

# Economics. *For Society.*

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UBS Center Policy Brief

## **Trapped by misperceptions**

Women, work, and social norms  
in Saudi Arabia

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# Trapped by misperceptions

## In a nutshell

Employment rates for women in Saudi Arabia are very low. By custom, they cannot decide for themselves whether to work or not – they need the consent of their male guardian (either their husband or father). Whether men permit their wives or daughters to work depends crucially on social norms. This policy brief reports evidence that most Saudi men privately believe that women should be allowed to work, but that they underestimate the extent to which other men share their views. Experiments reveal that when men are informed that other men agree about women and work, they are more willing to let their wives take a job. This has real-life consequences: wives of men whose misperceptions about the acceptability of female employment have been corrected are more likely to apply and be interviewed for a job.

## Opportunities for action

### 1

The vast majority of married men in Saudi Arabia support the idea of women working outside the home, but they are unaware that almost all other men hold the same view. This research indicates that long-held social norms based on such misperceptions can be changed.

### 2

For policy-makers in Saudi Arabia and other countries where social norms play a key role in people's economic choices, the evidence that mistaken beliefs can be corrected may offer guidance in forming policies to change behavior.

### 3

Conducting opinion polls and disseminating information could be a relatively cheap – and effective – way of changing customs, particularly in less democratic societies, where the availability of other natural aggregators of information is more limited.

## In detail

Thirteen of the 15 countries with the world's lowest rates of women active in the labor market are in the Middle East and North Africa (World Economic Forum, 2015). A prominent example is Saudi Arabia, where under 18% of the female population aged 16–64 were employed in 2017. This compares with a female labor market participation rate of around

50% in Japan, 63% in Switzerland, and 56% in the United States.

Social norms are a key constraint on female participation in Saudi Arabia's labor market. For example, women are expected to work in spaces segregated from men. Men also have a say in whether women can have a paid job and how much they

can work: the existing norm – though not the law – implies that essentially all women need to receive approval from their male guardian, typically their husband or father.

Recent changes in Saudi law may have created a more accepting environment for women in the workplace. For example, the ban on women's right to drive was lifted in 2018.

### **Pluralistic ignorance**

Katz and Allport (1931) introduced the concept of 'pluralistic ignorance', which is particularly prevalent in conservative societies. Pluralistic ignorance occurs when the majority of people privately rejects a social norm but incorrectly believes that most other people accept it – and they therefore end up following the norm themselves.

When individuals believe that a behavior or attitude is stigmatized, they might be reluctant to reveal their private views to others for fear of social sanction. If most people act this way, they might all end up believing that their private views are only shared by a small minority at most.

As our research shows, this situation applies to Saudi Arabia. Drawing on a combination of experiments and survey evidence, we find that the vast majority of married men in Saudi Arabia support the participation of women in work outside the home. At the same time, they substantially underestimate the level of support for female labor market participation by other men – even those from their same social setting, such as neighbors.

### **Saudi men substantially overestimate other men's opposition to women working outside the home**

Our study shows that randomly correcting these beliefs about others increases married men's willingness to let their wives work

outside the home (as measured by their costly sign-up for a mobile job-matching service for their wives).

Finally, we find that married men's increased willingness maps onto real outcomes: three to five months after the main intervention, the wives of men in our original sample, whose beliefs about the general acceptability of women in the workplace were updated, are more likely to have applied and been interviewed for a job outside the home.

### **Beliefs of young married men in Saudi Arabia**

We conducted our main experiment in 2017 with a sample of 500 Saudi married men aged 18–35, recruited from different parts of Riyadh. The experimental design, shown alongside Figures 1–4, began with the men attending a 30-participant session composed of individuals from the same geographical area, thus sharing a common social network. In Part 1 of the experiment, we used an online survey to collect the men's demographic information as well as their opinions about a range of topics and their perceptions of other participants' beliefs.

Around 87% of the participants agreed with the statement: 'In my opinion, women should be allowed to work outside the home.' But when given incentives to guess how other participants responded to the question, three quarters of them underestimated the true number (see Figures 1 and 2), with the average guess being that 63% of the others agreed with the statement.

We interpret this as evidence of misperception of social norms, even among people from the same neighborhood who know each other. Participants were asked to guess not only what the others think but also to say how confident they were in their guesses: those with larger misperceptions reported lower confidence.

Those with fewer social connections were also less confident and had more incorrect beliefs about the others.

In Part 2 of the experiment, we evaluated whether correcting these misperceptions matters for household decisions about women working outside the home. A randomly selected half of the participants were given feedback on the true number of agreements with the statement. At the end of the experiment, participants could choose between receiving an online gift card and signing their wives up for a job-matching mobile application specializing in the Saudi female labor market.

In a ‘control’ group who did not have their beliefs updated, 23% of participants chose the job-matching service. In the ‘treatment’ group who received feedback on the true opinions of the others, the share went up significantly, by nine percentage points, a 36% increase (see Figure 3).

The increase was driven by those who underestimated the true share of supporters of female labor market participation in their session: sign-up rates went up by 57% (from a baseline rate of 21%) when this group was provided with information. Information did not change sign-up rates for those who did not underestimate support by others (a group that had a higher baseline sign-up rate of 31%).

It might be suggested that the sign-up outcome is not strongly indicative of ‘real’ decisions, or that the immediate decision does not imply a more permanent change in perceived social norms and behavior. To address these concerns, three to five months after the original intervention, the participants were re-contacted by phone and a series of additional answers were collected (Part 3 of our experiment).

We document a longer-term impact on real labor market outcomes (see Figure 4). Wives of treated participants were

significantly more likely to have applied for a job outside the home (up by 10 percentage points from a baseline level of 6%) and to have been interviewed for a job outside the home (up by five percentage points from a baseline level of 1%). We are not able to detect a significant change in the likelihood of the wife being employed outside the home, though we observe a directional increase.

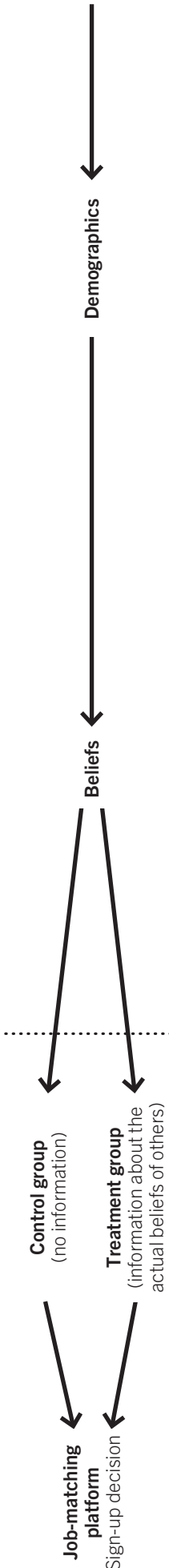
### **Wives of men with updated beliefs about the acceptability of female labor market participation are more likely to apply for a job outside the home**

We also document that the change in perceived social norms is persistent: treated participants believe a significantly higher share of their neighbors in general support women working outside the home. Finally, we observe that the persistent change in perceived social norms might spill over to other behavior: treated participants were significantly more likely to report that they would sign up their wives for driving lessons (see Figure 4).

### **Widespread support for women in the workplace**

Following our experimental intervention with men in Riyadh, we conducted a similar anonymous online survey with a larger sample of about 1,500 married Saudi men aged 18–35 from around the country. The goals here were two-fold. First, we wanted to assess the validity of our initial finding that most Saudi men privately support female labor market participation while failing to understand that others do too.

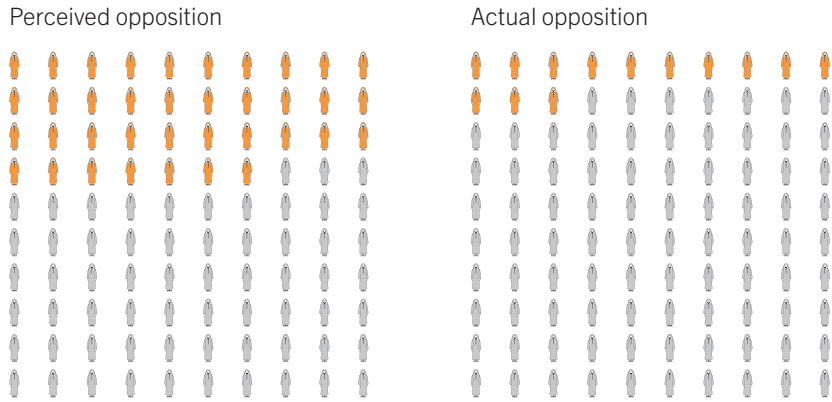
In this more representative sample of the Saudi male population, 82% of men agreed with the same statement on women working outside the home used in the main experiment. When given incentives to guess the responses of other survey respondents, 92% of them underestimated the true



Part 1 – anonymous online survey

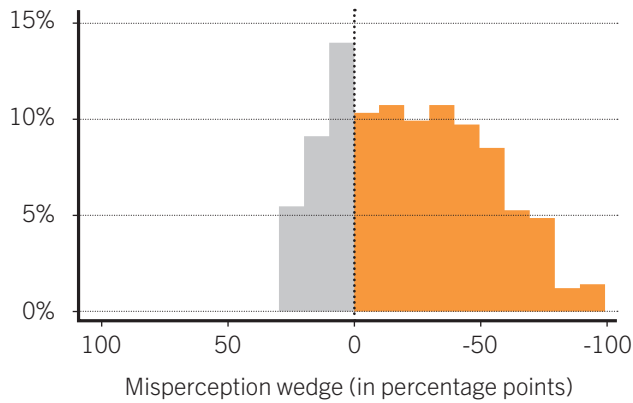
Part 2 – experiment

**Figure 1:**  
Saudi men’s perceptions of other men’s opposition to women working



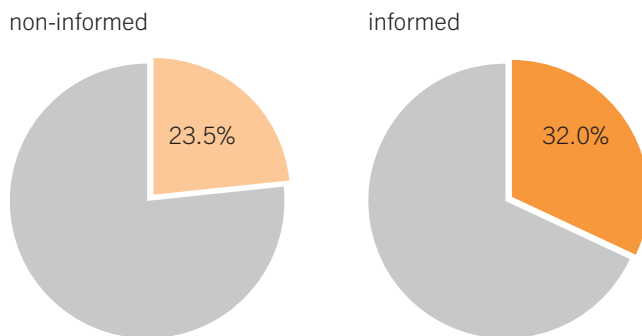
Notes: The survey participants guess that 37% of them are against work outside the home—yet, only 13% are actually against.

**Figure 2:**  
Distribution of the misperception extent



Notes: A wedge is the difference between the participant’s belief about the opinions of other participants and the others’ actual opinions. Over 70% of the participants over-estimate opposition to women working outside the home.

**Figure 3:**  
Job-matching service sign-up



Notes: Information about others’ beliefs increases the job-matching service sign-up from 23.5% to 32.0%.

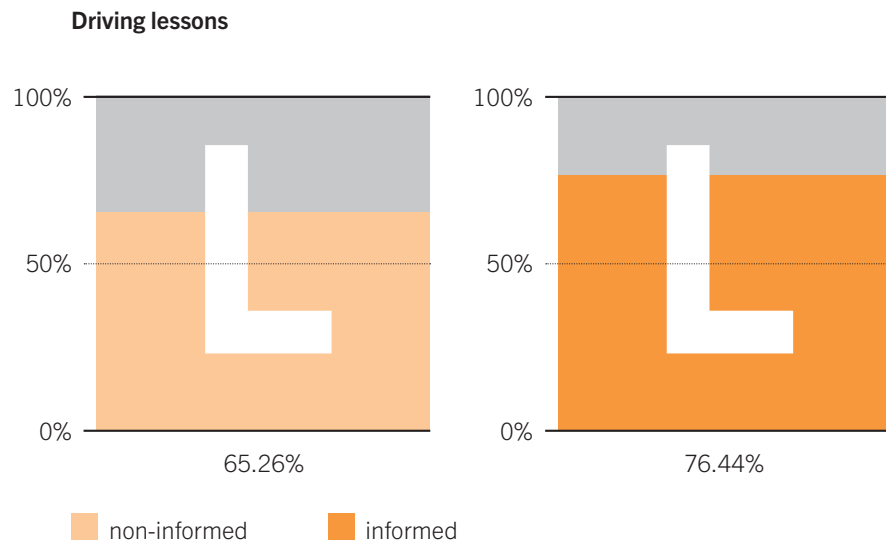
End of main experiment ↓

Part 3 - follow-up survey on the longer-term outcomes, performed a few months after the experiment

**Figure 4:  
Longer-term effects of correcting  
misperceived beliefs**



*Notes: These three panels refer exclusively to job opportunities outside the home. The increases in the first two panels stem from the original treatment.*



*Notes: The share of husbands who report in a hypothetical question that they would sign their wives up for driving lessons is more than 10 percentage points higher in the group that was informed of their misperception.*

share. These are stronger misperceptions than in the first experiment, perhaps because they were not being asked about their own neighbors' opinions.

The second goal was to examine whether, in the main experiment, participants might have felt under pressure to say what they thought the experimenters wanted to hear, which could have been a driver of our finding about misperceptions. Although the experiment was anonymous, it is possible that some participants may have felt that they had to answer the question about their own views in a certain way.

For the online survey, half the participants were assigned to an elicitation procedure that provided a 'cover' for their opinion on women and work. Using a method that provides respondents with a higher degree of 'plausible deniability', we find a very similar level of agreement with the statement about whether women should be allowed to work outside the home: 80%.

Finally, we examined whether individuals may incorrectly expect others to respond strategically to the question about female labor market participation, which would distort guesses since the question asked about how others answered the question. We find that beliefs in the online survey about other participants' true opinions were very similar to the guesses about others' answers in the main experiment.

### **Evidence from the Arab Barometer**

As a final check on the validity of the facts we document, we show that the share of Saudi men who are supportive of female participation in work outside the home is very similar when using a nationally representative sample from the wave of the Arab Barometer with that question for Saudi Arabia (2010–11).

Out of around 1,400 male respondents, 75% agree with the statement 'a married woman can work outside the home if she

wishes.' Among male respondents aged 18–35 (the age bracket in our study), the share is 79%.

### **The vast majority of young married men in Saudi Arabia privately support the participation of women in the labor market**

The Arab Barometer survey allows us to establish that older men are also supportive of women working outside the home: among those over 35, the share agreeing with the statement is 71%. Moreover, the numbers from the Arab Barometer in 2010–11 suggest that the misperception of social norms might not have been a short-lived phenomenon. Support for female labor market participation has been high (even before the recent progressive law changes) and relatively constant.

### **Social norms in economics**

Our study contributes to a growing body of evidence on social norms in economics. This work focuses mainly on the long-term persistence of cultural traits (for example, Fernandez, 2007; and Alesina et al, 2013). We study how longstanding social norms can potentially change with the provision of information.

We also contribute to work on gender and labor markets (for example, Bertrand, 2011; and Goldin, 2014) by studying how social norms affect women's labor market participation. Our study relates to work by Fernandez (2013) on the role of cultural changes in the large increases in married American women's labor market participation over the last century.

Finally, our work adds to research on social image concerns in economics. People's concerns about how they will be viewed by others affect important decisions – from voting (DellaVigna et al, 2017) to choice of schools (Bursztyn and Jensen, 2015). We show that Saudi men's decisions

to let their wives work are also affected by the perceived likelihood of judgment by others.

## Saudi men's decisions to let their wives work are affected by perceptions of the likelihood of judgment by others

### Conclusions

We view our findings as ‘proof of concept’ of the potential for information provision to change behavior regarding the participation of women in the workplace in Saudi Arabia – and potentially elsewhere. We believe that expanding the scale, and observing how information spreads in networks and how it affects a large set of outcomes, is an important topic for both policy and research.

On the policy side, our results highlight how simple information provision might change perceptions of a society's opinions on important topics, and how this might lead to changes in behavior. Conducting opinion polls and diffusing information about their findings could be used to change behavior in some societies. Active information provision may be particularly important in less democratic societies, where the availability of other natural aggregators of information – such as elections, referendums and opinion polls – is more limited.

On the research side, our goal was to understand the opinions and perceptions of male guardians in Saudi Arabia. As a result, we did not examine the opinions and perceptions of women. Evidence from the Arab Barometer suggests that the vast majority of women in the country are supportive of women working outside the home (89%). Future research can enrich our understanding of women's role in household decisions about work.

Finally, understanding what lies at the root of the stigma associated with female labor market participation might help to design policies to address it: what are husbands trying to signal to others by acting in opposition to women in the labor market?

This UBS Center Policy Brief summarizes ‘Misperceived Social Norms: Female Labor Force Participation in Saudi Arabia’ by **Leonardo Bursztyn** (University of Chicago), **Alessandra Gonzalez** (University of Chicago) and **David Yanagizawa-Drott** (University of Zurich).

### Further reading

Alesina, Alberto, Paola Giuliano and Nathan Nunn (2013) ‘On the Origins of Gender Roles: Women and the Plough’, *Quarterly Journal of Economics* 128(2): 469-530.

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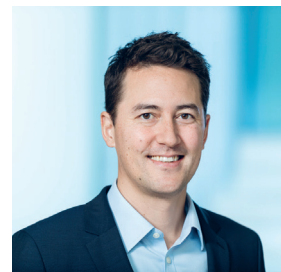
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