Three Occupation Groups by Gender and Treatment

	Treatment	**Control**	**Diff**	**P-value**
	(1)	(2)	(3)	(4)
Panel A: Women				
Teaching and Education	22.17	22.62	-0.45	0.87
I.T. and Telecommunications	10.87	10.48	0.39	0.85
Marketing and Sales	8.91	7.86	1.06	0.57
Panel B: Men				
Teaching and Education	14.67	14.13	0.54	0.88
I.T. and Telecommunications	13.04	10.87	2.17	0.52
Marketing and Sales	7.61	9.24	-1.63	0.57

Notes: This table presents the three most common occupation groups for respondents in the fourteen-month experimental sample (see Section IV.A) who are employed at the fourteen-month mark, separately by gender and treatment status. Panel A (B) presents the top three occupation groups for women (men). Column 1 reports the share of respondents in the treatment group in each occupation. Column 2 reports the share of respondents in the control group in each occupation. Column 3 reports the differences between the two groups, and Column 4 reports the corresponding *p*-values from a test of equality. Occupation grouping is based on Standard Occupational Classification (SOC) codes.

Table B.9: Descriptive Statistics for Women in the Experimental Sample by Baseline Expected Marriage Age

	All	Exp. Marriage Age ≤ 25	Exp. Marriage Age > 25	Diff.	P-value
	(1)	(2)	(3)	(4)	(5)
Panel A: Administrative Data					
Age	22.4	22.0	23.2	-1.2	0.00
GPA	3.4	3.4	3.4	-0.0	0.30
Majors:					
Engineering / Computer Science	7.8	8.6	6.7	1.9	0.31
Life Sciences / Pharmacy	13.8	11.0	18.1	-7.1	0.00
Sciences	25.7	24.4	27.5	-3.1	0.32
Humanities / Languages / Education	25.6	26.2	24.6	1.6	0.59
Social Sciences	27.1	29.8	23.1	6.7	0.03
Panel B: Survey Responses (Sample Characteristics)					
College-Educated Mother	33.6	35.2	31.4	3.8	0.25
College-Educated Father	46.7	48.9	44.0	4.9	0.16
Working Mother	7.6	7.8	7.3	0.5	0.79
Working Father	68.5	69.9	66.8	3.1	0.34
Panel C: Survey Responses (Key Variables)					
Own Employment Belief for 6m	79.1	77.4	81.7	-4.3	0.00
Belief about Female Peers' Employment for 6m	51.4	51.5	51.4	0.0	0.98
Preferred Daily Work Hours	7.2	7.1	7.2	-0.1	0.13
Prefer to Work Onsite	65.9	62.0	71.7	-9.8	0.00
Reservation Wage	50.3	50.4	50.2	0.2	0.90
Expected Wage	57.8	57.3	58.6	-1.3	0.48

Notes: This table presents baseline descriptive statistics for women in the six-month experimental sample (see Section IV.A), excluding those who were already married or engaged at baseline. Column 1 presents statistics for all women; Columns 2 and 3 present statistics separately for women expecting earlier marriage at baseline (≤ age 25) and women expecting late marriage at baseline (> age 25). Column 4 reports early-late differences, and Column 5 reports *p*-values from tests of equality of means. All unbounded continuous variables are winsorized at the 2% level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.10: Long-Term Treatment Effects on Women's Marriage Outcomes by Baseline Expected Marriage Age

	Married or Engaged	Nb. Marriage Offers
	(1)	(2)
Panel A: Exp. Marriage Age > 25		
Treatment	0.012	0.235
	(0.039)	(0.434)
Control Mean	0.109	2.443
Panel B: Exp. Marriage Age ≤ 25		
Treatment	0.043	-0.143
	(0.040)	(0.413)
Control Mean	0.212	3.761
Nb. Obs.	697	594

Notes: This table presents the treatment effects on marriage outcomes for women in the fourteen-month experimental sample (see Section IV.A), excluding those who were already married or engaged at baseline. We unfortunately did not collect the education of grooms in this round, so outcomes are limited to marriage offer quantities. Panel A shows results for women expecting late marriage at baseline (> age 25), and Panel B shows them for women expecting earlier marriage at baseline (≤ age 25). Column 1 shows the treatment effect on whether a respondent is married or engaged, measured at the fourteen-month follow-up. Column 2 shows the treatment effect on the number of marriage offers the respondent received at fourteen months. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.11: 2SLS Treatment Effects on Women's Marriage Market by Baseline Expected Marriage Age

	Married / Engaged	Nb. Marriage Offers	Bachelor's+ Educated Groom	Master's+ Educated Groom
	(1)	(2)	(3)	(4)
Panel A: Exp. Marriage Age > 25				
Applied Early (Instrumented)	-0.006	0.961	0.440*	0.502**
	(0.111)	(0.908)	(0.260)	(0.252)
Control Mean	0.062	1.090	0.356	0.253
Panel B: Exp. Marriage Age ≤ 25				
Applied Early (Instrumented)	0.084	-0.020	0.069	0.014
	(0.113)	(0.777)	(0.158)	(0.158)
Control Mean	0.121	1.854	0.563	0.437
Nb. Obs.	803	749	788	788

Notes: This table presents 2SLS treatment effects on marriage outcomes for women in the six-month experimental sample (see Section IV.A), excluding those who were already married or engaged at baseline. The treatment is used as an instrument for whether the respondent applied early (by the incentive deadline, August 15th). Panel A shows results for women expecting late marriage at baseline (> age 25), and Panel B shows results for women expecting earlier marriage at baseline (≤ age 25). Column 1 shows the effect on whether a respondent is married or engaged by the six-month follow-up. Column 2 shows the effect on the number of marriage offers received by six months. Column 3 shows the effect on whether the highest education level among all received offers is a Bachelor's degree or above, and Column 4 shows the same for a Master's degree or above. Estimates are obtained from pooled regressions with covariates selected via post-double-selection LASSO. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.12: Log Reservation Wages Over Time

	Log Reservation Wage
	(1)
Six Month Response	-0.145***
	(0.029)
Fourteen Month Response	-0.066*
	(0.034)
Treatment	-0.021
	(0.021)
Treatment × Six Month Response	-0.009
	(0.041)
Treatment × Fourteen Month Response	0.002
	(0.046)
Female Control Mean	3.862
Nb. Obs.	2,142

Notes: This table reports time trends and treatment effects of the experimental intervention on log reservation wages among female students. The sample is restricted to women who were observed in the baseline, six-month, and fourteen-month follow-up surveys (see Section IV.A). Each observation is a person × wave response. The dependent variable is log self-reported reservation wage, constructed using two survey questions tailored to current employment status. For employed respondents, the survey asks how much less than their current salary they would be willing to accept if their current job were to shut down. Their reservation wage is computed as their current salary minus this amount. For unemployed respondents, the survey first asks them to imagine a full-time, on-site job in their field and estimate the wage they would be offered. It then asks how much less than this offer they would be willing to accept. Their reservation wage is calculated as the expected offer minus this stated amount. The specification includes indicators for the six- and fourteen-month follow-up waves, as well as interactions between treatment and wave. The baseline wave serves as the omitted category. Estimates are obtained with covariates selected via post-double-selection LASSO. Standard errors are clustered at the individual level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
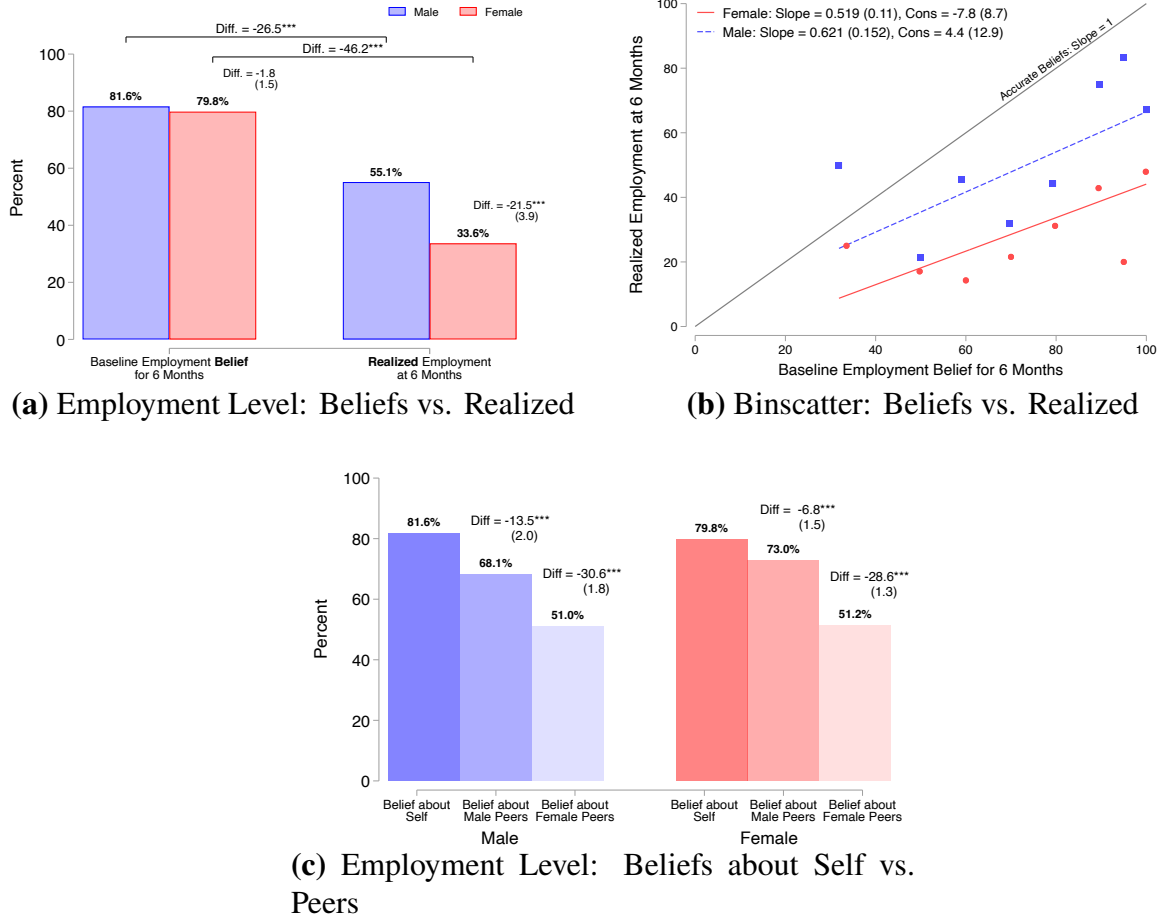
C External Validity of Diagnostic Results

In this section, we establish the external validity of our diagnostic findings from the private university by replicating them at Pakistan's oldest and largest public university. This new setting attracts students from more diverse socioeconomic and geographic backgrounds than the private university, making it an attractive setting for testing external validity. We establish external validity by showing that our diagnostic insights from Figures I to II hold when produced using the control group in our experimental sample.[37] We also present additional data suggesting that women not only expect to work post-graduation, but want to.

Figure C.1 Panel (a) compares baseline employment expectations with realized outcomes by gender in the control group of the experimental sample, replicating the analysis from Figure I Panel (a). Consistent with the patterns observed in the diagnostic sample, men and women in the control group of the experimental sample exhibit high and similar expectations for future employment at baseline: 79.8% of women and 81.6% of men expect to be employed within six months of graduation. The modest gender gap in expectations (1.8 pp) is comparable to the gap in the diagnostic sample (5.2 pp), where employment expectations were similarly high (71.8% for women, 77.0% for men). Additionally, the realized outcomes for women diverge sharply from their initial expectations in both samples. In the experimental sample, only 33.6% of women in the control group are employed six months after graduation – 46.2 pp below their expectations, and 21.5 pp lower than men's realized employment rate. This overestimation of future employment among women mirrors the diagnostic sample, where 36.9% of women are employed six months post-graduation, 34.9 pp below their average baseline expectations, and 27.3 pp lower than men's realized employment rate.

Figure C.1 Panel (b) shows that the relationship between baseline employment beliefs and realized outcomes in the experimental sample mirrors the analysis in Figure I Panel (b): both genders have inaccurate beliefs across the full distribution, and markedly different intercepts. Slopes are higher in the experimental sample than the diagnostic sample, but remain far from 1 (0.52 for women and 0.62 for men in the experimental sample, versus 0.31 for women and 0.35 for men in the diagnostic sample). Slopes are also less precisely estimated, due to a smaller sample size, which results from restricting our analysis to the control group.

Figure C.1 Panel (c) compares the baseline employment beliefs about self and peers in the experimental sample, replicating insights from Figure I Panel (c). In the diagnostic sample, we saw that even though men and women have inaccurate beliefs about their own future employment, they predict their peers' future labor supply more accurately. Specifically, both men and women correctly predict that their male peers' chances of employment are relatively high, estimated at

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[37]The treatment group is excluded as our treatment directly impacts some of the outcomes of interest, such as realized employment.

Figure C.1: Baseline Employment Belief and Realized Employment Outcomes: Experiment Control Sample

(a) Employment Level: Beliefs vs. Realized

(b) Binscatter: Beliefs vs. Realized

(c) Employment Level: Beliefs about Self vs. Peers

Notes: This figure replicates Figure I using data from the control group of the six-month experimental sample (see Section IV.A). Panel (a) contrasts students' average baseline belief about their employment likelihood six months post-graduation with their average realized employment at the six-month mark, separately for men (blue) and women (red). Female-male differences are shown above the female bar; average within-gender differences between baseline beliefs and realized employment are shown above the horizontal brackets. Panel (b) is a binned scatterplot of baseline employment beliefs against realized employment, separately by gender. Panel (c) reports respondents' average baseline beliefs about their own employment likelihood vs. their beliefs about their peers' employment likelihood. Male (female) responses are represented by the blue (red) cluster of bars. For each cluster, the leftmost bar shows beliefs about one's own employment likelihood; the middle bar shows beliefs about male peers; and the rightmost bar shows beliefs about female peers. Average differences between beliefs about oneself and beliefs about male (female) peers appear above the middle (rightmost) bar in each cluster. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

63.5% by men, and 68.5% by women in the diagnostic sample. Similar responses were provided by the control group of the experimental sample, where men estimated other men's employment prospects at 68.1%, while women estimated them at 73.0%. Similarly, both genders correctly assess that women have relatively lower chances of working six months later, estimated in the control experimental sample at 51.0% by men and 51.2% by women. This is remarkably close the beliefs

Figure C.2: Explaining the Gender Employment Gap: Experiment Control Sample
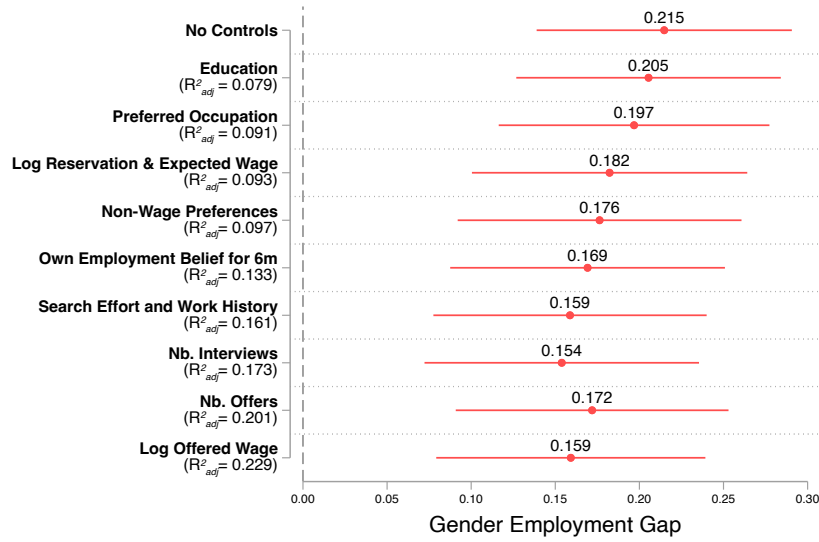
Notes: This figure replicates Figure II using data from the control group of the six-month experimental sample (see Section IV.A). Each row reports the coefficient, its 95% confidence interval, and the adjusted R^2 from a regression of employment on gender and the control set listed in that row and above. In each row, the controls are the same as in Figure II. All unbounded continuous variables are winsorized at the 2% level. The mean employment level for men at six months is 55.1%.

reported in the diagnostic sample (50.2% by men and 51.6% by women).

Figure C.2 follows Figure II in analyzing whether common demand- and supply-side barriers to female employment explain the gender employment gap observed six months after graduation. In the diagnostic sample, the raw gender gap in employment was 27.3 pp. In the control group of the experimental sample, the employment gap is smaller but still substantially large at 21.5 pp. As in Figure II Rows 2 to 6, gradually adding controls for education (GPA and major), preferred occupation, reservation and expected wage, preferences for work hours and remote work, and baseline beliefs about own employment prospects reduces the employment gap in the control group of the experimental sample only modestly, by 4.6 pp. Adding controls for job search effort and work history (Row 7) further narrows the gap by just 0.9 pp. Finally, gender disparities in employment remain similar even after accounting for demand-side factors (number of interviews, job offers, and offered wages; Rows 8 to 10), with the residual gap at 15.9 pp. Taken together, these controls only reduce the raw gap by 5.6 pp. This is only slightly larger than the diagnostic sample, where the gap shrinks from 27.3 pp to 25.6 pp (1.7 pp), such that the key takeaway remains: even after controlling for student characteristics, job preferences, and demand-side factors (especially the number of job offers), the gender employment gap persists.

Beyond replication of the patterns already documented at the private university, we collect additional data at the public university in support of the fact that women at the time they graduate from college

Figure C.3: Employment Beliefs and Realized Outcomes by Wealth
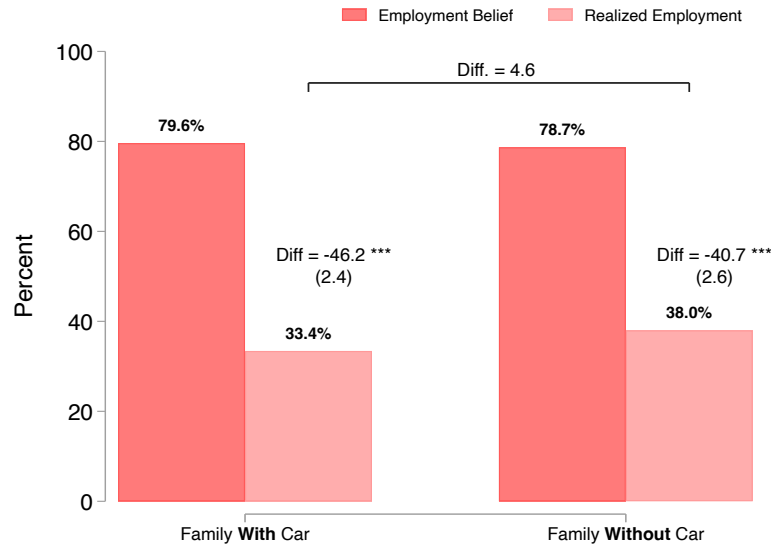
Notes: This figure presents heterogeneity by family wealth in women's baseline beliefs about their employment likelihood six months post-graduation and their realized employment at the six-month mark. The sample consists of women in the control group of the six-month experimental sample (see Section IV.A). Women whose families own a car (do not own a car) are represented by the left (right) cluster of bars. Within each cluster, the darker red bar shows baseline employment beliefs and the lighter red bar shows realized employment. Average within-group differences between beliefs and realized employment are reported above the realized employment bar. The average difference in realized employment between women whose families do and do not own a car appears above the horizontal bracket. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

want to work. First, we explicitly ask women at baseline if they want to work on a paid basis within six months of graduation.[38] Of the women surveyed, 97.6% reported that they want to be working six months after graduation. We also ask women who reported less than a 100% likelihood of working within six months, why they think they may not work. The first panel of Figure VII titled "Self" reports the distribution of their responses. The most prevalent barrier, cited by 37% of women, was poor macroeconomic conditions that may limit job availability. Importantly, only 9% told us that they may not work because they may not *want* to work six months from now. Even when considering respondents' beliefs about other women (second panel in Figure VII titled "Other Women"), only 15% of women reported that other women may not work post-graduation because they may not want to work. Finally, we find that there is no meaningful difference in women's stated likelihood of working in six months by their levels of familial wealth, suggesting that financial necessity may not be the primary driver of women's intention to work. At baseline, we measure ownership of five assets and amenities: car, motorbike, internet connection, laptop and smartphone. As shown in Table II, most families own all of these assets, but there is more variation

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[38]The exact question was: "Do you want to be working (e.g., for a firm or in your own/family business) in the next **six months** after you graduate?"

in car ownership across households. Accordingly, Figure C.3 shows baseline beliefs about work separately by whether a woman's family owns a car. There are no systematic differences in women's responses by family car ownership (79.6% and 78.7%). There are also no significant differences in realized employment outcomes six months later by car ownership. This suggests that financial constraints are not the primary reason driving women's willingness to work and that other motives (e.g., independence, desire for a career, bargaining power etc.) prevail.

D Variable Construction

This section details the construction of variables requiring modifications from the raw survey data. Unless noted, the construction for diagnostic and experimental samples is identical. Variables appear alphabetically. All continuous variables are winsorized at the 2% level. When the variable has a clear lower bound and data entry errors are not possible (e.g., the number of applications is bounded by 0 and the survey was coded such that negative values could not be logged), we only winsorize at the upper end. Complete question text, response constraints, and conditional logic are detailed in the Online Appendix.

D.I Labor Market Outcomes:

- **Working**: Respondents are asked whether they are currently working in a paid capacity; this yes/no response forms the basis of our binary employment indicator.[1] We also classify a respondent as working if they report working in a family business.
- **Working for Wage at a Firm:** We construct a separate employment indicator that captures whether the respondent is doing paid work for a firm or the public sector. We code this as zero for respondents who are working without pay and for those who report working as freelancers, in their own business, or in a family business.
- **Cumulative Number of Job Applications:** In each post-baseline wave, respondents report how many job applications they have submitted since graduation. At the six- and fourteen-month follow-ups, we also ask about applications sent recently (in the past month and past six months, respectively). Because these responses rely on recall, later reports may be lower than earlier ones. When this occurs, replace the later reported value with the previously reported higher value. Similarly, if the reported cumulative applications since graduation are lower than the sum of previously reported applications and the number submitted recently, we adjust the cumulative total accordingly.

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[1]The baseline survey for the experimental sample is the only exception. There, the indicator is constructed from a question on current work status with the following options: (1) accepted a paid job or internship; (2) already working in a paid job or internship; (3) starting their own business; (4) already started their own business; (5) agreed to work in a family business; (6) already working in a family business; and (7) none of these. We classify respondents as employed if they select any option from (1) through (6).

- **Cumulative Number of Job Offers:** We apply the same correction procedure used for **Cumulative Number of Job Applications**. If a respondent reports fewer cumulative job offers in a later wave than in an earlier one, we replace the later value with the previously reported maximum. Likewise, if reported cumulative offers are lower than the sum of the prior cumulative total and the number of recent offers, we adjust the cumulative total accordingly. In a given survey wave, if a respondent does not report job offers but also reports sending no job applications and not working, we impute zero offers. Conversely, if a respondent is working in a firm but is missing job-offer information or reports zero offers, we impute one offer.

- **Accepted Job Binary:** At each survey wave, we classify a respondent as having accepted a job if they have received at least one job offer (from **Cumulative Number of Job Offers**) and are currently **Working**.

- **Date of First Job Application:** For the experimental sample, we ask respondents at the six- and fourteen-month follow-ups to report the date they submitted their first job application after graduation. If a respondent recalls only the month, we impute the midpoint of the month (the 15th) as the application date. To minimize noise from limited recall, if a first-application date is reported at six months, we take that as the date of earliest application. If the six-month value is missing but a date is reported at the fourteen-month follow-up, we use the latter provided it is temporally consistent with earlier information.[2]

- **Applied Early Binary:** In the diagnostic sample, we create this indicator from **Cumulative Number of Job Applications**, considering a respondent as having applied early if they sent at least one application by the two-month follow-up. In the experimental sample, we instead use the **Date of First Job Application:**. We classify a respondent as having applied early if their first job application was submitted on or before August 15 (the deadline to receive the financial reward for early applications). This definition is more precise than in the diagnostic sample, since the experimental sample includes a direct question on the timing of the first job application rather than only the number of applications by the first follow-up.

- **Current Occupation:** At each survey wave, respondents who report currently working are asked to provide their job title. After applying standard text-cleaning procedures to the responses (e.g., converting to lowercase, removing stop words, etc.), we classify titles using the Python package `occupationcoder` (Turrell et al., 2022), which assigns two- and three-digit Standard Occupational Classification (SOC) sub-major groups based on the United Kingdom's Office for National Statistics (ONS).[3] We apply some manual adjustments when

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[2]Specifically, we only adopt the fourteen-month value if it is not later than the reported date of first job offer or the first reported job start at six months; otherwise, we treat the first-application date as missing.

[3]This classification system differs from the U.S. SOC system.

necessary to ensure consistency with work-related outcomes. Specifically, we recode job titles containing apprenticeship-related keywords (e.g., "trainee") as "Apprenticeship"; titles suggesting that the respondent is not currently working (e.g., "continuing study") are recoded as missing; and titles suggesting freelance work are assigned the category "Freelancer".

- **Offered Wage:** At each survey wave, we define a respondent's offered wage as the highest wage offer they have reported up to and including that wave. Thus, at Wave 3, the offered wage is the highest offer reported in Waves 1-3. At Wave 4, the offered wage is the highest offer reported in Waves 1-4.

D.II Labor Market Beliefs and Expectations:

- **Own Employment Beliefs:** Respondents are asked to estimate, on a scale of 0–100, the likelihood that they will be employed in six months. We make no adjustments to this measure except in cases where a respondent is already working at baseline but leave this question blank. For these respondents (1.5% of diagnostic sample respondents), we impute a value of 100. No such cases occur in the experimental sample.

- **Employment Beliefs about Peers**: Respondents are asked to estimate the likelihood that their female and male peers will be employed in six months by stating how many out of ten randomly selected (male/female) classmates will be employed. We multiply these responses by 10, so that the resulting scale is comparable to **Own Employment Beliefs**.

- **Preferred Occupation:** At baseline, respondents are asked which job title they would be most interested in if they were to work for a firm. After applying standard text-cleaning procedures to the responses (e.g., converting to lowercase, removing stop words, etc.), we again use the Python package occupationcoder (Turrell et al., 2022) to automatically classify titles into two and three-digit SOC sub-major groups. We use the two-digit SOC code as a control for preferred occupation in our analysis.

- **Preferred Work Hours:** In the experimental sample, respondents directly report the number of hours per day they would prefer to work. In the diagnostic sample, this question is not asked; instead, respondents choose between preferring full- or part-time work (binary). To harmonize the measure across samples, we impute preferred daily work hours for the diagnostic sample by assigning eight hours to full-time preferences and five hours to part-time preferences.

- **Reservation Wage:** At baseline, respondents report their reservation wage for various work arrangements (full-time onsite, part-time onsite, full-time remote, and part-time remote), along with their expected wage offer for a full-time onsite job for their preferred job title. To construct a standardized measure that allows for comparisons across respondents, we prioritize the reservation wage for full-time onsite work. If this value is missing (3.2% of the

Table D.1: Mapping of Responses About Reasons Not to Work to Categories

Raw Response	Classified Category
Jobs are scarce due to poor economic conditions	Poor macroeconomic conditions
I may not get permission from family to work	Family reasons
Other women may not get permission from family to work	Family reasons
I am having a baby/getting married/focusing on family	Family reasons
Other women get married and have kids soon after graduation	Family reasons
I may want to keep studying	Pursuing higher education
Other women may (eventually) pursue further studies	Pursuing higher education
I may not want to work	May not want to work
Other women may not want to work	May not want to work
Firms don't want to hire women / harder for women to find a job	Firms don't hire women
Other	Other

Notes: This table categorizes responses explaining why respondents or their peers may not be working, mapping them into predefined categories. For additional details, see Section D. We leave out of the response set the two reasons listed for one's own chances not to work that do not have a direct mapping to other's reasons: "I don't have experience" and "I don't have networks to help get that job". Those received 20.2% and 10.6% of responses, respectively.

diagnostic sample; 0.1% of the experimental sample), we use the full-time remote reservation wage. If neither full-time wage is provided but a part-time onsite wage is available, we scale it to a full-time equivalent by multiplying by (40/25), assuming a 25-hour part-time workweek. If all previous values are missing but a part-time remote wage is available, we apply the same adjustment. In subsequent survey waves, reservation wages depend on the respondent's **Working** status. Respondents who are working report their current wage and the maximum reduction they would accept to continue in the job; we define their reservation wage as the difference between these two values. Respondents who are not working report their updated expected wage offer for a full-time, onsite job and how much less than the expected offer they would accept for the role. Here too, the reservation wage equals the difference between the expected wage offer and the maximum discount.

- **Reasons Not to Work:** In the experimental sample, we construct two sets of variables capturing reasons for potential non-employment, based on respondents' open-ended answers to survey questions. The first set reflects women's beliefs about their own future employment: women who report less than 100% likelihood of working in six months are asked why they think there is a chance they may not work. The second set reflects respondents' beliefs about their peers: women who believe that fewer than 10 out of 10 random female classmates will be employed in six months are asked why they think their peers may not work. In both cases, open-ended responses are coded by enumerators using a predefined list of response categories; multiple options may be selected, and responses may be entered under "Other" if they do not fit existing options. The mapping of raw categories to those used in Figure VII is provided in Table D.1.

D.III Marriage Market Variables:

- **Expected Age of Marriage:** At each survey wave, respondents report how many months or years remain until they expect to get married. We convert month-based estimates to years (dividing by 12) and add them to a respondent's baseline age to obtain their expected age at marriage. If a respondent transitions from being unmarried in one wave to being married in the next, we assume marriage occurred midway between the two waves and impute the corresponding marriage age. For example, if a respondent is newly married at the six-month follow-up after not being married at baseline, we assign their marriage age as baseline age plus 0.25 years (i.e., three months). The same midpoint assumption is applied to transitions occurring between later waves.

- **Marriage Offers Received:** In each survey wave except the fourteen-month follow-up, respondents report how many marriage proposals they have received since graduation. In the fourteen-month follow-up for the experimental sample, to reduce recall error, respondents instead report how many proposals they have received in the past six months; we add this to their six-month (Wave 3) total to obtain a cumulative measure (acknowledging that the two-month gap between waves is the same for treatment and control groups). As with **Cumulative Number of Job Applications** and **Cumulative Number of Job Offers**, if a respondent reports fewer cumulative marriage proposals in a later wave than in an earlier wave, we update the later response with the previously reported maximum to enforce monotonicity over time.

Table D.2: Diagnostic Sample: Mapping of Majors to General Major Categories

General Major Category	Corresponding Majors
Engineering / Computer Science	*Bachelor of Science in Civil Engineering*
	Bachelor of Science in Computer Science
	Bachelor of Science in Electrical Engineering
	Bachelor of Science in Mechanical Engineering
	Bachelor of Science in Software Engineering
Humanities, Languages and Education	*Bachelor of Science in English*
	Bachelor of Science in Media
Life Sciences / Pharmacy	*Bachelor of Science in Botany*
	Bachelor of Science in Food Science and Technology
	Bachelor of Science in Zoology
Sciences	*Bachelor of Science in Biochemistry*
	Bachelor of Science in Biotechnology
	Bachelor of Science in Chemistry
	Bachelor of Science in Mathematics
	Bachelor of Science in Microbiology
	Bachelor of Science in Physics
Social Sciences	*Bachelor of Laws (LLB)*
(inc. Business and Law Degrees)	*Bachelor of Business Administration (BBA)*
	Bachelor of Science in Accounting and Finance
	Bachelor of Science in Commerce
	Bachelor of Science in Economics
	Bachelor of Science in International Relations
	Bachelor of Science in Psychology

Notes: This table maps the majors offered at the diagnostic university into five general categories: (1) Engineering and Computer Science, (2) Humanities, Languages, and Education, (3) Life Sciences and Pharmacy, (4) Sciences, and (5) Social Sciences (including Business and Law degrees). The general major classification, along with its binary indicators, is used as a control variable throughout our analyses. For further details, see Section D.

D.IV   Other Constructed Variables:

- **Undergraduate Majors:** To summarize respondents' fields of study in our balance tables, we map students' academic majors into generalized categories and construct binary indicators for each category. The mapping from detailed majors to the general category is shown in Tables D.2 and D.3 for the diagnostic and experimental sample, respectively.[4]

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[4]Major information is obtained from university administrative records.

Table D.3: Experimental Sample: Mapping of Majors to General Major Categories

General Major Category	Corresponding Majors
Engineering / Computer Science	*Bachelor of Science in Architecture*
	Bachelor of Science in Computer Sciences
	Bachelor of Science in Electrical Engineering
	Bachelor of Science in Information Technology
	Bachelor of Science in Software Engineering
	Bachelor of Science in Technology Education
Humanities, Languages and Education	*Bachelor of Science in Arabic*
	Bachelor of Science in Communication Studies
	Bachelor of Science in English
	Bachelor of Science in English (Applied Linguistics)
	Bachelor of Science in French
	Bachelor of Science in Gender Studies
	Bachelor of Science in Graphic Design
	Bachelor of Science in History
	Bachelor of Science in Islamic Studies
	Bachelor of Science in Kashmiryat
	Bachelor of Science in Painting
	Bachelor of Science in Persian
	Bachelor of Science in Philosophy
	Bachelor of Science in Physical Education
	Bachelor of Science in Punjabi
	Bachelor of Science in Special Education
	Bachelor of Science in Urdu
	Bachelor of Science in Education
Life Sciences / Pharmacy	*Bachelor of Science in Agriculture*
	Bachelor of Science in Agricultural Food Science and Technology
	Bachelor of Science in Botany
	Bachelor of Science in Pharmacy
Sciences	*Bachelor of Science in Applied Geology*
	Bachelor of Science in Chemical Engineering
	Bachelor of Science in Environmental Sciences
	Bachelor of Science in Geography
	Bachelor of Science in Information Management
	Bachelor of Science in Mathematics
	Bachelor of Science in Microbiology and Molecular Genetics
	Bachelor of Science in Molecular Biology
	Bachelor of Science in Physics
	Bachelor of Science in Space Science
	Bachelor of Science in Statistics
Social Sciences **(inc. Business and Law Degrees)**	*Bachelor of Science in Applied Psychology*
	Bachelor of Science in Business Information Technology
	Bachelor of Science in Commerce
	Bachelor of Science in Criminology
	Bachelor of Science in Economics
	Bachelor of Science in Management
	Bachelor of Science in Political Science
	Bachelor of Science in Sociology

Notes: This table maps the majors offered at the diagnostic university into five general categories: (1) Engineering and Computer Science, (2) Humanities, Languages, and Education, (3) Life Sciences and Pharmacy, (4) Sciences, and (5) Social Sciences (including Business and Law degrees). The general major classification, along with its binary indicators, is used as a control variable throughout our analyses. For further details, see Section D.

Supplemental Appendix: Survey Instrument

Unless noted, all questions in the baseline survey and the six-month survey were asked to both the diagnostic and experimental samples. The fourteen-month survey was fielded only for the experimental sample. In the interest of space, we list here relevant questions for the analysis presented in this paper. We do not provide the instrument for the nine-month survey in the diagnostic sample because it is very similar to the six-month ones and only a small part of the analysis draws on this wave.

Contents

I   Enumerator Guidelines

For multiple-select questions aimed at identifying reasons or motivations, enumerators were told not to read out answer choices. Instead, they were asked to listen to the respondent and select the option that best matched the response. If none applied, "Other" could be selected. The answer choices for these questions are marked with boxes in the questionnaire below, while questions requiring only one response use circles.

For wage questions, enumerators were told to reassure respondents that responses would remain confidential and will be used only for research, and to record amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Enumerators also reminded respondents they could skip any question they found uncomfortable, specifically when introducing questions about wages and a respondent's marriage market decisions.

II   Baseline Surveys

Consent Script

My name is {Enumerator's Name}.

Your university is collaborating with the London School of Economics (LSE) and the Massachusetts Institute of Technology (MIT) to understand the future plans of the graduating students.

This will allow the university to provide better counseling to our students in the future, and keep in touch with the alumni. Participating in this survey is totally up to you.

Answering these questions will take you approximately 20 minutes. All survey participants will be offered a KFC meal and dessert from Layers.

The information provided by you will remain strictly confidential. Your name will never be published in any report. The published results of the survey will be a compilation of information of hundreds of people.

If any question makes you uncomfortable, you can skip it or stop talking with me at any time. If you have any more questions about this research, you can contact sticerd@lse.ac.uk.

Do you agree to participate in the survey?

○ Yes

○ No

Basic Information

Q1

How old are you?

Q2

What is your gender?

○ Male

○ Female

Q3

What is your marital status?

○ Never married

○ Divorced

○ Separated

○ Widowed

○ Married

○ Engaged

Q4

Are you enrolled in or admitted to a higher education program (e.g., Master's, PhD) that you plan to attend right after graduation?

○ Yes

○ No

Note: Respondents in the experimental sample who answered 'Yes' were screened out of the survey.

Q5

Will you graduate this summer?

○ Yes

○ No

Note: This question was asked only to the experimental sample. Respondents who answered 'No' were screened out of the survey.

Q6

Condition: Asked if Q5 = "Yes"

When will you graduate from your program?

*Enumerator: Enter **month** and **year** of graduation*

Q7

Condition: Asked if Q3 != "Never Married" or "Engaged"

Do you have children?

○ Yes

○ No

Q8

Have you already accepted a paid job/internship/business opportunity, or are you currently working in a paid job/business/internship?

○ Accepted a paid job/internship

○ Already working in a paid job/internship

○ Starting own business

○ Already started own business

○ Agreed to work in family business

○ Already working in family business

○ None of the above

Q9

Condition: Asked if Q8 = "Already working in a paid job/internship" or "Already started own business" or "Already working in family business"

When did you start working?

*Enumerator: Enter **month** and **year***

Note: This question was asked only to the experimental sample.

Q10

Condition: Asked if Q8 = "Accepted a paid job/internship" or "Starting own business" or "Agreed to work in family business"

When will you start working?

*Enumerator: Enter **month** and **year***

Note: This question was asked only to the experimental sample.

Q11

Condition: Asked if Q8 = "Already working in a paid job/internship" or "Already started own business" or "Already working in family business"

Will you continue in the same job/business after you graduate?

○ Yes

○ No

Note: This question was asked only to the experimental sample. If the respondent answered "Yes" and Q8 = "Already working in a paid job/internship", they were categorized as ineligible for the experiment (not assigned to either treatment or control).

Q12

Condition: Asked if Q8 = "None of the above" or [(Q8 = "Already working in a paid job/internship" or "Already started own business" or "Already working in family business") and Q11 = "No"]

Do you intend to be working (e.g., for a firm or in your own/family business) in the next 6 months after you graduate?

○ Yes

○ No

Note: This question was asked only to the experimental sample.

Q13

Condition: Asked if Q12 = "Yes"

What type of work would you prefer to do after you graduate?

○ Work as an employee for a firm

○ Work in my family-owned business

○ Be self-employed as a freelancer for short-term assignments (e.g., online tasks or content writing through Upwork)

○ Be self-employed by starting my own business (e.g., starting marketing/public relations consulting firm)

Note: This question was asked only to the experimental sample.

Q14

Do you want to be working (e.g., for a firm or in your own/family business) 2 years from now?

○ Yes

○ No

Note: This question was asked only to the experimental sample.

Job Title Elicitation

Q15

Condition: Asked if Q12 = "No"

If you <u>had</u> to look for a job after you complete your current degree, which of the following employment options, if any, would you consider?

○ Work as an employee for a firm

○ Work in my family-owned business

○ Be self-employed as a freelancer for short-term assignments (e.g., online tasks or content writing through Upwork)

○ Be self-employed by starting my own business (e.g., starting marketing/public relations consulting firm)

○ None of the above

Q16

Condition: Asked if Q15 != "Work as an employee for a firm" and Q12 = "No"

If you <u>had</u> to work for a firm, which job title would you be most interested in among all the possibilities given your current qualifications?

┌──────────────┐
│   │
│   │
└──────────────┘

Enumerator: Enter -99 if the respondent insists they are not interested in working for a firm at all.

Q17

Condition: Asked if Q16 = -99 Q12 = "No"

What is the most common job title that matches what people with your current qualifications typically do?

┌──────────────┐
│   │
│   │
└──────────────┘

Q18

Condition: Asked if Q12 = "Yes" or [Q12 = "No" and Q15 = "Work as an employee for a firm"]

After you graduate, which job title would you be most interested in among all the possibilities given your current qualifications?

Q19

Imagine a firm wants to hire you in a full-time on-site job for {the job title from Q16, Q17, or Q18}. How much do you think you would be offered in monthly starting salary for the job? Answer the question regardless of whether you will accept the job or choose to work at all.

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Reservation Wage Elicitation

Imagine that you have graduated from your current degree and are offered a job with 4 possible schedules, which corresponds to {the job title from Q16, Q17, or Q18}.

The four possible schedules are:

- Full-time, onsite

- Full-time, remote

- Part-time, onsite

- Part-time remote

There are no additional jobs currently available that are of interest to you so if you reject this job, you will be unemployed for the foreseeable future.

What is the minimum monthly starting salary for which you would be willing to work for any of the following work schedules? You may reject any or all schedules if you would not work on that schedule for any salary.

Consider that in all options, the job and the employer are identical in all respects except the schedule, and the job is located in your preferred city. The job is a 20 minute drive away from your house and is representative of other similar jobs in the industry in terms of career growth opportunities, non-wage benefits etc.

Enumerator: Enter -99 if they would not accept a given schedule for any amount of money. Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q20A

Full-time job; on-site: 40 hours per week, 9am to 5pm, Monday to Friday.

> [   ]

Q20B

Full-time job; work from home: 40 hours per week, 9am to 5pm, Monday to Friday.

> [   ]

Enumerator: Enter -99 if they would not accept a given schedule for any amount of money. Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q20C

Part-time job; on-site: 25 hours per week, 9am to 2pm, Monday to Friday.

> [   ]

Enumerator: Enter -99 if they would not accept a given schedule for any amount of money. Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q20D

Part-time job; work from home: 25 hours per week, 9am to 2pm, Monday to Friday.

> [   ]

Enumerator: Enter -99 if they would not accept a given schedule for any amount of money. Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Comprehension Check

Q21

Imagine you are offered (0.8 * PKR {first non-missing wage from Q20A, Q20B, Q20C, and Q20D},000) for {corresponding schedule from first non-missing wage from Q20A, Q20B, Q20C, and Q20D} corresponding to {the job title from Q16, Q17, or Q18}.

This is a take-it-or-leave-it offer; the firm does not negotiate salary. Would you accept the job?

○ Yes

○ No

Schedule Preferences

Q22

Do you prefer to work full-time or part-time?

○ Full-time

○ Part-time

Note: *This question was asked only to the diagnostic sample.*

Q23

How many hours do you prefer to work in a day?

[   ]

Note: *This question was asked only to the experimental sample.*

Q24

Do you prefer on-site work or working from home?

○ Work from home

○ On-site work

Labor Market Beliefs

Q25

Do you agree, disagree or neither agree nor disagree with the following statement: When jobs are scarce, men should have more right to a job than women.

○ Agree

○ Disagree

○ Neither agree nor disagree

Q26

Do you agree, disagree or neither agree nor disagree with the following statements: Being a housewife is just as fulfilling as working for pay.

○ Agree

○ Disagree

○ Neither agree nor disagree

Q27

Think of <u>men</u> in your cohort at [the university] who are not pursuing further education right after graduating. Out of 10 randomly selected male students in this sample, how many of them do you think will be employed within six months after graduating?

Q28

Condition: Asked if Q27 >= 0 and < 10

Out of the remaining {10 - answer from Q27} <u>men</u>, why do you think they are not working?

☐ Some men don't want to work

☐ They may (eventually) pursue further studies

☐ Jobs are scarce due to poor economic conditions

☐ Waiting for better opportunities

☐ Going abroad

☐ They are doing unpaid work / internships / apprenticeships

☐ Other reason

Enumerator: Select all of the options that apply to the respondent's answer.

Note: This question was asked only to the experimental sample.

Q29

Condition: Asked if Q28 = "Other reason"

If other, please specify.

<div style="border:1px solid black; height:60px; width:100%"></div>

Note: This question was asked only to the experimental sample.

Q30

Think of <u>women</u> in your cohort at [the university] who are not pursuing further education right after graduating. Out of 10 randomly selected female students in this sample, how many of them do you think will be employed within six months after graduating?

<div style="border:1px solid black; height:60px; width:200px"></div>

Q31

Condition: Asked if Q30 >= 0 and < 10

Out of the remaining {10 - answer from Q30} <u>women</u>, why do you think they are not working?

☐ They get married and have kids soon after graduation

☐ Some women don't want to work

☐ Their parents/husbands wouldn't give them permission to work

☐ They may (eventually) pursue further studies

☐ Firms don't want to hire women/harder for women to find a job

☐ There are few suitable jobs for women

☐ Other reason

Enumerator: Select all of the options that apply to the respondent's answer.

Note: This question was asked only to the experimental sample.

Q32

Condition: Asked if Q31 = "Other reason"

If other, please specify.

[ ]

Note: This question was asked only to the experimental sample.

Q33

Think of the typical {respondent's from Q2} student from your university working as a {job title from Q16, Q17, or Q18}. What do you think that student's monthly starting salary for a full-time on-site job (40 hours per week, 9am to 5pm, Monday to Friday) will be?

[ ]

Note: This question was asked only to the experimental sample.

Q34

Think of the typical {opposite to respondent's gender from Q2} student from your university working as a {job title from Q16, Q17, or Q18}. What do you think that student's monthly starting salary for a full-time on-site job (40 hours per week, 9am to 5pm, Monday to Friday) will be?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Note: This question was asked only to the experimental sample.

Q35

Whom do you have to consult when deciding to accept a job offer?

☐ Friends

☐ Mother

☐ Father

☐ Brother(s)

☐ Sister(s)

☐ Cousin(s)

☐ Husband or fiancé

☐ Rest of family

☐ Teachers, career office, career councilor, university website

☐ Classmates enrolled in my course / seniors

☐ No one

☐ Other

Enumerator: Select all of the options that apply to the respondent's answer.

Q36

Condition: Asked if Q35 = "Other"

If other, please specify.

Labor Force Participation

Q37

Did you work, intern, or do a business in the past 12 months that you are no longer engaged in now?

○ No

○ Yes, worked for a firm

○ Yes, worked as a freelancer

○ Other (e.g. family business)

Q38

Condition: Asked if Q37 = "Other (e.g. family business)"

If other, please specify.

Q39

How many jobs have you applied to in the past three months?

Q40

Within the last 7 days, about how many total hours did you spend on job search activities? Please round up to the nearest total number of hours.

Note: This question was asked only to the experimental sample.

Q41

How many interviews have you received in the past three months?

Q42

How many job offers have you received in the past three months?

Q43

Condition: Asked if Q42 > 0

What monthly salary offer did you receive? If you got several salary offers, what was the highest?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q44

Condition: Asked if Q42 > 1

What is the lowest monthly salary you have been offered?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Note: This question was asked only to the experimental sample.

Marriage Questions

Q45

Condition: Asked if Q3 = "Married"

In what year did you get married?

[   ]

Q46

Condition: Asked if Q3 != "Married"

In how many years from now do you expect you will get married?

[   ]

Q47

Condition: Asked if Q7 = "Yes"

How many children do you have?

[   ]

Q48

Did you or your family ever send any marriage proposals?

○ Yes

○ No

Note: *This question was asked only to the experimental sample.*

Q49

Condition: Asked if Q48 = "Yes"

How many marriage offers have you or your family sent?

[   ]

Q50

Condition: Asked if Q49 > 0

What was the month and year when you or your family sent the first ever marriage offer?

Q51

Did you ever receive any marriage offers?

○ Yes

○ No

Q52

Condition: Asked if Q51 = "Yes"

How many marriage offers have you received?

Q53

Condition: Asked if Q51 = "Yes"

What was the month and year you received your first marriage offer?

*Enumerator: Enter **month** and **year***

Q54

Condition: Asked if Q2 = "Female" and Q51 = "Yes"

What is the highest level of education amongst all the marriage offers you have received?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q55

Think of 10 random women in your class. How many women out of 10 would have received a marriage offer within 3 months of graduation?

Q56

Think of 10 random women in your class. How many women out of 10 would have received a marriage offer within 6 months of graduation?

Roster

Q57

Please provide the following information about yourself:

Personal email address: [   ]

Personal mobile phone number: [   ]

Q58

Did you or your family own a car or any 4 wheel vehicle during the last year?

○ Yes

○ No

Note: *This question was asked only to the experimental sample.*

Q59

Did you or your family own a motorbike during the last year?

○ Yes

○ No

Note: *This question was asked only to the experimental sample.*

Q60

Do you have internet access in the household you live in?

○ Yes

○ No

Note: *This question was asked only to the experimental sample.*

Q61

Do you own a personal smartphone?

○ Yes

○ No

Note: *This question was asked only to the* *experimental sample*.

Q62

Do you own a personal laptop?

○ Yes

○ No

Note: *This question was asked only to the* *experimental sample*.

Family

Q63

What is the employment status of your father?

○ Working for pay in a firm

○ Self-employed in own business

○ Out of the labor force

○ Working in housework

○ Retired

○ Parents passed away

○ Studying

○ Other

Note: *This question was asked only to the* *experimental sample*.

Q64

Condition: Asked if Q63 = "Other"

If other, please specify.

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Note: This question was asked only to the *experimental sample*.

Q65

What is your father's job title? Tell us the job title of their most recent paid job if he is currently unemployed or retired.

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┌─────────────────────────────┐
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│                             │
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Note: This question was asked only to the *experimental sample*.

Q66

What is the highest level of education received by your father?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q67

What is the employment status of your mother?

○ Working for pay in a firm

○ Self-employed in own business

○ Out of the labor force

○ Working in housework

○ Retired

○ Parents passed away

○ Studying

○ Other

Note: *This question was asked only to the experimental sample.*

Q68

Condition: Asked if Q67= "Other"

If other, please specify.

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Note: *This question was asked only to the experimental sample.*

Q69

What is your mother's job title? Tell us the job title of their most recent paid job if she is currently unemployed or retired.

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Note: *This question was asked only to the experimental sample.*

Q70

What is the highest level of education received by your mother?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q71

Condition: Asked if Q2 = "Female" and Q3 = "Engaged"

How old is your fiancé?

<div style="border:1px solid black; width:150px; height:50px;"></div>

Q72

Condition: Asked if Q2 = "Female" and Q3 = "Married"

How old is your husband?

<div style="border:1px solid black; width:150px; height:50px;"></div>

Q73

Condition: Asked if Q2 = "Female" and Q3 = "Engaged"

What is the highest level of education received by your fiancé?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q74

Condition: Asked if Q2 = "Female" and Q3 = "Married"

What is the highest level of education received by your husband?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q75

Do you have siblings?

○ Yes

○ No

Note: This question was asked only to the experimental sample.

Q76

Condition: Asked if Q75 = "Yes"

How many brothers do you have?

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Note: This question was asked only to the experimental sample.

Q77

Condition: Asked if Q75 = "Yes"

How many sisters do you have?

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Note: This question was asked only to the experimental sample.

Q78

Condition: Asked if Q76 > 0

How many older brothers do you have?

<div style="border:1px solid black; width:50%; height:3em;"></div>

Note: This question was asked only to the experimental sample.

Q79

Condition: Asked if Q77 > 0

How many older sisters do you have?

<div style="border:1px solid black; width:50%; height:3em;"></div>

Note: This question was asked only to the experimental sample.

Q80

Condition: Asked if Q79 > 0

What is the employment status of your oldest sister?

○ Working for pay in a firm

○ Self-employed in own business

○ Unemployed

○ Working in housework

○ Retired and not looking for jobs

○ Studying

○ Other

Note: This question was asked only to the experimental sample.

Q81

Condition: Asked if Q80 = "Other"

If other, please specify.

Note: This question was asked only to the experimental sample.

Q82

Which province are you from?

○ Azad Kashmir

○ Balochistān

○ Gilgit-Baltistan

○ Islāmābād

○ Khyber Pakhtunkhwa

○ Punjab

○ Sindh

Q83

In which province would you prefer to live after graduation?

○ Azad Kashmir

○ Balochistān

○ Gilgit-Baltistan

○ Islāmābād

○ Khyber Pakhtunkhwa

○ Punjab

○ Sindh

Q84

Which city are you from?

Q85

In which city would you prefer to live in after graduation?

Treatment Randomization

You have now reached the last part of the survey which is experimental. At this stage, whether you are shown one of the two experimental modules, or taken straight to the end of the survey will be randomly determined by this wheel.
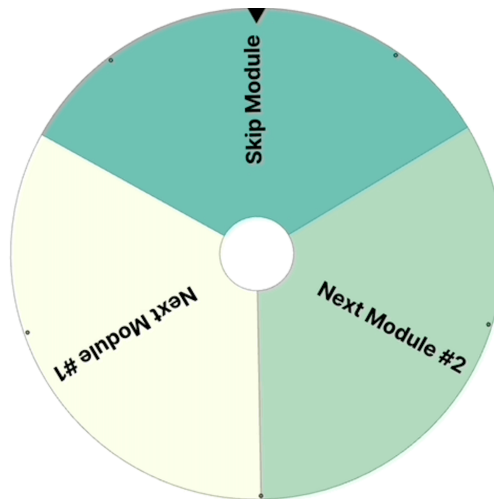
Enumerator: Turn to respondent. Please touch the screen to spin the wheel.

Note: This module was only shown to the experimental sample.

Q86

*Condition: Asked if **Treatment Randomization** = "Next Module #1"*

Our research team is committed to supporting your job search.

You have been randomly selected to receive 20,000 rupees if you apply to at least four jobs relevant to your preferred title, {the job title from Q16, Q17, or Q18}, **and/or your field**, {student's major from pre-loaded administrative data} **and/or skill-set before August 15th**.

The process is simple: We will give you a link to a form. On this form, you will be able to upload a proof of your four applications (e.g., screenshot of the "Application Submitted" page). Only applications to jobs relevant to your preferred title, {the job title from Q16, Q17, or Q18}, and/or your field, {student's major from pre-loaded administrative data} and/or skill-set will be considered valid.

A member of our team may get in touch with you to verify the details of your application and to confirm that you have sent authentic and relevant applications. Only applicants for whom all applications are authentic and relevant will get the **20,000 rupees** via mobile money transfer.

Would you like to participate in this follow-up study?

○ Yes

○ No

Q87

*Condition: Asked if **Treatment Randomization** = "Next Module #2"*

Our research team is committed to supporting your job search.

You have been randomly selected to receive 5,000 rupees if you apply to at least four jobs relevant to your preferred title, {the job title from Q16, Q17, or Q18}, **and/or your field**, {student's major from pre-loaded administrative data} **and/or skill-set before August 15th**.

The process is simple: we will give you a link to a form. On this form, you will be able to upload a proof of your four applications (e.g., screenshot of the ""application submitted" page). Only applications to jobs relevant to your preferred title preferred title, {the job title from Q16, Q17, or Q18}, and/or your field, {student's major from pre-loaded administrative data} and/or skill-set will be considered valid.

A member of our team may get in touch with you to verify the details of your application and to confirm that you have sent authentic and relevant applications. Only applicants for whom all applications are authentic and relevant will get the **5,000 rupees** via mobile money transfer.

Would you like to participate in this follow-up study?

○ Yes

○ No

Note

*Condition: Read out if **Treatment Randomization** = "Skip Module"*

The lottery has decided that you will skip directly to the last module of the survey.

Note

Below is the link to the form where you can upload proof of applications any time before August 15th, as well as submit your money transfer details.

We will check all responses on August 15th, and if you have fulfilled all requirements, we'll initiate the money transfer. We will also email this link to you at the end of the survey.

{QR Code Shown Here}

Work Intentions

Q88

In how many days, weeks, or months from now do you plan to start applying to jobs?

Enumerator: Enter if you recorded the answer in Days, Weeks, or Months.
***Note:** This question was asked only to the experimental sample.*

Q89

How many jobs do you plan to apply for by August 15th?

Note: This question was asked only to the experimental sample.

Q90

On a scale from 0 (very unlikely) to 100 (very likely), how likely is it that you will be working within 6 months of graduating?

┌─────────────┐
│   │
└─────────────┘

Note: This question was asked at this point in the survey (after treatment assignment) to the experimental sample. In the diagnostic sample, it was asked after Q30.

Q91

Condition: Asked if Q90 < 100

Why do you think there is a chance you may not work?

☐ Poor macroeconomic conditions; jobs are scarce

☐ I don't have experience

☐ I don't have networks to help get a job

☐ Firms don't want to hire women (applies to women only)

☐ I may not get permission from family to work

☐ I may not want to work

☐ I want to keep studying

☐ Because I am getting married / having a baby / focusing on family

☐ Other reason

Note: This question was asked only to the experimental sample.

Q92

If other, please specify.

End of Survey

Note

We thank you for your time spent taking this survey. Your response has been recorded.

Enumerator Entries

Q93

Enumerator: Please enter your final comments here.

III   Two-Month Follow-Up Survey

Current Employment and Job Search Status

Q1

How many jobs have you applied to since graduation?

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│                 │
│                 │
└─────────────────┘
```

Q2

How many job offers have you received since graduation?

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│                 │
│                 │
└─────────────────┘
```

Q3

Are you currently working in a paid capacity (e.g., for a firm, in your own business or for your family business) or have you recently accepted a paid job offer?

○ Yes

○ No

Q4

Condition: Asked if Q3 = "Yes"

Are you working for your own business, or for a family business, or for a private firm?

○ Working for own business

○ Working for a family business

○ Working for a private firm

Q5

Condition: Asked if Q3 = "Yes"

What is your current monthly salary?

Q6

Condition: Asked if Q2 > 0

What is the highest monthly salary you have been offered?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q7

Condition: Asked if Q2 > 1

What is the lowest monthly salary you have been offered?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q8

Condition: Asked if Q4 = "Working for own business" or "Working for a family business" or "Working for a private firm"

What is your job title?

Labor Market Beliefs and Preferences

Q9

Condition: Asked if Q4 = "Working for own business" or "Working for a family business" or "Working for a private firm"

If the work you are doing suddenly shut down and you had to apply for a new job, would you agree to work for less than {wage from Q5},000?

○ Yes

○ No

Q10

Condition: Asked if Q9 = "Yes"

As a {job title from Q8}}, how much less than {wage from Q5},000 will you accept?

┌─────────────┐
│   │
└─────────────┘

Q11

Condition: Asked if Q3 = "No" and Q1 = 0

If you <u>had</u> to apply for a job, which job title would you be interested in, among all the possibilities given your current qualifications?

┌──────────────────┐
│   │
└──────────────────┘

Q12

Condition: Asked if Q3 = "No" and Q1 > 0

Which job title are you interested in, among all the possibilities given your current qualifications?

┌──────────────────┐
│   │
└──────────────────┘

Q13

Imagine a firm wants to hire you in a full-time on-site job as a {job title from Q11 or Q12}.

How much do you think you would be offered in monthly starting salary for the job?

Answer this question regardless of whether you will accept the job or choose to work at all.

```

```

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q14

Condition: Asked if Q3 = "No"

As a {job title from Q11 or Q12}, would you be willing to work for less than {expected salary from Q13},000?

○ Yes

○ No

Q15

Condition: Asked if Q14 = Yes

As a {job title from Q11 or Q12}, how much less than {expected salary from Q13} would you accept?

```

```

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Marriage Questions

Q16

What is your marital status?

○ Never married

○ Divorced

○ Separated

○ Widowed

○ Married

○ Engaged

Q17

Condition: Asked if [Marital Status from Baseline != "Married" and != "Engaged"] or [(Marital Status from Baseline = "Married" and Q16 != "Married") or (Marital Status from Baseline = "Engaged" and Q16 != "Engaged" and != "Married")].

How many marriage offers have you received since graduating?

```
┌─────────────┐
│             │
│             │
└─────────────┘
```

Q18

Think about a graduate from your university, in the same field and cohort. Imagine she is a non-working woman. In your opinion, how many marriage offers would she get within a year of graduation?

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│             │
│             │
└─────────────┘
```

Note: This question was asked only to the experimental sample.

Q19

Condition: Asked if Q18 > 0

Of these Q18 offers, how many are from high-income men? Consider high-income to mean they are making more than PKR 150K monthly.

```
┌─────────────┐
│             │
│             │
└─────────────┘
```

Note: This question was asked only to the experimental sample.

Q20

Condition: Asked if Q18 > 0

Of these Q18 offers, how many are from men that are highly-educated men? Consider highly-educated to mean they have a Master's Degree or above.

<div style="border:1px solid;width:200px;height:60px"></div>

Note: This question was asked only to the experimental sample.

Q21

Think about a graduate from your university, in the same field and cohort. Imagine she is a <u>working</u> woman. In your opinion how many marriage offers would she get within a year of graduation?

<div style="border:1px solid;width:200px;height:60px"></div>

Note: This question was asked only to the experimental sample.

Q22

Condition: Asked if Q21 > 0

Of these Q21 offers, how many are from high-income men? Consider high-income to mean they are making more than PKR 150K monthly.

<div style="border:1px solid;width:200px;height:60px"></div>

Note: This question was asked only to the experimental sample.

Q23

Condition: Asked if Q21 > 0

Of these Q21 offers, how many are from men that are highly-educated men? Consider highly-educated to mean they have a Master's Degree or above.

Note: This question was asked only to the *experimental sample*.

Q24

Condition: Asked if Gender from Baseline = "Female" and Marital Status from the 2-month Survey != "Married"

For you personally, will you receive more marriage offers if you are...

○ A working woman

○ A non-working woman

○ No difference

Note: This question was asked only to the *experimental sample*.

Q25

Condition: Asked if Gender from Baseline = "Female" and Marital Status from the 2-month Survey != "Married"

For you personally, will it be easier to find a good husband if you are/become...

○ A working woman

○ A non-working woman

○ No difference

Note: This question was asked only to the *experimental sample*.

Q26

Condition: Asked if Gender from Baseline = "Female" and Marital Status from the 2-month Survey != "Married"

For you personally, would you prefer a husband that...

○ Wants you to work

○ Doesn't mind you working

○ Does not want you to work

Note: *This question was asked only to the* *experimental sample.*

Q27

Condition: Asked if *Gender from Baseline* *= "Male" and* *Marital Status from the 2-month Survey* *!= "Married"*

For you personally, are you more likely to make a marriage offer to...

○ A working woman

○ A non-working woman

○ No difference

Note: *This question was asked only to the* *experimental sample.*

Q28

Condition: Asked if *Gender from Baseline* *= "Male" and* *Marital Status from the 2-month Survey* *!= "Married"*

Which of the following statements is most true for you personally...

○ I would want my wife to work

○ I do not mind if they work

○ I would rather they do not work

Note: *This question was asked only to the* *experimental sample.*

End of Survey

Note

We thank you for your time spent taking this survey. Your response has been recorded.

IV   Six-Month Follow-Up Survey

Consent Form

My name is {Enumerator's Name}.

I am calling from the research team that surveyed you in June and September at your university for a study led by the London School of Economics (LSE), the Massachusetts Institute of Technology (MIT) and your university.

We want to ask you some follow up questions that will take 5 to 10 minutes. These questions are to understand how your post-graduate life has changed in the last few months. Your answers will allow us to provide better counseling to future students, and keep in touch with the alumni. Participating in this survey is totally up to you.

The information provided by you will remain strictly confidential. Your name will never be published in any report. It will not be possible to link your responses to you in any publication. The published results of the survey will be a compilation of information from hundreds of people. If any question makes you uncomfortable, you can skip it or stop talking with me at any time.

Do you agree to participate in the survey?

○ Yes

○ No

Current Employment and Job Search Status

Q1

Are you currently working in a paid capacity (e.g., for a firm, in your own business or for your family business) or have you recently accepted a paid job offer?

○ Yes

○ No

Q2

Condition: Asked if Q1 = "Yes"

For your main source of earning, are you working for your own business, or for a family business, or for a private firm in paid capacity?

○ Working for own business

○ Working for a family business

○ Working for a private firm

Q3

Are you currently working in an unpaid capacity?

○ Doing an internship/apprenticeship

○ Working in family business without pay

○ No unpaid work

○ Other

Q4

Condition: Q3 = "Other"

If other, please specify.

<div style="border:1px solid black; width:200px; height:50px;"></div>

Q5

How many jobs have you applied to since graduation?

<div style="border:1px solid black; width:200px; height:50px;"></div>

Q6

How many jobs have you applied to in the last month?

<div style="border:1px solid black; width:200px; height:50px;"></div>

Q7

When did you send your first job application since we surveyed you at your university in June?

*Enumerator: Enter **day** and **month**.*

Note: This question was asked only to the experimental sample.

Q8

How many jobs did you interview for since graduation?

Q9

How many job offers have you received since graduation?

Q10

Condition: Asked if Q9 > 0

How many job offers have you received in the last month?

Q11

When did you receive your first job offer since we surveyed you at your university in June?

*Enumerator: Enter **day** and **month**.*
Note: This question was asked only to the experimental sample.

Q12

Condition: Asked if Q1 = "No"

Within the last 7 days, about how many total hours did you spend on job search activities? Please round up to the nearest total number of hours.

```
┌─────────────────┐
│                 │
│                 │
└─────────────────┘
```

Note: This question was asked only to the experimental sample.

Q13

Condition: Asked if Q9 > 0

What is the highest monthly salary you have been offered?

```
┌─────────────────┐
│                 │
│                 │
└─────────────────┘
```

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q14

Condition: Asked if Q9 > 1

What is the lowest monthly salary you have been offered?

```
┌─────────────────┐
│                 │
│                 │
└─────────────────┘
```

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q15

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

When did you start working?

*Enumerator: Enter **month** and **year***

Q16

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

What is your job title?

Q17

Condition: Asked if Q2 = "Working for a private firm"

What is the name of the firm you work for?

Q18

Condition: Asked if Q2 = "Working for own business" or "Working for a family business"

What type of business are you currently working in (e.g., real estate, clothing brand, marketing firm)?

Q19

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

Do you work full time or part time?

○ Full-Time

○ Part-Time

Q20

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

How many days do you work in a given week?

┌─────────────┐
│   │
│   │
└─────────────┘

Q21

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

On average, how many days do you work from home in a given week?

┌─────────────┐
│   │
│   │
└─────────────┘

Q22

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

What is your current monthly salary?

┌─────────────┐
│   │
│   │
└─────────────┘

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q23

Condition: Asked if Q20 != Q21

How many minutes does it take you to commute from home to work?

[   ]

Note: This question was asked only to the experimental sample.

Q24

Condition: Asked if Q20 != Q21

How much does it cost you to commute to work per month?

[   ]

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Note: This question was asked only to the experimental sample.

Labor Market Beliefs and Preferences

Q25

Condition: Asked if Q2 = "Working for own business" or "Working for a family business" or "Working for a private firm"

If the work you are doing suddenly shut down and you had to apply for a new job, would you agree to work for less than {wage from Q22},000?

○ Yes

○ No

Q26

Condition: Asked if Q25 = "Yes"

As a {job title from Q16}}, how much less than {wage from Q22},000 will you accept?

[   ]

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q27

Condition: Asked if Q1 = "No"

How many jobs do you plan to apply to in the next 3 months?

Note: This question was asked only to the experimental sample.

Q28

Do you want to work in the next year?

○ Yes

○ No

Note: This question was asked only to the experimental sample.

Q29

Condition: Asked if Gender from Baseline = "Female" and {Marital Status from the 2-month Survey} != "Married"

Do you intend to work after getting married?

○ Yes

○ No

Note: {Marital Status from the 2-month Survey} references the respondent's reported marital status at the two-month follow-up survey.

Q30

Condition: Asked if Q1 = "Yes"

For how many months or years do you think you will continue to work in this job?

Enumerator: Enter if you recorded the answer in months or years.

Note: This question was asked only to the experimental sample.

Q31

Condition: Asked if Q1 = "No" and Q5 = 0

If you <u>had</u> to apply for a job, which job title would you be interested in, among all the possibilities given your current qualifications?

Q32

Condition: Asked if Q1 = "No" and Q5 > 0

Which job title are you interested in, among all the possibilities given your current qualifications?

Q33

Imagine a firm wants to hire you in a full-time on-site job as a {job title from Q31 or Q32}.

How much do you think you would be offered in monthly starting salary for the job?

Answer this question regardless of whether you will accept the job or choose to work at all.

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q34

As a {job title from Q31 or Q32}, would you be willing to work for less than {expected salary from Q33},000?

○ Yes

○ No

Q35

As a {job title from Q31 or Q32}, how much less than {expected salary from Q33} would you accept?

> *Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").*

Q36

On a scale from 0 (very unlikely) to 100 (very likely), how likely is it that you will be working within 3 months?

Q37

Why do you think there is a chance you may not work?

☐ Poor macroeconomic conditions; jobs are scarce

☐ I don't have experience

☐ I don't have networks to help get a job

☐ Firms don't want to hire women (applies to women only)

☐ I may not get permission from family to work

☐ I may not want to work

☐ I may want to keep studying

☐ Because I am getting married / having a baby / focusing on family

☐ Other reason

Q38

Condition: Asked if Q37 = "Other"

If other, please specify.

[   ]

Marriage Questions

Q39

What is your marital status?

○ Never married

○ Divorced

○ Separated

○ Widowed

○ Married

○ Engaged

Q40

Condition: Asked if Q39 = "Engaged"

When did you get engaged?

*Enumerator: Enter **day** and **month**.*

Q41

Condition: Asked if Q39 = "Engaged"

What is the highest level of education received by your fiancé?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q42

Condition: Asked if Q39 = "Engaged"

What is the monthly income of your fiance?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Note: *This question was asked only to the diagnostic sample.*

Q43

Condition: Asked if Q39 != "Engaged" or "Married"

How many marriage offers have you received since graduating?

Q44

Condition: Asked if Q43 >= 0

When did you receive your first marriage offer after graduating?

○ June

○ July

○ August

○ September

○ October

○ November

○ December

○ January

○ February

Note: This question was asked only to the diagnostic sample.

Q45

Condition: Asked if Q43 >= 0

When did you receive your first marriage offer after graduating?

*Enumerator: Enter **day**, **month**, and **year**.*

Note: This question was asked only to the experimental sample.

Q46

Condition: Asked if Gender from Baseline = "Female" and Q43 > 0 and Q39 != "Married"

Out of the marriage offers you have received, what is the number of men who are ok with you working?

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└─────────────────┘
```

Note: This question was asked only to the experimental sample.

Q47

Condition: Asked if Marriage Offers from the 2-month Survey > 0 or Q43 > 0 and Q39 != "Married"

On a scale of 0 (very unlikely) to 100 (very likely) how likely are you and your family to accept one of the marriage offers you have already received?

```
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│                 │
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```

Note: This question was asked only to the experimental sample.

Q48

Condition: Asked if Q39 != "Engaged" or "Married"

How many marriage proposals have you or your family sent since graduating?

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│                 │
└─────────────────┘
```

Q49

Condition: Q39 != "Engaged" or "Married" and Q48 > 0

When did you send your first marriage offer after graduating?

○ June

○ July

○ August

○ September

○ October

54

○ November

○ December

○ January

○ February

Note: This question was asked only to the diagnostic sample.

Q50

Condition: Q39 != "Engaged" or "Married" and Q48 > 0

When did you send your first marriage offer after graduating?

*Enumerator: Enter **month** and **year**.*

Note: This question was asked only to the experimental sample.

Q51

Condition: Q39 != "Married"

In how many months or years from now do you expect you will get married?

*Enumerator: Enter if you recorded the answer in **months** or **years**.*

Q52

Condition: Asked if Q39 = "Married"

How long ago did you get married?

*Enumerator: Enter if you recorded the answer in **months** or **years**.*

Q53

Condition: Q39 = "Married"

What is the highest level of education received by your husband / wife?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Q54

Condition: Asked if Gender from Baseline = "Female" and Q43 > 0

What is the highest level of education amongst all the marriage offers you have received?

○ Uneducated

○ Matric / O' levels

○ F.A. / F.Sc. / A' levels

○ Bachelors

○ Masters

○ Doctorate (PhD)

Note: *This question was asked only to the experimental sample.*

Q55

Condition: Asked if Q39 = "Married"

What is the monthly income of your husband / wife?

[ ]

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Note: This question was asked only to the diagnostic sample.

Beliefs About Classmates

Q56

Think of <u>men</u> in your cohort at [the university] who are not pursuing further education right after graduating. Out of 10 randomly selected male students in this sample, how many of them do you think will be employed within six months after graduating?

[ ]

Q57

Out of the remaining {10 - answer from Q56} men, why do you think they are not working?

☐ Some men don't want to work

☐ Jobs are scarce due to poor economic conditions

☐ Waiting for better opportunities

☐ Going abroad

☐ They may (eventually) pursue further studies

☐ They are doing unpaid work / internship / apprenticeship

☐ Other reason

Enumerator: Select all of the options that apply to the respondent's answer.

Note: This question was asked only to the experimental sample.

Q58

If other, please specify.

<div style="border:1px solid black; height:60px; width:50%"></div>

Note: This question was asked only to the experimental sample.

Q59

Think of <u>women</u> in your cohort at [the university] who are not pursuing further education right after graduating. Out of 10 randomly selected female students in this sample, how many of them do you think will be employed within six months after graduating?

<div style="border:1px solid black; height:50px; width:20%"></div>

Q60

Out of the remaining {10 - answer from Q59} women, why do you think they are not working?

☐ They get married and have kids soon after graduation

☐ Some women don't want to work

☐ Their parents/husbands wouldn't give them permission to work

☐ Firms don't want to hire women/harder for women to find a job

☐ There are few suitable jobs for women

☐ They may (eventually) pursue further studies

☐ Jobs are scarce due to poor economic conditions

☐ Other reason

Enumerator: Select all of the options that apply to the respondent's answer.

Q61

Condition: Asked if Q60 = "Other reason"

If other, please specify.

End of Survey

Note

We thank you for your time spent taking this survey. Your response has been recorded.

V   Fourteen-Month Follow-Up Survey

Note: *This questionnaire was asked only to the experimental sample. The diagnostic sample was asked a similar questionnaire during a nine-month follow-up survey.*

Consent Form

My name is {Enumerator's Name}.

I am calling from the research team that surveyed you at your university last summer, and over the phone in September and January for a study led by the London School of Economics (LSE), and the Massachusetts Institute of Technology (MIT).

We wanted to ask you some additional questions about your post-graduate life. It will take 10 minutes and to thank you for your time, we will give you a PKR 1,000 Food Panda voucher or a mobile credit if you don't use Food Panda.

Participating in this survey is totally up to you. The information provided by you will remain strictly confidential. If any question makes you uncomfortable, you can skip it or stop talking with me at any time.

Do you agree to participate in the survey?

○ Yes

○ No

Current Employment and Job Search Status

Q1

Since graduating, have you ever worked in a paid capacity (e.g., for a firm, in your own business or for your family business)? Or have you accepted a paid job offer recently?

○ Yes

○ No

Q2

Condition: Asked if Q1 = "Yes"

Are you currently working in a paid capacity (e.g., for a firm, in your own business or for your family business) or have you recently accepted a paid job offer?

○ Yes

○ No

Q3

Condition: Asked if Q2 = "Yes"

Are you working for your own business, or for a family business, or for a private firm?

○ Working for own business

○ Working for a family business

○ Working for a private firm

Q4

Are you currently working in an unpaid capacity?

○ Doing an internship/apprenticeship

○ Working in family business without pay

○ No unpaid work

Q5

Condition: Asked if Q2 = "Yes"

When did you start your current (paid) job?

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┌─────────────┐
│             │
│             │
└─────────────┘
```

Q6

Condition: Asked if Q1 = "Yes"

What was the start date of your <u>first</u> job since graduation?

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┌─────────────┐
│             │
└─────────────┘
```

Enumerator: Enter their graduation date (2023-07-30) if they had started working before graduation and are still doing that job.

Q7

How many jobs have you applied to since graduation?

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┌─────────────┐
│             │
└─────────────┘
```

Q8

Condition: Asked if Q7 > 0

How many jobs have you applied to in the last six months?

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┌─────────────┐
│             │
└─────────────┘
```

Q9

Condition: Asked if Q7 > 0 and Q8 > 0

How many jobs have you applied to in the last month?

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┌─────────────┐
│             │
└─────────────┘
```

Q10

Condition: Asked if Q8 > 0 and Number of Job Applications Sent by 6-Month Survey = 0

When did you <u>send</u> your first job application after graduation?

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┌─────────────┐
│             │
└─────────────┘
```

Q11

How many job offers have you received since graduation?

<div style="border:1px solid;width:180px;height:60px"></div>

Q12

How many job offers have you received in the last six months?

<div style="border:1px solid;width:180px;height:60px"></div>

Q13

Condition: Asked if Q12 > 0

When did you <u>receive</u> your first job offer after graduation?

<div style="border:1px solid;width:180px;height:60px"></div>

Q14

How many jobs did you interview for in the last six months?

<div style="border:1px solid;width:180px;height:60px"></div>

Q15

Condition: Asked if Q12 > 0 or Q11 > 0

What is the highest monthly salary you have been offered?

<div style="border:1px solid;width:180px;height:60px"></div>

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Currently Employed

Q16

Condition: Asked if Q2 = "Yes"

What is your job title?

Q17

Condition: Asked if Q2 = "Yes"

Is this a full-time job or a part-time job?

○ Full-time

○ Part-time

Q18

Condition: Asked if Q2 = "Yes"

What is your current monthly salary?

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q19

Condition: Asked if Q2 = "Yes"

As a {job title from Q16}, would you be willing to work for less than {current wage from Q18},000?

○ Yes

○ No

Q20

Condition: Asked if Q19 = "Yes"

As a {job title from Q16}, how much less than {current wage from Q18},000? would you be willing to work for?

[ ]

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Labor Market Beliefs and Preferences

Q21

Condition: Asked if Q2 = "No" and (Q7 = 0 or Q8 = 0)

If you had to apply for a job, which job title would you be interested in, among all the possibilities given your current qualifications?

[ ]

Q22

Condition: Asked if Q2 = "No" and (Q7 > 0 or Q8 > 0)

Which job title are you interested in, among all the possibilities given your current qualifications?

[ ]

Q23

On a scale from 0 (very unlikely) to 100 (very likely), how likely is it that you will be working within 6 months?

[ ]

Q24

Condition: Asked if Q23 < 100

Why do you think there is a chance you may not work?

☐ Poor macroeconomic conditions; jobs are scarce

☐ I don't have experience

☐ I don't have networks to help get a job

☐ Firms don't want to hire women (applies to women only)

☐ I may not get permission from family to work

☐ I may not want to work

☐ I want to keep studying

☐ Because I am getting married / having a baby / focusing on family

☐ Other reason

Q25

Condition: Asked if Q24 = "Other"

If other, please specify.

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Q26

Condition: Asked if Q1 = "No" or Q2 = "No"

Imagine a firm wants to hire you in a full-time on-site job for {the job title from Q21 or Q22}.

How much do you think you would be offered in monthly starting salary for the job?

Answer the question regardless of whether you will accept the job or choose to work at all.

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```

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Q27

As a {job title from Q21 or Q22}, would you be willing to work for less than {expected salary from Q26},000?

○ Yes

○ No

Q28

Condition: Asked if Q27 = "Yes"

As a {job title from Q21 or Q22}, how much less than {expected salary from Q26},000? would you accept?

```
                    
```

Enumerator: Please remember to enter amounts in thousands of PKR (e.g., 10,000 PKR = "10").

Marriage Questions

Q29

What is your marital status?

○ Never married

○ Divorced

○ Separated

○ Widowed

○ Married

○ Engaged

Q30

Condition: Asked if Q29 = "Engaged" and Marital Status from the 6-Month Survey ! = "Engaged"

When did you get engaged?

[   ]

Q31

Condition: Asked if [Marital Status from the 6-Month Survey ! = "Engaged" or "Married" and Q29 ! = "Engaged" or "Married"] or [Marital Status from the 6-Month Survey = "Engaged" and Q29 ! = "Engaged" or "Married"] or [Marital Status from the 6-Month Survey = "Married" and Q29 ! = "Married"]

How many marriage offers have you received in the last 6 months?

[   ]

Q32

Condition: Asked if Gender from Baseline = "Female" and [Marriage Offers from the 6-Month Survey > 0 or Q31 > 0] and Q29 != "Engaged" or "Married"

On a scale of 0 (very unlikely) to 100 (very likely) how likely are you and your family to accept one of the marriage offers you have already received?

[   ]

Q33

Asked if Marriage Offers from the 6-Month Survey = 0 and Q31 > 0

When did you receive your first marriage offer since we surveyed you at your university in June?

[   ]

Q34

Condition: Asked if [Marital Status from the 6-Month Survey ! = "Engaged" or "Married"] or [Marital Status from the 6-Month Survey = "Married" and Q29 ! = "Married"] or [Marital Status from the 6-Month Survey = "Engaged" and Q29 ! = "Engaged" or "Married"]

How many marriage proposals have you or your family sent/received in the last 6 months?

Q35

Condition: Asked if Q29 = "Married" and [Marital Status from the 6-Month Survey ! = "Married"

When did you get married?

Q36

Condition: Asked if Gender from Baseline = "Female" and Q29 != "Married" or "Engaged"

On a scale of 0 (very unlikely) to 100 (very likely), how likely do you think it is that you will find a husband and in-laws who would allow you to work after getting married?

Q37

Condition: Asked if Gender from Baseline = "Female" and Q29 = "Married" or "Engaged" and Q1 = "No" or (Q1 = "Yes" and Q2 = "No")

On a scale of 0 (very unlikely) to 100 (very likely), how likely do you think it is that your husband would let you work?

Q38

Condition: Asked if Gender from Baseline = "Female"

Think of your 5 closest female friends. First, tell us from among the 5 how many are employed / working?

[ ]

Q39

Condition: Asked if Q38 < 5

Of the remaining friends who are not working, how many are currently looking for work?

[ ]

End of Survey

Q40

How would you like to receive your reward payment?

○ Foodpanda voucher

○ Mobile credit

Note

We thank you for your time spent taking this survey. Your response has been recorded.