Misperceived Social Norms about Women Working Outside the Home and Its Effect on Women in Saudi Arabia*

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Table of contents

1	Intr	oduction	2
2	Dat	a	2
	2.1	Source	2
	2.2	Methodology	
3	Resi	ults	2
	3.1	Figure 1 (Originally figure 2)	2
	3.2	Table 1 (Originally table 1)	3
	3.3	Figure 2 (Originally figure 3)	3
	3.4	Figure 3 (Originally figure 4)	5
	3.5	Figure 4 (Originally figure 6)	7
4	Disc	cussion	8
	4.1	First discussion point	8
	4.2	Second discussion point	
	4.3	Third discussion point	
	4.4	Bias	
	4.5	Weaknesses and next steps	

 $^{^*}$ Code and data are available at: https://github.com/ScarletWu/Misperceived-Social-Norms-Women-Working-Outside-the-Home-in-Saudi-Arabia. Replication on Social Science Reproduction platform available at: https://www.socialsciencereproduction.org/reproductions/1461/

Appendix		9	
Α	Additional data details	9	
В	References	10	

1 Introduction

You can and should cross-reference sections and sub-sections.

The remainder of this paper is structured as follows.

2 Data

- 2.1 Source
- 2.2 Methodology

3 Results

3.1 Figure 1 (Originally figure 2)

The authors calculated "wedges" which represent the difference between what participants guessed and the actual percentage of agreement among their session peers regarding women working outside the home (WWOH). The negative wedge indicates that the participant underestimated the support for WWOH. Conversely, a positive wedge suggests that the participant overestimated the support for WWOH. We replicate the histograms to check the distribution of the wedges between participants' beliefs about the support for WWOH among their session participants and the actual levels of support. Figure 1 specifically maps the distribution of these "wedges" – the differences between each participant's guess and the actual percentage of session participants who agreed with the pro-WWOH statement. It was found that more than half of participants underestimated the support for WWOH. There is a clear gap between perceived and actual social norms regarding women's work outside the home. The left skew of the histogram would indicate that a majority of participants underestimated the true level of support for WWOH.



Figure 1: Histogram of Perceptual Gaps in Beliefs About Women Working Outside the Home

3.2 Table 1 (Originally table 1)

By using the regression analysis, we examine the treatment effect on the participants' likelihood to sign up for a job matching service for their wives. The treatment variable is significant across all model specifications, with coefficients ranging from 0.0853 to 0.0899. The constant term varies considerably across different model specifications, suggesting differing baseline propensities for signing up absent the treatment. The p-values for the treatment effect, under various robustness checks such as robust standard errors, wild bootstrap, and permutation test, all indicate significance, ranging from 0.008 to 0.038. These results reinforcing the treatment's positive impact on sign-up rates (Table 1).

3.3 Figure 2 (Originally figure 3)

Figure 2 illustrates the difference in job matching service sign-up rates between the control and treatment groups. The bar for the treatment group would be higher than the control group's, showing a clear increase in the likelihood of signing up due to the treatment. The specific values of 23.48% for the control group and 32.02% for the treatment group, along with a p-value of 0.017, would be represented, indicating a statistically significant effect of the information intervention on the participants' actions.

Table 1: Summary Statistics (Main Experiment)

	All	Control	Treatment
Observations	500	247	253
Age	24.78	24.64	24.91
	(4.21)	(3.99)	(4.41)
Number of Children	1.71	1.64	1.77
	(1.72)	(1.7)	(1.74)
College Degree (%)	56.2	55.06	57.31
Employed (%)	86.6	87.45	85.77
Wife Employed (%)	65.2	65.59	64.82
Wife Working Outside the Home (% retrospective follow-up)	8.4	7.89	8.9
Other Participants Known (%)	51.19	49.68	52.66
	(38.24)	(38.6)	(37.92)
Other Participants with Mutual Friends (%)	38.64	37.62	39.63
	(34.94)	(34.62)	(35.29)

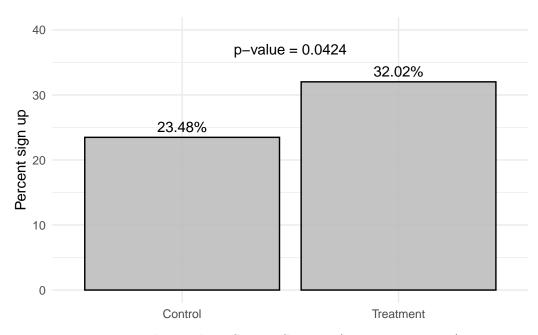


Figure 2: Job Matching Service Sign Up (Main Experiment)

The combination of Table 1 and Figure 2 demonstrates the efficacy of the information treatment in altering the participants' behavior towards women's labor market participation, revealing not only a statistical significance but also practical importance in the context of social norms and labor supply outcomes in Saudi Arabia.

3.4 Figure 3 (Originally figure 4)

The the longer-term outcomes of the treatment are shown in Figure 3 with error bars indicating the 95% confidence intervals for these proportions.

The job matching service sign-up rates is presented in Figure 4a. In the control group, 6.04% of participants chose to sign their wives up for the job service instead of taking a gift card payment while 16.74% participants in the treatment group chose the job service (p-value = 0.001). The increased sign-up rate in the treatment group more young men accepted the idea of WWOH after the correction of misperceptions.

The informational intervention has impact on participants' wives were interviewed for a job outside the home. After the intervention, there was a statistically significant increase in interviews, with the percentage of wives who interviewed for a job outside the home rising from 1.1% to 5.95%. This more than fivefold increase (p-value = 0.013) suggests that the treatment had a notable effect on the interview rates for jobs outside the home (Figure 4b).

Similarly, the informational intervention effects on the employment rate of participants' wives in jobs outside the home. The employment rate post-intervention increased from 7.69% to 9.73%. Although this represents an increase, it is not statistically significant (p-value = 0.456), implying that while the intervention might have had an encouraging effect on job-seeking behavior, it did not translate into a significant difference in actual employment within the study period (Figure 4c).

Besides, Figure 4d indicates that the change in husbands' willingness to sign their wives up for driving lessons as a result of the informational intervention. There is a significant increase from 68.13% to 78.38% in the proportion of husbands who reported they would sign their wives up for driving lessons (p-value = 0.03). This result indicates that the informational intervention not only had an impact on labor supply outcomes but also potentially affected broader social norms and attitudes toward women's rights and autonomy in Saudi Arabia, as evidenced by the increased openness to women's mobility through driving.

Overall, the treatment has a significant impact on both immediate and longer-term outcomes related to women's labor market participation and related behaviors (Figure 3).

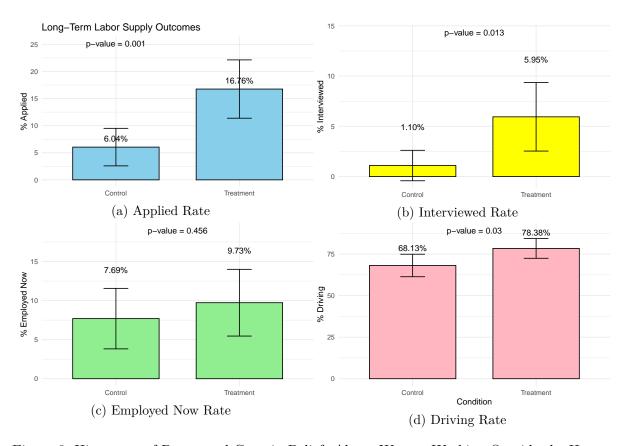


Figure 3: Histogram of Perceptual Gaps in Beliefs About Women Working Outside the Home

3.5 Figure 4 (Originally figure 6)

Figure 4 is made to illustrate the result of the first national survey. There are two vertical lines that represent the actual proportion of respondents who agreed with the statement in Figure 6. One line is for the control group, which reflects their perceptions about others' answers, and the other line is for the treatment group, which reflects their perceptions about others' beliefs. The graph shows the support level of treatment group is mostly higher than control. This figure underscores a significant discrepancy between personal beliefs and perceived societal norms. The larger sample size of this national survey strengthens the evidence that men privately support women's employment outside the home more than they assume others do, suggesting widespread misperceptions about societal norms.

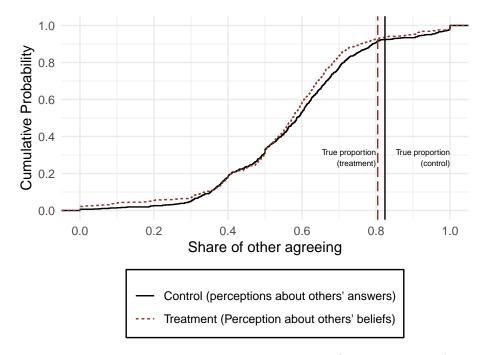


Figure 4: Misperceptions about Others' Beliefs (National Survey)

4 Discussion

- 4.1 First discussion point
- 4.2 Second discussion point
- 4.3 Third discussion point
- **4.4 Bias**
- 4.5 Weaknesses and next steps

Appendix

A Additional data details

B References