

Who Benefits? Experimental Evidence on Saudi Women's Take-up of Unemployment Assistance

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Abstract

Does a woman's take-up of government benefits vary with her perception of how they will be shared within the household? Using randomized assignment to alternative information treatments, we examine this question in the context of Saudi women's willingness to apply for unemployment assistance (*Hafiz*). We compare the take-up among women who receive no program information to three groups: those who receive information on program eligibility conditions (Eligibility group) and those who receive additional information that their registration status is broadly confidential (Privacy group) or that they fully control registering and accessing benefits (Agency group). Three months later, the treatments, on average, doubled *Hafiz* applications, with the treatment impacts largest for the Agency group. Women from poorer households and married women are most responsive to the Agency and Privacy interventions respectively. These findings are consistent with collective household bargaining models where family members' spending preferences differ; we predict larger treatment impacts when there is more competition for resources.

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I. INTRODUCTION

Globally, female labor force participation has stagnated at roughly 50 percent of the population (World Bank, 2022). In the Middle East and North Africa, female labor force participation (FLFP) is particularly low, and in Saudi Arabia, the context of our study, FLFP was 22 percent in 2018 (World Bank, 2022), despite high female education. In response, the government implemented active labor market policies that differentially targeted women.

We conduct a field experiment to evaluate how information frictions and intra-household concerns influence women's take-up of Saudi Arabia's capstone employment policy, *Hafiz*. *Hafiz* pays unemployed individuals a monthly stipend to facilitate job search and provides access to a digital job placement services platform. While anyone can join *Hafiz*, by 2017, nearly 85 percent of the 980,000 beneficiaries since inception were women.

At the same time, many *Hafiz*-eligible women have not enrolled. Some women may opt out due to household responsibilities.² But, the low take-up may also reflect insufficient program eligibility information (e.g. Bhargava and Manoli, 2015), challenges navigating cumbersome application process (e.g. Alatas, et al. 2016), or stigma (e.g. Bhargava and Manoli, 2015). Moreover, women may see limited value from enrolling if program benefits, or wages if they become employed, are captured by other household members, (Field et al. 2021).

To study these issues, we conducted a field experiment in partnership with *AlNahda*, a non-profit that aims to empower women.³ We identified 746 eligible but not yet enrolled women. We randomized women to a control group or to one of three interventions: the first informed them about the program and eligibility requirements ("eligibility"), and the next two additionally

² See, for example, Bursztyn, et al (2020) and Jayachandran (2021).

³ There was no centralized list of women that we could contact. The women in *AlNahda* may be different than the population at-large since they are vulnerable and need financial assistance, or they want to be connected to *AlNahda*'s community events or skills training.

either informed them about confidentiality (“privacy”) or that they have sole agency in applying for the program and will receive benefits into their own bank account (“agency”).

Receiving any treatment more than doubled *Hafiz* applications. The agency intervention had the largest impact, nearly doubling the impact compared to just the eligibility information. The agency impacts were largest in low-income households, as predicted by household bargaining models. The privacy treatment had the largest impact among married women.

II. Context and Experimental Design

II.A. Context

In 2011, Saudi Arabia introduced *Hafiz*, an unemployment assistance program to reduce labor force entry barriers. *Hafiz* transfers 2,000 SAR (\$530 USD) per month for up to a year, with payments conditional on participation in online training and job search efforts. Eligibility requires self-identifying as an active job-seeker, being unemployed for more than three months and out of schooling for at least six months. The program is means-tested (below 2000 SAR per month for the last year) and age-limited (20-34).

Hafiz 2 was also introduced, which allowed women who finished *Hafiz* or who were below age 60 to apply; it was similar to *Hafiz*, but with a declining payment schedule. At various times, there were additional employment bonuses (Abel et al, 2021).

II.B. Experimental design

Out of 9820 women in *AlNahda*’s database we reached 4424 women and identified 746 as potentially eligible for *Hafiz* (or *Hafiz 2*) between October and December of 2017 (Figure A1). For these 746 women, we conducted a baseline survey and administered the treatments (see Table

1). Each woman in the “pure control” group was simply thanked for her participation. We informed each “eligibility” group participant about Hafiz and how to use the website to check eligibility. The “privacy” treatment group received the same information as the eligibility group, plus information that program had broad take-up with three million female beneficiaries and that any data provided to the government was confidential. The “agency” treatment also provided the same information as in the eligibility treatment, and additionally told them about a May 2017 law that said women did not need a family member’s approval to apply and that Hafiz transfers could be deposited into their personal account.⁴ Treatments were reinforced by text messages the next day and three weeks later.

II.C. Data and Empirical Strategy

We use the baseline phone survey to document socioeconomic characteristics, and then match it to administrative data on *Hafiz* applications’ outcomes three months after the intervention using national identification numbers.

Study participants averaged 38 years old, half were married, and about a third were divorced or widowed. About 40% of women had family monthly income below 4000 SAR, placing them in the bottom 20% of Saudi income distribution. About half had at least a college degree, which is comparable to the general Saudi female population, and about 82 percent use the internet. Financial inclusion is high (93 percent have their *own* bank account), and about 40 percent had received government benefits. 93 percent believe it is very important for their daughter to have a job.

⁴ The 2017 decree officially required that all government and financial institutions grant services to women without requiring a guardian’s consent. See “Saudi Women No Longer Need Guardian’s Consent to Receive Services,” *Arab News*, May 5, 2017. <https://www.arabnews.com/node/1094681/saudi-arabia>, accessed on January 5th, 2021.

We estimate the impact of any treatment (*Information_i*) on applications (*Applied_i*) using OLS:

$$\text{Eq 1: } Applied_i = \beta_0 + \beta_1 Information_i + \delta X_i + \varepsilon_i$$

The randomization check (Table A1) showed some differences across treatments in marital status (and thus children), so we also report regressions with individual control variables (X_i) for age, years of education, household income category, marital status, total children, previous employment, and whether one previously applied to *Hafiz*. Next, we estimate Eq (1) with treatment-specific dummy variables. Finally, we examine treatment heterogeneity by income and marital status.

III. Results

Table 2, Panel A estimates the impact of any treatment on applying (Eq. 1), while Panel B provides coefficient estimates for each individual treatment.⁵

Applications for *Hafiz* were low, but the treatment more than doubled the application rate from 3.2 percent in the control group to about 8 percent.⁶ Examining treatment arms shows that the eligibility treatment increased applications by 4 percentage points (p-value=0.081 in Column 2). The privacy treatment had a similar sized effect of 3-percentage point that is not significant at conventional levels (p-value of 0.165 in Column 2).

Importantly, the agency treatment – which had informed women that they could apply on their own and the funds could be deposited into their own bank account – caused a 7.1 percentage point increase in applications relative to the control (p-value=0.005). While the point

⁵ Table A2 shows robustness checks.

⁶ This low take-up is consistent with other contexts: see, for example, Finkelstein and Notowidigdo (2019).

estimate of the agency treatment is double that of just providing eligibility information, we only reject equality of effects at 15 percent. Overall, the results imply that that constraints over how the government benefits are used within households may discourage women from applying.

In Table 3, we explore treatment heterogeneity by household income and marital status.⁷ Collective household models of bargaining emphasize the role of household income and different spending preferences between household members' in predicting outcomes. We anticipate privacy to matter more for married women and, potentially, stronger treatment impacts for the agency arm in lower-income households with more competition for resources .

Column 1, Panel B shows that the agency treatment has a much larger effect in magnitude on lower-income women (coefficient p-value =0.067; p-value for sum of coefficients test equal to zero = 0.006).⁸ In fact, not only do they have less financial resources within the family, lower-income women also have more demand for resources as they both have more children and live with more adult males (see Table A3). In contrast, the eligibility and privacy treatment effects do not significantly vary with individual income (sum of coefficients p-values: eligibility=0.144 and privacy=0.716).

Column 2 shows larger impacts of the privacy treatment for married women (p-value =0.029; p-value for sum of coefficients test equal to zero = 0.037), but no significant difference for the agency treatment (p-value=0.219). Women with men in the household but who are not married are more responsive to agency than privacy (p-value of privacy=agency is 0.002 in Table A5), while women with no men in the household do not show any different responses to treatments.

IV. CONCLUSION

⁷ Table A4 shows robustness checks.

⁸ Defined as below 4000 SAR income.

To encourage FLFP, many countries have active labor market programs for women that involve cash transfers for job support and connections to job placement services and job ads. However, take-up is often low. In Saudi Arabia, applications to such a program double when women are provided with program information, and nearly triple when women are provided with information that they can apply on their own and have the money deposited in their own account. We also find evidence that married women value programs that protect their confidentiality and that lower income women value control over registering and accessing benefits.

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Table 1: Experimental Interventions

Group	Sample Size	Intervention	Text Message
Control	188	Receive thank you message	“Thank you for participating in the Harvard and Al-Nahda survey.”
Eligibility	185	Benefits display	“Thank you for participating in the Harvard and Al-Nahda survey. Check if you qualify for a monthly 2,000 SAR on Hafiz: https://www.taqat.sa/web/guest/individualregistration ”
Privacy	187	Eligibility + Emphasis on social factors including peers finding out and peers’ behavior	“Thank you for participating in the Harvard and Al-Nahda survey. Three million Saudi women have benefitted from Hafiz. Your registration on Hafiz is confidential and will not be shared with any individuals or employers. Check if you qualify for a monthly 2,000 SAR on Hafiz: https://www.taqat.sa/web/guest/individualregistration ”
Agency	186	Eligibility + Information on financial decisions being confidential / lower restrictions on bank accounts	“Thank you for participating in the Harvard and Al-Nahda survey. Your registration on Hafiz does not require any other individual’s approval. The funds granted by Hafiz will be deposited into a bank account you only have access to. Check if you qualify for a monthly 2,000 SAR on Hafiz: https://www.taqat.sa/web/guest/individualregistration ”

Table 2: Experimental Effects on Applying to Hafiz

No Controls Controls

	(1)	(2)
<i>Panel A</i>		
Any Treatment	0.0487*** (0.0173)	0.0474*** (0.0171)
<i>Panel B</i>		
Eligibility	0.0384* (0.0228)	0.0401* (0.0229)
Privacy	0.0323 (0.0221)	0.0307 (0.0221)
Agency	0.0756*** (0.0262)	0.0714*** (0.0252)
<i>P-value</i>		
Eligibility=Privacy	0.815	0.718
Eligibility=Agency	0.208	0.282
Privacy=Agency	0.135	0.149
Observations	746	746
Control Group Mean	0.032	0.032

Notes: Control variables include age, years of education, household income, if married, total # of children, previously employed, previously applied to Hafiz, as well as controls for missing values in these variables. Robust standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Heterogeneous Treatment Impacts by Income and Family Structure

	Low Income	Married
	(1)	(2)
<i>Panel A</i>		
Any Treatment	0.0344*	0.0426*
	(0.0202)	(0.0253)
Any Treatment x Variable	0.0392	0.0088
	(0.0391)	(0.0348)
<i>Panel B</i>		
Eligibility	0.0298	0.0399
	(0.0277)	(0.0326)
Eligibility x Variable	0.0306	-0.0011
	(0.0499)	(0.0457)
Privacy	0.0380	-0.0208
	(0.0269)	(0.0237)
Privacy x Variable	-0.0235	0.0955**
	(0.0486)	(0.0436)
Agency	0.0339	0.0991**
	(0.0278)	(0.0395)
Agency x Variable	0.1076*	-0.0613
	(0.0586)	(0.0498)
<i>P-value</i>		
Eligibility+EligibilityxVariable=0	0.144	0.231
Privacy+PrivacyxVariable=0	0.716	0.037
Agency+AgencyxVariable=0	0.006	0.212
Observations	746	746
Control Group Mean	0.032	0.032
Controls Included	Yes	Yes

Notes: See Table 2 notes. Low income refers to income below 4000 SAR. The reported p-values are for tests of the sum of respective treatment coefficient and the corresponding interaction term coefficient equal to zero. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.