

Gender Role Attitudes, Perceived Norms, and the “Double Burden” in Morocco

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Abstract

To what extent do attitudes and perceived norms around household roles hinder the emergence of more gender-equal distributions of labor in Morocco? Moroccan women undertake a disproportionate share of unpaid household and care labor and participate in the labor force at low rates. Yet everyday practices are shifting, and normative expectations may be as well. From an online survey of predominantly urban, employed Moroccans, this paper finds that respondents aspire for men to be equal contributors in care tasks. Yet, unpaid labor burdens remain highly unequal,

respondents disfavor men taking primary responsibility for cooking or cleaning, and women's share of household labor correlates with perceptions of what men prefer more than with individuals' actual preferences. Results from a conjoint survey experiment measuring preferences around employment and the household division of labor confirm respondents' interest in more egalitarian relations in principle, but also suggest that strong preferences for a male breadwinner family model will continue to drive an unequal distribution of labor at home.

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Gender Role Attitudes, Perceived Norms, and the “Double Burden” in Morocco

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1 Introduction

The double burden many women face combining labor force participation with unpaid domestic labor and care work represents a major impediment to female labor force participation and political participation in the MENA region (ILO 2018; Nazier 2019; Women 2020). Expectations that women will take on the dominant role caring for the home and raising children lead many women to exit the labor force upon family formation (Assaad, Krafft, and Selwaness 2022). At the same time, norms around household task burden-sharing are in flux, and active efforts to change norms are underway. In this domain as in others, attitudes and social practice could shift more rapidly than normative expectations of what others believe and value (or *perceived norms*). To what extent do attitudes and perceived norms around household roles hinder the emergence of more gender-equal distributions of labor in Morocco?

This study draws on an original online survey of 1,038 Moroccan adults to investigate these and related questions. A convenience sample recruited via Qualtrics in January-February 2023 answered questions about responsibility for household tasks within their homes, their attitudes around gender roles within the home, and their perceptions of what men, women, and their neighbors think about the same issues. The respondents also compared hypothetical ideal household configurations in a conjoint survey experiment that measured preferences over whether men and women each work outside the home and how unpaid labor and care tasks are distributed. An information experiment on the survey also tested whether encountering real data about increases in the time men spent on household tasks during the COVID-19 pandemic altered perceptions about how attitudes around household gender roles would evolve in the future.

Among the survey respondents as among the general Moroccan public, unpaid labor burdens remain highly unequal, yet men’s and women’s perceptions of their relative contributions diverge. I examine responses to questions about who in the respondents’ households is primarily responsible for 13 common tasks. Women’s estimates of the female share of household labor are higher than men’s estimates, with men more likely to claim that tasks are undertaken equally. Married women report near-exclusive responsibility

for cleaning, cooking, and doing the dishes, while married men report near-exclusive responsibility for paying bills and making repairs. On other tasks, women are more likely to report primary responsibility, while men are more likely to claim they and their spouse undertake these tasks equally. Unmarried respondents generally report that their mothers are responsible for a much greater share than their fathers. Women are more likely than men to report that their household responsibilities inhibit their ability to work or their career progression. Employed women do not report lower burdens of household labor than women not currently employed.

I then examine how the distribution of household labor relates to respondents' attitudes and perceptions of others' attitudes around household gender roles. In this study, I use the term "perceived norms" to refer to these normative expectations, or beliefs about others' beliefs and values, as opposed to beliefs about what others (empirically) do.¹ I find that the female household share of labor does not correlate with respondents' personal attitudes or with their perceptions of what women believe, but does correlate with respondents' perceptions of what men believe. That is, the survey findings confirm that respondents perceive the actual organization of household labor as mainly linked to what they think men value. In contrast, respondents' personal beliefs are clearly linked to their aspirations to work outside the home (among women) or interest in having their wife work outside the home (among men). These results suggest that misperceived norms might inhibit women's labor force participation, as other studies (Bursztyn, González, and Yanagizawa-Drott 2020) have found. Yet an information experiment included in the survey found no evidence that highlighting men's contributions to household labor increased respondents' expectations of more egalitarian household gender roles in the future.

Finally, I examine a conjoint survey experiment assessing respondents' ideal organization of labor in and outside the home. Respondents compared two hypothetical households and indicated which was closer to their ideal. I find that respondents are indifferent

1. For a more extended discussion of the various dimensions of norms and perceptions of them, see Zeitoun, El Assiouty, Rahman, Osman, and Girgis (2023).

between women taking primary responsibility for most tasks and men and women sharing those tasks equally, but disfavor men taking primary responsibility for cooking and cleaning. The intensity of these preferences, however, is dwarfed by all respondents' strong preference that men work outside the home and men's (weaker) preference that women not work outside the home. I argue this suggests that women's unpaid labor burden is primarily a side effect of preferences for a male breadwinner family model which precludes men taking primary responsibility for household tasks, but does not reflect strong objections to men contributing to household tasks. Direct questions about who should work outside the home and who should be primarily responsible for household tasks confirm the strong attachment to the male breadwinner model and openness to more equal household contributions in relation to care tasks, but attachment to women's primary responsibility for cooking and cleaning.

In the conclusion, I argue that taken together, these findings suggest the limited potential of efforts to alter the domestic distribution of labor as a way to "free women up" for formal labor force participation. Moroccans aspire for men to contribute more equally to household tasks—and many men already portray themselves as doing so—but strong opposition remains to men taking primary responsibility for tasks or foregoing paid employment. I argue that these findings also reflect a culture of "benevolent sexism" that valorizes women's traditional roles while emphasizing that women deserve help at home from supportive partners. This can explain both the relative interest in "equalizing" household contributions in some spheres (and men's interest in emphasizing the extent to which they contribute) co-existing with preferences for men working outside the home, women not working outside the home, and women taking primary responsibility for household tasks, where feasible.

Together, the findings suggest limited scope for expanding women's labor force participation by altering attitudes or perceived norms around gendered responsibility for household tasks alone. Existing openness to more equal divisions of household labor in principle are constrained by the strength of attachment to a male breadwinner family model and disinterest in men taking primary responsibility for household tasks. Build-

ing on recent scholarship to investigate conceptions of masculinity and their influence on individuals' preferences and behavior could be a path toward addressing the latter obstacles.

2 Background

In MENA as elsewhere, reconciling responsibilities at work and at home can be challenging, especially for women who have traditionally shouldered the majority of unpaid household labor. A high burden at home may pose an impediment to female labor force participation, which remains low by global standards in the MENA region despite women's rising educational attainment (Assaad, Hendy, Lassassi, and Yassin 2020). Expectations that women will take on the dominant role caring for the home and raising children lead many women to exit the labor force upon family formation (Assaad, Krafft, and Selwaness 2022). State-funded childcare facilities are rare, and private childcare provision is usually informal, in-home, and minimally regulated. Where public childcare is available, insufficient operating hours may nonetheless inhibit or even decrease women's labor force participation (Krafft and Lassassi 2020). Cross-national comparisons of time-use surveys show that the ratio of time spent on unpaid labor by women versus men in the MENA is among the highest in the world (Charmes 2015, 2019). The COVID-19 pandemic also increased women's unpaid work and care burdens in the region (Hendy and Yassin 2022; Moghadam 2021; OECD 2020).

At the same time, norms around household task burden-sharing are in flux, and active efforts to change norms are underway. In Morocco, for example, recent anthropological research has explored how female labor force participation contributes to the renegotiation of expected household responsibilities (Bouasria 2013, 2017; Dike 2021). Community associations working on women's empowerment in Morocco have also undertaken awareness campaigns focused on de-stigmatizing men's contribution to household labor (Barnett 2022). During the early phases of the pandemic, Facebook posts in the country went viral highlighting how men could relieve the burdens of lockdown by contributing

more to household chores and featuring men proudly showing their domestic contributions. More broadly, as Krafft, Selwaness, and Sieverding (2022) argue with respect to the MENA region as a whole, “the pandemic has underscored gender inequality in care work, but also offers an opportunity to rethink care responsibilities and ultimately recognize, reduce, and redistribute care work” (3).

In prior work (Barnett 2022, 2023), I collected the first evidence available on the relationship between personal attitudes and perceived norms on a range of gender issues in Morocco. One striking, unexpected finding was a large gap between what Moroccans say they value and what they believe others value when it comes to men’s contributions to unpaid domestic and care work. In a nationally representative survey, 75.6% of Moroccans agreed or strongly agreed that men are just as responsible for taking care of the household and children as women are, but only 54.7% believed most of their neighbors similarly agreed. To the extent that behavior aligns more with perceived norms than personal attitudes, such misperceptions may represent an unnecessary constraint on more equal household distributions of labor and ultimately on female labor force participation.

Previous research in OECD contexts has highlighted gender gaps in perceptions of how others value unpaid labor and the extent to which they see them as fair (see e.g. Cerrato and Cifre (2018)). We know little, however, about individuals’ perceptions of others’ attitudes toward and time spent on unpaid labor and care work in the MENA region, with some notable recent exceptions in studies of Egypt (Zeitoun et al. 2023) and Jordan (Gauri, Rahman, and Sen 2019). At the same time, recent research has shown that people in the MENA region and South Asia, especially men, generally tend to overestimate others’ embrace of patriarchal attitudes (Bursztyn, González, and Yanagizawa-Drott 2020; Gulzar, Sonnet, and Khan 2020; Minardi, Akmal, Crawford, and Hares 2021). One policy implication of these findings is that providing more accurate information and more positive narratives about existing changes in attitudes might correct misperceived norms, in turn altering how individuals behave (Bursztyn, González, and Yanagizawa-Drott 2020; Gauri, Rahman, and Sen 2019), although the long-term effects of information interventions remain uncertain (Prentice and Paluck 2020; Tankard and Paluck 2017).

This project addresses these gaps and sheds light on these questions by gathering original data on Moroccans’ attitudes, experiences, and perceptions around unpaid labor, care work, and paid work outside the home. How do Moroccans’ attitudes and perceived norms around various aspects of unpaid labor and care work within the household relate to one another and to their actual behavior? To what extent do attitudes and perceived norms around household roles hinder the emergence of more gender-equal distributions of labor?

3 Data

3.1 Survey Sample

The original data discussed in this paper come from a survey of 1,038 Moroccan respondents recruited through Qualtrics from January 25 to March 3, 2023. Qualtrics maintains access to a pre-recruited pool of Moroccan respondents who complete surveys in exchange for a small financial incentive.² Demographic quotas based on gender, age, and geographic location were employed to ensure a baseline level of respondent diversity. Appendix Table 1 summarizes the demographics of the sample and compares it to that of a national probability face to face survey (F2F) conducted in 2022 by the Arab Barometer. The online sample disproportionately surveys individuals who are currently employed (58% versus 38% in the F2F survey), while under-representing students, the unemployed, housewives, and retired individuals. Online respondents are also more likely to self-identify as only somewhat religious or not religious, rather than religious. Despite higher employment rates, socio-economically, the online sample respondents identify themselves as struggling a bit more, on average, than respondents in the F2F survey, in response to a question about whether their household makes enough money to meet

2. In one sense, all respondents in this survey are therefore “employed.” However, completing surveys for compensation likely takes up no more than a small portion of respondents’ time and can be completed from home. While housewives and the unemployed are underrepresented in the sample, around 19% of female respondents self-identified as primarily housewives, and 12.5% of all respondents self-identified as unemployed.

expenses and/or save. The online survey is most unrepresentative in its over-inclusion of urban residents (92%, versus 65% in the F2F sample) and those with at least some higher education (43%, versus only 13% in the F2F sample). It is thus important to interpret the results of this survey as reflecting the attitudes and beliefs of a primarily urban, relatively educated sample. Most analyses (unless otherwise indicated) nonetheless adjust the data to better approximate a national probability sample using the weighting criteria followed by the Arab Barometer to adjust their surveys conducted in 2020-2021 via telephone, based on demographics in the 2014 Moroccan Census and the (face to face) 2018 Arab Barometer survey. Details of the weighting procedure are in the Appendix.

The pre-registered analysis plan for the survey³ and the Appendix include details about the survey questionnaire and the questions used to construct the variables used in the analysis below. The following sections briefly introduce the relevant items' wording, scales, and modification.

3.2 Time Use Survey Items

A battery of questions on the survey asked respondents to indicate who in their household usually did each of the following tasks (in parentheses are the short names for each of these variables used in subsequent analyses and visualizations). Following recent work that has highlighted the importance of cognitive labor or the “mental load” as both distinct from physical labor and, in other settings, more likely to be undertaken predominantly by women (Catalano Weeks 2022; Daminger 2019), I included both physical and mental or managerial tasks:

Physical tasks

- Minor home repairs (fixing appliances, broken doors or windows, etc.) (*repairs*)
- Buying groceries and other daily necessities (*groceries*)
- Cleaning the house (*cleaning*)
- Cooking (*cooking*)

3. Available at https://osf.io/b6ntz/?view_only=1ac20cd71c714ea4bc7e8f43db6a5dd2.

- Paying bills (note: included as both a physical and mental/managerial task) (*bills*)
- Helping children with schoolwork (*homework*)
- Caring for sick family members (*caring*)

Mental/managerial tasks

- Planning what food to buy (*food planning*)
- Planning the family budget (*budget*)
- Paying bills (*bills*)
- Planning clothing purchases (*clothing*)
- Researching options for children’s education (*education*)
- Deciding when someone should see a doctor (*doctor*)

Respondents chose whether they, their spouse, they and their spouse equally, a maid or servant, their mother, their father, or someone else usually did each of the above tasks. “Paying bills” is included as both a physical and a mental/managerial tasks, as in Morocco, paying bills still frequently involves physically reporting to a business or postal office in order to make a payment. Only currently married respondents were asked who is primarily responsible for making decisions about children’s education and helping them with homework. Appendix Figures 1 to 3 display the distribution of responses for each item.

3.3 Attitudes and Perceived Norms Survey Items

The survey also asked respondents to indicate whether they strongly agree, agree, disagree, or strongly disagree with the following items (in parentheses are the shorthand names used to refer to these questions in subsequent analyses and visualizations):

- Taking care of the home and children is a woman’s primary responsibility. (*primary*)
- It is important for fathers to be involved in daily housework and childcare tasks (for example, tasks such as cleaning, feeding, bathing, and dressing). (*daily*)
- When mothers work outside the home, children suffer. (*suffer*)
- It can be good for the family when mothers work outside the home. (*work good*)

- A man should have the last word in household decision-making about finances. (*last word*)
- Housewives should be paid for their household labor. (*pay women*)
- Women should have as much opportunity as men to take a break from household responsibilities to spend time with friends. (*leisure*)
- Men who take on more household tasks to support women pursuing careers are not very manly. (*manly*)

Responses to these items constitute the personal attitudes (PA) indicators. I also ask whether respondents believe that (1) most Moroccan women, (2) most Moroccan men, and (3) “people in your neighborhood” currently strongly agree, agree, disagree, or strongly disagree with the same set of statements. Responses to these items constitute the perceived norms indicators. To avoid systematic question order effects, whether respondents were asked about personal attitudes or perceived norms first was randomized using Qualtrics’ built-in randomization, as was the order in which respondents were asked about their perceptions of each reference group, and the order in which the individual survey items were presented within each grouping.

For each respondent, I generate an aggregate personal attitudes score and separate perceived norms scores with respect to each reference group (men, women, and neighbors). First, I re-code responses to the items such that 0 = strongly agree and 3 = strongly disagree when the statement as written is a conservative viewpoint, and such that 0 = strongly disagree and 3 = strongly agree when the statement as written is an egalitarian viewpoint. Higher numerical values then represent more egalitarian viewpoints for all items. The scores are the mean responses to survey items after this re-coding.⁴ For each respondent, I also calculate a pooled perceived norm for each individual item taking the average of respondents’ perceived norms of men, women, and neighbors. From this, I calculate an overall *pooled perceived norms score* which is the average pooled perceived norm across all eight survey items. The mean values of these scores among male and female respondents, respectively, are visualized in Appendix Figures 6 to 8.

4. All questions were forced choice (respondents had to select an answer to continue the survey), so there are no missing values on the personal attitudes or perceived norms items.

Following a brief informational intervention (discussed in section 5), respondents reviewed the same battery of items about the gender roles within and outside the home, asking whether respondents believe that (1) most Moroccan women and (2) most Moroccan men *will* strongly agree, agree, disagree, or strongly disagree *five years from now*. Future perceived norms scores were calculated from these responses in the same manner as described above for current perceived norms with respect to each reference group and are visualized in Appendix Figure 9.

3.4 Demographic Covariates

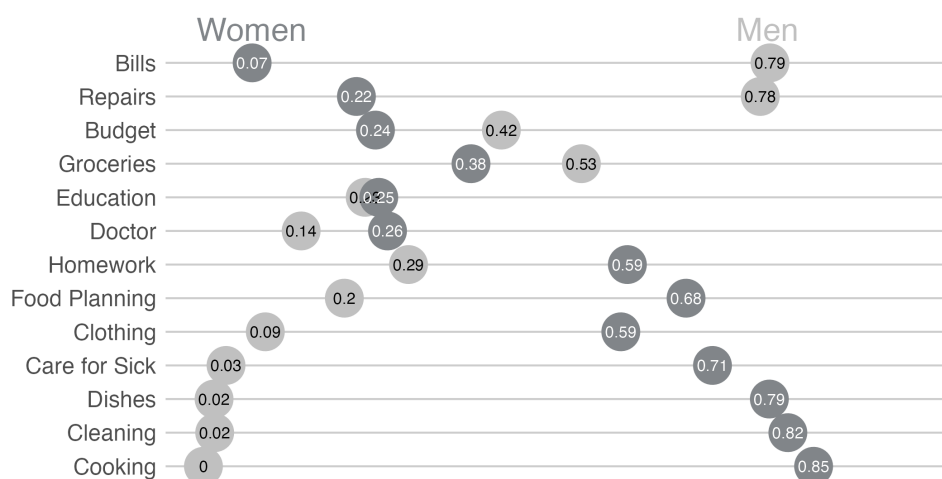
In all regression analyses below that control for demographic covariates, I include the following predictors (henceforth these are referred to as the “standard covariates”):

- Dummy variable for male respondents (with female respondents as the reference category).
- Age categories: 18-25 (reference category), 26-35, 36-45, 46-55, 55+.
- Dummy variable for urban respondents (with rural respondents as the reference category).
- Education categories: preparatory education or less (reference category); secondary or technical education; bachelor’s degree or higher.
- Subjective socio-economic status: a variable taking the values 1-4 based on answers to a question about whether the family’s income covers necessary expenses and they can save, where a 4 indicates the greatest socio-economic stability.
- Dummy variable for respondents who are currently employed, with all other respondent categories (housewives, students, retired, unemployed or other) combined as the reference category.
- Dummy variable for currently married respondents (with all other respondents in the reference category).
- Dummy variable for respondents with at least one child (with a reference category of no children).
- Religiosity: a variable taking values from 1 (not religious) to 3 (religious) as self-reported.

4 Divergent Perceptions of the Unequal Burden

Survey respondents report that women undertake the bulk of unpaid labor in their households. Yet perceptions of relative contributions of men and women diverge among married respondents. In response to the household task questions, most married respondents reported that either they, their spouse, or they and their spouse equally were primarily responsible for most tasks. Consistent with findings from other studies comparing self-reported contributions to household labor (Barroso 2021; Catalano Weeks 2022; Cerrato and Cifre 2018), there is a gap in married men’s and women’s perceptions of contributions to household labor across different tasks. Figures 1 and 2 display the proportion of male and female married respondents, respectively, stating that each tasks is completed primarily by themselves, by their spouse, or by themselves and their spouse equally.

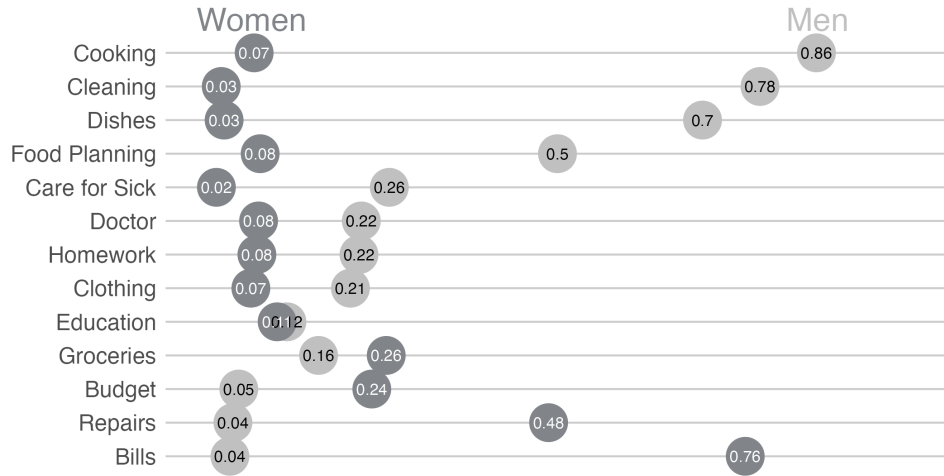
Figure 1: Married Respondents: Primary Responsibility for Tasks (Self)



Primarily Self (Married)

Note: The figures compare the weighted proportion of male and female married respondents who indicated, for each task, they they are usually responsible for the task themselves.

Figure 2: Married Respondents: Primary Responsibility for Tasks (Spouse)



Primarily Spouse (Married)

Note: The figures compare the weighted proportion of male and female married respondents who indicated, for each task, that their spouse is usually responsible for the task

Figure 3: Married Respondents: Primary Responsibility for Tasks (Equal)



Primarily Equal (Married)

Note: The figure compares the weighted proportion of male and female married respondents who indicated, for each task, that they and their spouse equally are usually responsible for the task.

Married women are more likely to state that they are primarily responsible for tasks than men are to acknowledge that their spouses are primarily responsible for the same tasks. Instead, married men are more likely to claim that those tasks are handled equally

by the two spouses. On the other hand, for tasks where men report being personally responsible most of the time (paying bills, making repairs, shopping for groceries), women are more likely than men to claim that these tasks are handled equally by the two parties. It is possible both that men are systematically overestimating their contributions across all tasks (as has been argued with respect to similar findings in the United States, see Barroso (2021)), and that women may be underestimating men’s contributions on some tasks where men are taking on more responsibility.

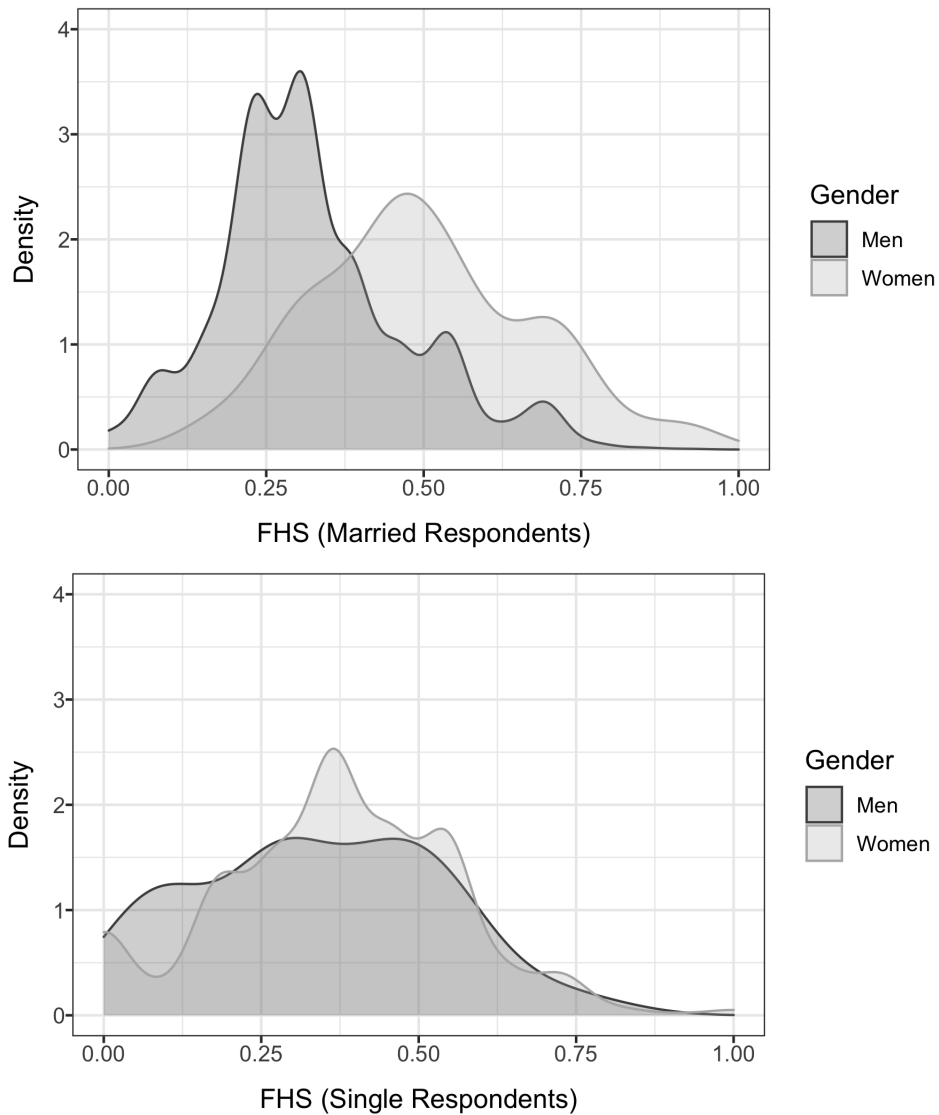
I construct a measure that combines responses to the questions about individual household tasks while taking into account respondents’ marital status. The variable I construct, *female household share*, takes the following values:⁵

- For married women, the share of tasks they report being primarily responsible for.
- For married men, the share of tasks they report their spouses being primarily responsible for.
- For never-married respondents, the share of tasks they report their mothers being primarily responsible for, unless the respondent indicates that he or she personally does the majority (>50%) of the task items, in which case they are excluded from the analysis. While respondents were not asked whether they still live with their parents, applying this restriction proxies for limiting the sample of never-married respondents to those living at home for the purposes of this analysis.

Separated, divorced, and widowed respondents are also excluded from analysis using this variable. These represent a small minority of the sample (3.7%). Figure 4 displays density plots comparing the distribution of the *female household share* measure for male and female respondents, respectively, among both married and never-married respondents. Overall, a total of 150 respondents are excluded from this analysis either because they are single and report responsibility for the majority of household tasks, or because they are divorced, widowed, or separated.

5. The structure of this composite variable was pre-registered.

Figure 4: Female Household Share Reported by Gender



Note: The figures compare distributions of the *female household share* variable among male and female respondents respectively among those married (top panel) and among those never-married who report personal responsibility for less than 50% of household tasks (bottom panel).

The density plots show that married male respondents systematically claim that their spouses alone are primarily responsible for a lower share of household tasks than married women report they themselves are. As noted above and visible in Figures 3 above, this is largely because men are more likely than women to say that most household tasks are shared equally with their partner. That single men are slightly more likely than single women to report low female household shares may reflect that more of these men are living outside of their parents' homes, while single women are less likely to do so.

Respondents also estimated the number of hours they (and their spouse, if applicable) spend on household activities per week; the share of physical household labor they and their partner complete (out of 100%); and the share of mental household labor (the “mental load”) they and their partner each complete (out of 100%). Only currently married respondents were asked about the household behavior of their spouse as it is rare for unmarried couples to live together in Morocco. The patterns in these responses are similar to those found when examining the composite female household share variable.⁶

Combined with information on women’s employment status, these patterns show the extent of the double burden female respondents face. The average unweighted value of *female household share* did not differ significantly between employed women (0.41) and women not currently working (0.43).⁷ Even after controlling for other demographic covariates, there is no correlation between FHS and women’s current employment status, consistent with women’s participation in the labor market failing to reduce expectations that they will take responsibility for most tasks within the home. Women are also more likely than men to report feeling as though they face a substantial “double burden” of paid and unpaid work. The survey asked respondents who are currently employed to what extent household obligations “impede your ability to succeed at work and advance your career.” Overall, 13% of those employed agreed this was true to a great extent, and another 20% agreed it was true to a moderate extent. By gender, 28% of employed men viewed household obligations as a moderate or great impediment, versus 40% of employed women. Among the latter, a majority said it was a great impediment.⁸

Female respondents were also asked whether, in an ideal world, they would work outside the home. Currently employed women were more likely than women not currently employed to say that their ideal would personally be to *not* work (53% vs. 42%). Of the women not currently employed who stated that they would ideally be so, 32% stated their

6. Results available upon request.

7. The weighted averages are identical at 0.43.

8. All percentages are weighted.

education was the primary obstacle, followed by the labor market (31%), their children (12%), or other reasons (15%), with 6% citing their husbands and another 4% citing their families as the primary obstacle. There is thus a substantial minority for whom family objections or obligations (especially childcare) are an impediment to labor market participation, along with a slight majority of working women who would prefer not to be in the labor force—potentially because of the burden of household labor they struggle to escape.⁹

5 Female Labor Burden Correlates with Perceived Male Attitudes

Does this distribution of household labor reflect respondents’ preferences, their perceptions of social norms, or both? In this section, I show that the reported *female household share* of labor introduced above does not correlate with respondents’ personal attitudes, but does correlate with respondents’ perceptions of men’s attitudes. These results are consistent with recent findings from Jordan that women’s labor force participation is correlated with expectations of husbands’ attitudes (Gauri, Rahman, and Sen 2019).

I hypothesized *ex ante* that respondents living in households with a more traditional division of labor would have more conservative personal attitudes and would perceive more conservative norms.¹⁰ To test this expectation, I assess the correlation between the female household share (FHS) variable and (1) the personal attitudes score and (2) the perceived norms scores by estimating weighted OLS regressions where the outcome is either the PA score or the relevant PN score (on the scale of 0-3, where 3 indicates the most egalitarian position), and the predictors are the FHS variable and the set of standard covariates described in the Data section. The hypothesis was that the coefficient on the

9. The survey also asked currently employed female respondents who would prefer *not* to work what compelled them to do so anyway. 92% stated their financial situation obliged them to work, and 8% cited other reasons. No respondent answered that their husband required them to work.

10. See pre-registered hypothesis H2(c).

FHS term would be negative: more egalitarian attitudes and perceived norms would be associated with a lower female household share of labor. Table 1 shows the result of these regressions, presenting only the coefficient for the FHS term. Full results are available in the Appendix.

Table 1: Female Household Share, Attitudes, and Perceived Norms

	Attitudes	Pooled PN	PN Men	PN Women	PN Neighbors
Female Household Share	−0.009 (0.075)	−0.128* (0.050)	−0.212** (0.066)	−0.052 (0.073)	−0.114 (0.082)
Num.Obs.	888	888	888	888	888
Covariates Included	Yes	Yes	Yes	Yes	Yes

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: The table shows the coefficient estimated for the variable indicating the share of household tasks undertaken primarily by women (female household share) from weighted OLS regressions using models taking as the left-hand side variable, respectively, the personal attitudes score (1), the pooled perceived norms score (2), the perceived norms of men score (3), the perceived norms of women score (4), and the perceived norms of neighbors (5). Covariates are included in all models; full results are in the Appendix.

Contrary to expectations, I find that female household share is not significantly correlated with personal attitudes. That is, respondents who report living in homes where women are responsible for a higher share of household tasks do not report more conservative personal attitudes, on average, than those living in households where women are responsible for a lower share of tasks. However, FHS is negatively correlated with the pooled perceived norms score ($p < 0.05$). Respondents in homes where women are responsible for a higher share of household tasks perceive other Moroccans' attitudes as more conservative, compared to respondents where women are responsible for a lower share of tasks. This relationship is driven by respondent perceptions of men's attitudes, which are negatively correlated with FHS ($p < 0.01$). FHS is not associated with respondents' perceptions of women's attitudes or their neighbors' attitudes. The same relationship holds when the future perceived norms scores are used to predict current FHS (see Appendix

Table 3).

This correlation likely reflects a doubly causal relationship: deference to perceived male preferences influences the household distribution of labor, and observing this distribution in turn informs perceptions of what men—but not women—believe and value, highlighting that respondents see men’s norms as the relevant factor in how the household is organized.

I also hypothesized that women who say they would ideally hold a job outside of the home would perceive more egalitarian current and future norms than women who say they would ideally be housewives.¹¹ To assess this expectation, I conduct a similar analysis as above, but in lieu of the female household share variable, the predictor of interest is the indicator for ideally wanting to work personally. I also examine whether men’s responses about the work status of the wife in their ideal household correlate with personal attitudes and perceived norms. Table 2 presents the estimates from both sets of models for the “ideally would work” variables. Full results are available in the Appendix.

The data provide strong support for the second hypothesis. For women, ideally working outside the home is positively correlated with more egalitarian personal attitudes and both current and future perceived norms with $p < 0.001$. A preference for personally working outside the home is accompanied by beliefs—and perceptions that others also believe—that such work can be good for the family, that children do not suffer, that it is not “un-manly” of a spouse to help his wife succeed in her career, and more generally that men should be involved in household tasks. Among men, the results are the same: believing a wife would ideally work outside the home is correlated with more egalitarian personal attitudes around household labor and more egalitarian current and future perceived norms with $p < 0.05$.

Respondents’ attitudes and perceived norms around household roles are thus consistent with their preferences over women’s paid work status, but not with the current distribution of labor within the home. The alignment of FHS with perceptions of men’s attitudes, but not with respondents’ current attitudes, suggests there may be room for

11. See pre-registered hypothesis H2(d).

Table 2: Women's Ideal Work Status, Attitudes, and Perceived Norms

	Attitudes	Pooled PN	Future PN
<i>Women</i>			
Ideal: I would work	0.397*** (0.034)	0.127*** (0.023)	0.181*** (0.032)
Num.Obs.	514	514	514
Covariates Included	Yes	Yes	Yes
<i>Men</i>			
Ideal: Wife would work	0.084* (0.040)	0.095** (0.029)	0.160*** (0.037)
Num.Obs.	524	524	524
Covariates included	Yes	Yes	Yes

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Note: The top section of the table shows the coefficient estimated for the variable indicating, for female respondents, that they would ideally work outside of the home, from weighted OLS regressions using models taking as the left-hand side variable, respectively, the personal attitudes score (1), the pooled perceived norms score (2), and the pooled future perceived norms score (3). The bottom section of the table presents the same, but for the variable indicating, for male respondents, that in their hypothetical ideal household, the wife would work outside the home. Covariates are included in all models; full results are in the Appendix.

better aligning individual preferences and behavior by altering perceived norms. One potential reason for a gap between what Moroccans say they value with respect to the household division of labor and what they believe others value *currently* is that the division of labor in other households is hard to observe. Providing information about how household behavior has shifted in recent years could lead respondents to update their expectations about how much men will contribute in the future and how social norms around their contributions will evolve.

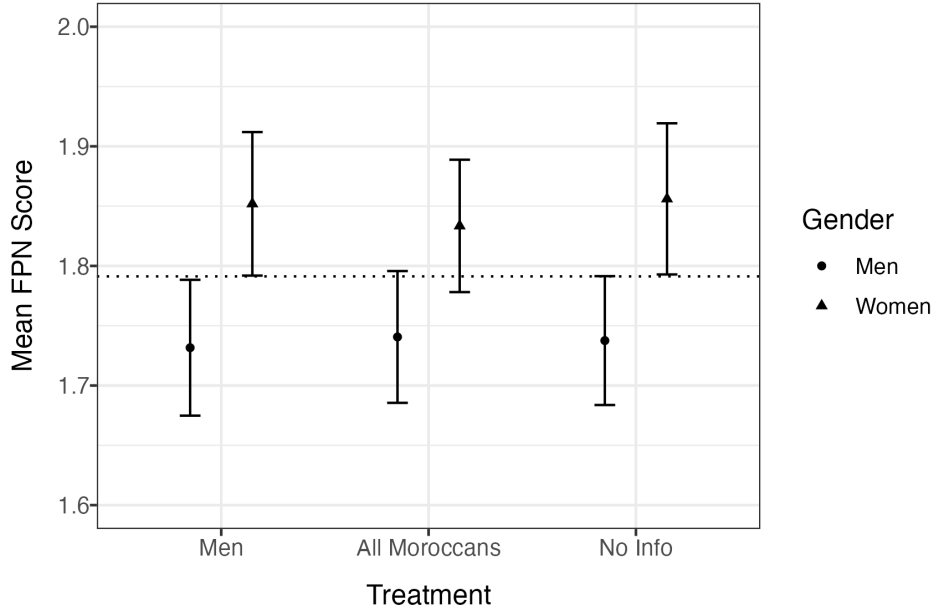
To test this possibility, the survey included an experiment testing whether providing information about changes in men’s contributions to household labor would induce changes in respondents’ expectations about future perceived norms. After answering the questions about their personal attitudes and current perceived norms, respondents were randomly sorted with equal probability into one of three treatment groups.¹² Group 1 read information about how the COVID-19 pandemic increased the time Moroccan men spend on household labor. Group 2 read information about how the COVID-19 pandemic increased the time many Moroccans spend on household labor. Group 3 did not read any information. Full text of the information treatments is available in the Appendix.

I hypothesized that providing information about the impact of COVID-19 on men’s behavior would increase Moroccans’ perceptions that norms five years from now will be more egalitarian and that these effects would be larger among men than among women.¹³

12. Simple randomization was applied using Qualtrics’ built-in randomization. Appendix table 6 shows results of a balance test confirming that there were no significant differences in the standard covariates, personal attitudes scores, or current perceived norms scores across treatment groups.

13. See pre-registered hypotheses H4(a) and H4(b). The logic for the hypothesized gender difference was that men are relatively less likely to encounter discussions of gender equality in everyday life (as suggested by Bursztyn, González, and Yanagizawa-Drott (2020)). We would expect the treatment effects to be larger among men as encountering information should address a knowledge gap that they are likely to exhibit more than women do. For women, the information may not seem particularly revealing, or to the extent that it is, they may be more pessimistic than men (who have an interest in taking a positive view of their own sex) that a post-COVID increase in household contributions by men is likely to translate into sustained change. In addition, the information may be more likely to strike women as an incomplete picture of reality, given that time spent by women on household labor also increased during the pandemic, a fact of which women are more likely to be aware.

Figure 5: Information Experiment Results



Note: The figure plots the average pooled future perceived norm (FPN) score for men and women, respectively, in each treatment group. Treatment 1 was the information about men, Treatment 2 the information about all Moroccans, and Treatment 3 was the no-information treatment. The black dotted line shows the overall mean FPN score.

Figure 5 shows the average future perceived norm score¹⁴ by gender and treatment assignment. While women have consistently more egalitarian future perceived norms, for neither gender is there variation in responses across treatments. The estimates of mean future perceived norms across groups are nearly identical. Given the experiment's power,¹⁵ this is a precise null effect. To assess whether respondent inattention may account for this null finding, I restrict the sample to those who passed an attention check question on the first attempt (see Appendix for discussion). Appendix Figure 10 shows that there is no evidence of a treatment effect among this sub-sample either. There is no evidence that providing information about men's contributions to household tasks shifted respondents' future perceived norms.

14. These analyses are unweighted, as the quantity of interest is the treatment effect among the treated, and treatment was fully randomized within the sample.

15. The study as designed was well-powered (power = 0.8) to detect a small Cohen's d effect size of 0.2, which (given the realized standard deviation of the future perceived norms score) would translate into a difference in means of 0.07 on the 0-3 scale.

6 The Strength of the Male Breadwinner Model

Previous sections established that (1) women face a disproportionate burden of unpaid household labor, yet married men and women have divergent perceptions about their respective contributions, with men more likely to claim tasks are undertaken equally, and (2) the female household share of labor is uncorrelated with respondents' attitudes toward gender roles within the home, yet does correlate with respondents' perceptions of men's attitudes: respondents living in households with a higher share of female labor perceive that men hold more conservative attitudes. However, providing information about men spending more time on household tasks did not shift expectations about the gender roles Moroccans will value in the future.

This section further probes to what extent Moroccans are open, in principle, to a more equal distribution of household labor, using a conjoint survey experiment to jointly assess preferences over multiple dimensions of household organization. Conjoint analysis is a survey technique in which the researcher simultaneously randomly varies multiple components of a set of profiles about which respondents then answer questions. The design allows researchers to manipulate multiple independent variables while estimating the causal effect of changing one variable's value on the likelihood that a respondent will favor a profile. In a typical design, respondents make a binary forced choice about which of two alternative profiles they prefer, for example about hypothetical immigrants or political candidates (Abramson, Kocak, and Magazinnik 2022; Hainmueller, Hopkins, and Yamamoto 2014). Recent work has used this approach to measure constraints on women's employment in the MENA region (Barnett, A. Jamal, and Monroe 2021; Blaydes, Gengler, and Lari 2021) and couples' attitudes toward the division of household labor in the United States (Hutchinson, Khan, and Matfess 2022). Conjoint analysis has been shown to have good validity in relationship to real-world behavior (Hainmueller, Hangartner, and Yamamoto 2015), and the design may mitigate social desirability bias in survey responses (Horiuchi, Markovich, and Yamamoto 2022). On this survey, respondents saw descriptions of two

households in which the items in brackets below were independently randomized¹⁶ (that is, for each attribute, one of the options in the brackets was randomly presented, with equal probability, and displayed in each profile):

- The husband [is / is not] employed outside the home.
- The wife [is / is not] employed outside the home.
- Childcare is the primary responsibility of [the mother / the father / both adults equally / a grandparent / a maid or domestic servant].
- Cleaning and cooking are the primary responsibility of [the mother / the father / both adults equally / a grandparent / a maid or domestic servant].
- Home repairs are the primary responsibility of [the mother / the father / both adults equally / a grandparent / a maid or domestic servant].
- Caring for ill or elderly family members is the primary responsibility of [the mother / the father / both adults equally / a grandparent / a maid or domestic servant].

After reading descriptions of the two households, respondents indicated which of the two was closer to their ideal household, even if it was not their ideal (this is the outcome variable *choice*).¹⁷ Respondents completed three rounds of this choice task. After doing so, they also responded to individual questions that directly assessed their preference over each of the above attributes in isolation (for example, would they prefer that cleaning and cooking are the primary responsibility of the mother, the father, both adults equally, a grandparent, or a maid or domestic servant).

With 1,038 respondents, there are 3,114 conjoint experiment responses. All analyses cluster standard errors by respondent. Figure 6 visualizes the marginal mean values

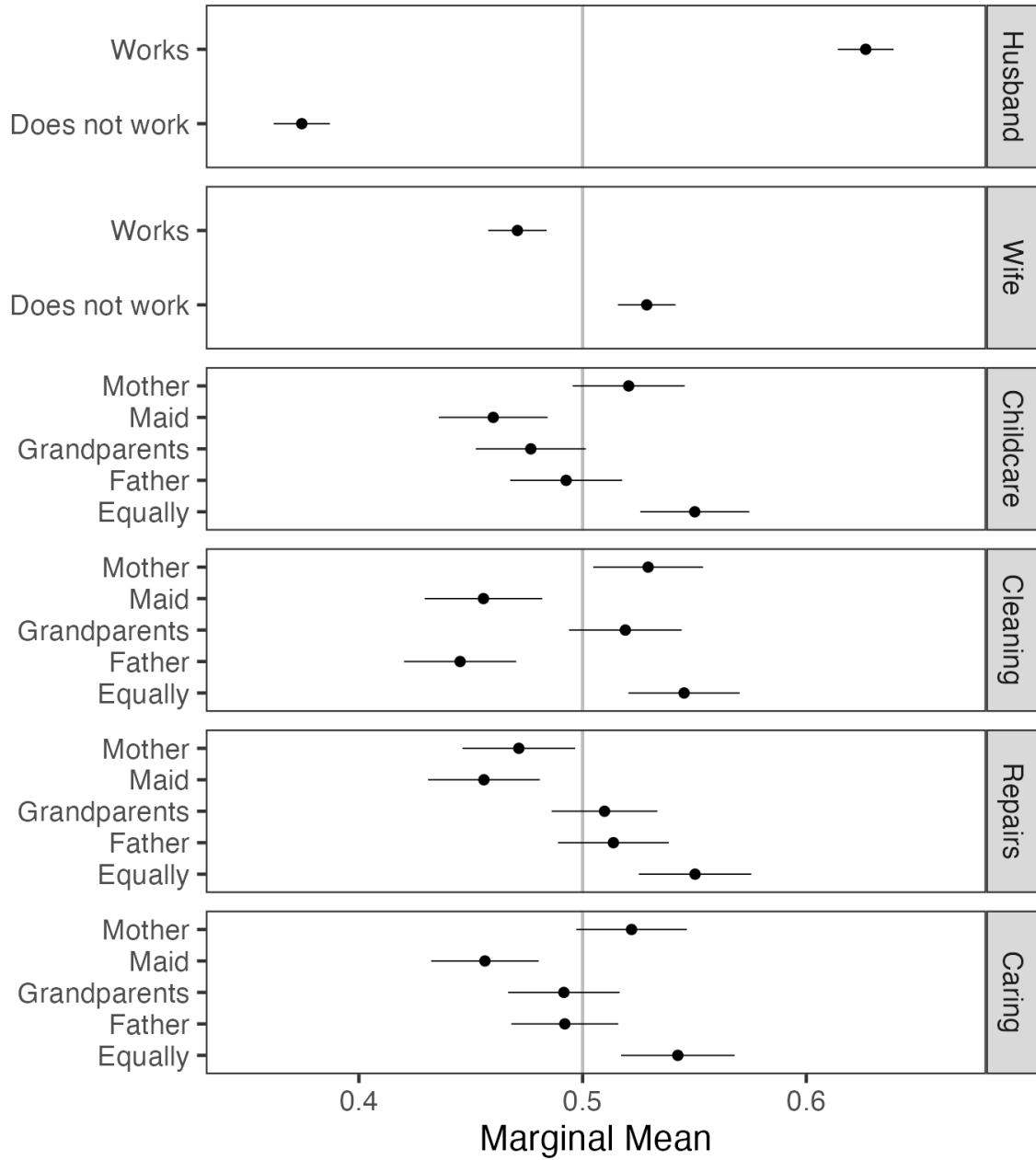
16. Simple randomization of each attribute was accomplished via random sampling from arrays in Javascript code embedded in the survey, following a procedure shared by Graham (2020).

17. After each choice task, I also asked respondents whether they preferred the family profile they selected, liked both profiles equally, or liked neither profile. I collapse the latter variable into a binary indicator for whether the respondent actually preferred the family profile they selected (this is the outcome variable *preferred*), the results for which are displayed in Appendix Figure 11.

of each profile attribute level, or the overall probability of selecting a profile given the presence of that version of the attribute, averaging over other attributes. Marginal means are calculated using the *cregg* package in R (Leeper 2022).¹⁸ I focus on discussing when marginal mean estimates are statistically distinguishable from 0.5 (50%), which is the marginal mean in expectation in the forced-choice conjoint design when a respondent has no preference over levels of an attribute.

18. I present the marginal means, rather than the commonly used average marginal component effects (AMCEs), in light the greater suitability of the marginal mean for discussions of respondent preferences (particularly for subgroup analyses) and the greater ease of interpreting them (Leeper, Hobolt, and Tilley 2019). AMCE estimates are included in the Appendix; the results are substantively similar.

Figure 6: Conjoint Experiment: Aggregate Marginal Means



Note: The figure displays the marginal mean for each attribute level with its 95% confidence interval. The marginal mean is “the column and row mean outcome for each feature level averaging across all other features” which “in the common forced-choice design with two alternatives ... [has] a direct interpretation as probabilities” that a profile with that feature level would be selected (Leeper, Hobolt, and Tilley 2019).

The conjoint results reveal that respondents do not appear to hold strong preferences for mothers specifically holding primary responsibility for any household tasks, compared to scenarios in which men and women take equal responsibility. In fact, profiles in which the mother and father hold equal responsibility have the highest absolute favorability

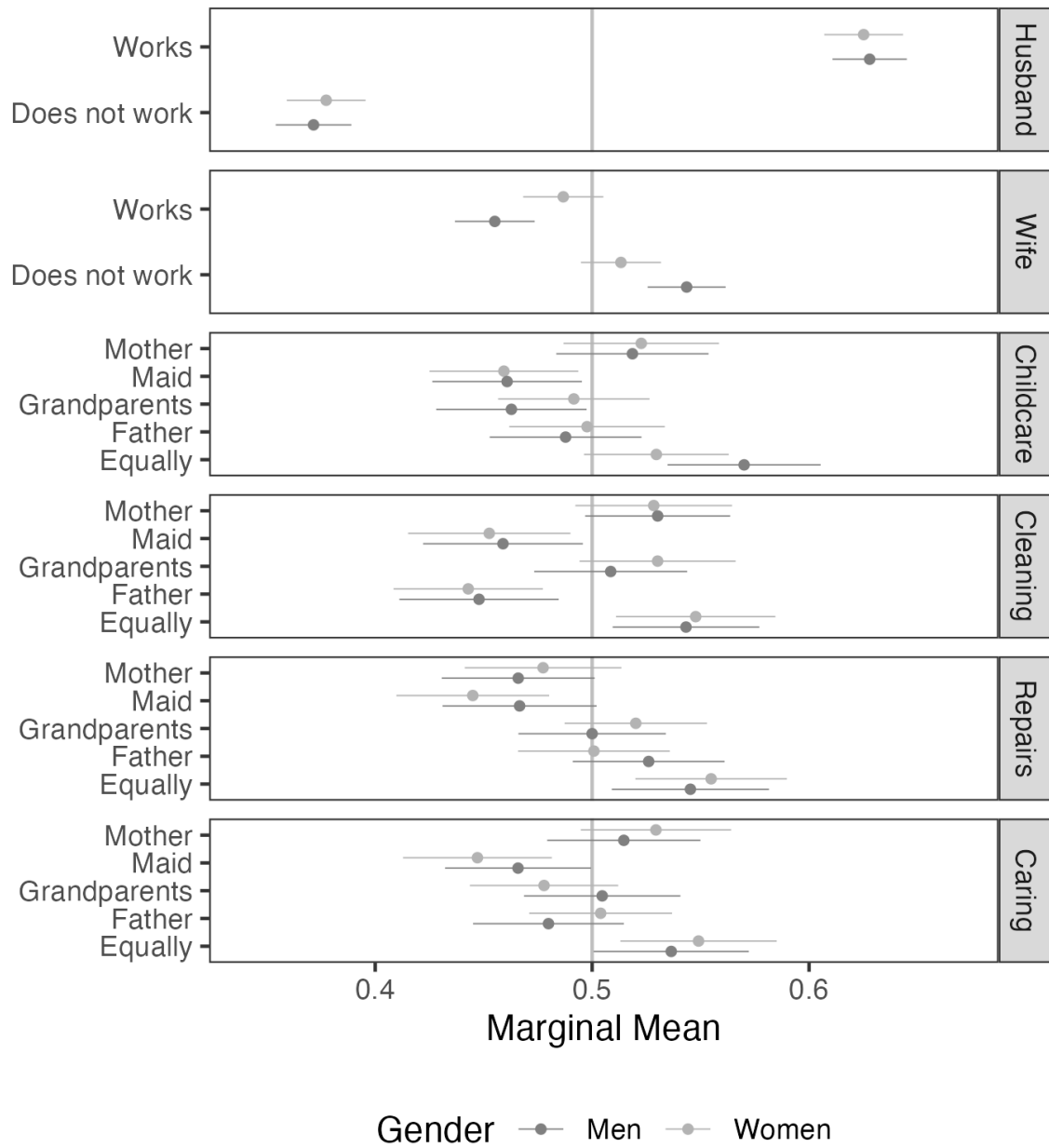
across the various tasks, although not to an extent statistically distinguishable from the favorability for primary female responsibility. Respondents are also indifferent about fathers taking primary responsibility for childcare, care of other family members, or making repairs, but they do disfavor fathers alone taking primary responsibility for cleaning and cooking (profiles in which the father is primarily responsible for cleaning and cooking are selected with probability 0.45).

In contrast, respondents do have a negative view of outsourcing household tasks to a maid or domestic servant. Profiles in which a maid is responsible for childcare, cooking and cleaning, repairs, or caring for the sick are all selected with probability 0.46. Negativity toward hired domestic help has potentially important implications for women's ability to outsource existing unpaid and care labor in order to participate effectively in the labor market.

By far respondents' strongest preference, among the attributes included, is that men should have a job outside the home. Profiles in which the husband works outside the home are selected with probability 0.63. While respondents disfavor profiles in which the wife works outside the home, the intensity of this preference is not as strong. Profiles in which the wife works are selected with probability 0.47.

Examining the marginal mean responses disaggregated by respondent gender shows that the largest divide between men and women is over their preferences for whether married women would ideally work outside the home. Figure 7 displays the marginal mean preferences for the conjoint attributes among male and female respondents, respectively.

Figure 7: Conjoint Experiment: Marginal Mean Responses by Gender



Note: The figure displays the marginal means (the probability of choosing a profile with a given attribute level, averaging over other features) for each attribute level in the conjoint experiment, disaggregating results by respondent gender. The results for the attribute varying whether or not the husband works outside the home are at the top. The results for the attribute varying whether or not the wife works outside the home are just beneath.

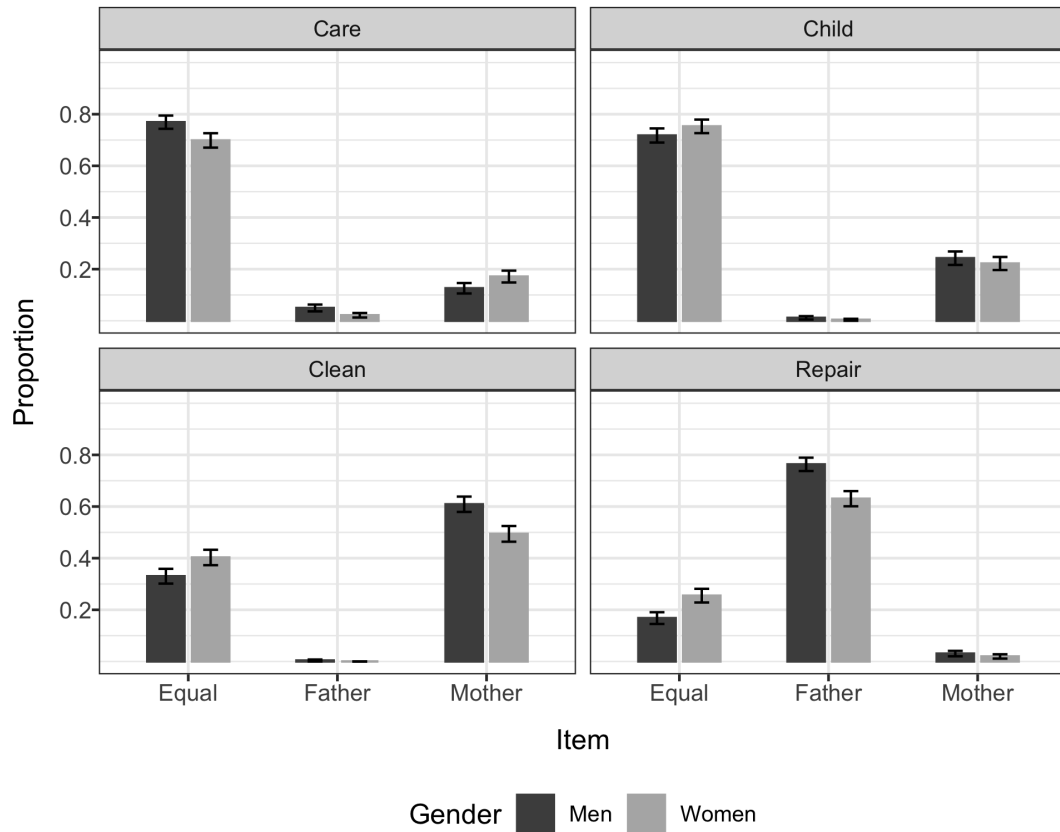
Women slightly prefer a scenario in which the woman works outside the home, although neither the marginal mean for this nor that for the opposing scenario is statistically distinguishable from 0.5. Men have a clear if substantively small preference for women not working outside the home; they select such profiles with probability 0.54. At

the same time, both male and female respondents hold identical and strong preferences for men ideally working outside of the home. The marginal mean for the scenario in which the man works outside the home is 0.63 among both men and women.

The direct questions about these attributes that followed the conjoint experiment confirm the strength and consistency of this finding. Isolated from other factors, 87% of men and 97% of women answered that in their ideal household, the husband would work outside the home. In contrast, 61% of women and 82% of men answer directly that women not working outside the home is their ideal. The difference between these proportions and the marginal means calculated in the conjoint experiment show that preferences over men's and women's employment status may be moderated when individuals consider them in the context of preferences over the overall distribution of labor within the home. Nonetheless, the continued existence of such strong gendered preferences over employment status suggests that it is these preferences, more than specific objections to a less traditional division of household labor, that determine the distribution of responsibility for household tasks.

In response to direct questions, respondents also indicated a preference for scenarios in which men and women share household tasks equally. The modest positive effect associated with equal responsibility for tasks in the conjoint experiment provides some confidence that these claims are not merely the result of social desirability bias. Figure 8 shows the weighted proportion of male and female respondents, respectively, indicating that the mother, father, or mother and father equally would be responsible for each task (for simplicity, I omit other response options). Around 68% of men and women believe that husbands and wives would ideally take equal responsibility for childcare and caring for sick family members, compared to 29% who believe women alone would ideally handle childcare and 21% who believe women alone would ideally care for sick relatives. Thus, with respect to care work, many Moroccans embrace an ideal of equal burden sharing and participation by both men and women. However, among those who do not, the expectation remains that these are women's responsibilities.

Figure 8: Labor Distribution Preferences: Direct Responses



Note: The plots display the weighted proportion of male and female respondents who indicated that in a hypothetical ideal household, each task would be undertaken by both the mother and father equally, the father alone, or the mother alone. Other response categories (a maid, grandparents, or other) are omitted for simplicity; those results are available upon request.

In contrast, only 29% believe that cleaning and cooking would ideally be handled equally, with 69% of men and 61% of women saying that this ideally be handled by women alone. Similarly, a majority of respondents believe that simple home repairs would ideally be handled by men alone, with fewer than a third responding that this should be handled equally. There thus appears to be more commitment to a gendered division of labor with respect to physical tasks, compared to care tasks.

In summary, I find that respondents generally view hypothetical situations in which care tasks are shared equally between men and women as being just as or more desirable than ones in which women carry principle responsibility for these tasks—but they care most about men working outside the home, and continue to prefer a more gendered

distribution of physical tasks like cooking, cleaning, and making repairs. Despite openness to more equal household contributions, the intensity of respondent preferences for male employment *outside* the home limit the potential impact of this theoretical openness to greater household burden-sharing. The results suggest that women’s unpaid labor burden is primarily a side effect of preferences for a male breadwinner family model, rather than strong preferences over who does specific household tasks.

7 Conclusion

This paper began by asking to what extent attitudes and perceived norms (or normative expectations) around household roles hinder the emergence of more gender-equal distributions of labor in Morocco. As across the MENA region, women are disproportionately out of the paid labor force and in charge of most unpaid household and care tasks. Drawing on results from an original online survey of predominantly urban, relatively educated Moroccans, with embedded experiments, I found that individuals’ attitudes toward household duties themselves appear a relatively unimportant determinant of individual behavior in this context. Instead, both (a) perceptions of men’s attitudes toward household roles and (b) attitudes toward men’s roles outside the home—specifically, strong preferences among both men and women for a male breadwinner—appear the most important factors contributing to women shouldering a disproportionate unpaid labor burden and, often, a heavy double burden of paid and unpaid labor.

Respondents acknowledge that women shoulder a higher share of the household burden of labor than men do. Yet men also take a rosy view of their contributions: married male respondents are more likely to estimate that their own contributions to unpaid labor are relatively equal to their spouses, while married women report being primarily responsible for tasks more than sharing them equally. Among single respondents, men also provide a lower estimate of the share of household labor undertaken primarily by their mothers (potentially because they are more likely to live independently), but neither male nor female single respondents cite fathers as contributing much at all. Despite these

differences, a majority of male and female respondents alike respond that care tasks especially (looking after children, caring for sick relatives) would ideally be undertaken by men and women equally. Among those who feel otherwise, however, women are seen as ideally responsible for these tasks. A conjoint experiment varying the responsibility for different tasks in a hypothetical household also revealed that respondents appear indifferent between women, men, or women and men equally taking responsibility for childcare, care of the sick, and minor repairs, although they continue to look unfavorably on men taking primary responsibility for cleaning and cooking.

This openness to more egalitarian household roles in principle does not seem to translate substantially into the actual reorganization of household responsibilities. The female household share of labor does not vary between employed and unemployed women. Nor is it correlated with respondents' personal attitudes on a battery of questions about gender roles within the household. However, the female household share of labor does correlate with what respondents perceive men to believe and value. Respondents with more conservative perceptions of men's attitudes tend to report a higher female burden of labor within the home. This likely reflects a doubly causal relationship: respondents exposed to men with more conservative attitudes align household roles with the perceived preferences of the patriarchal authorities within their households, and respondents who observe a higher female burden of labor likely conclude that this distribution exists because it is what men prefer. Perceptions of what men value may not be easy to change. An information experiment testing whether providing respondents with information about men's increased contributions to household labor during COVID-19 did not have any effect on respondents' expectations of future social norms.

Most notably, however, both the conjoint experiment and direct survey questions revealed that (a) both men and women strongly prefer that in an ideal household, the husband will work outside the home, and (b) men, but not women, continue to have a strong preference for the wife not working outside the home in an ideal household. Around half of the women in the sample—including half of those currently employed—also believed that a woman would ideally not work outside the home.

These results may reflect the strength of *benevolent sexism* in Morocco: that is, “a set of interrelated attitudes toward women that are sexist in terms of viewing women stereotypically and in restricted roles but that are subjectively positive in feeling (for the perceiver)” (Glick and Fiske 1996, 491). One manifestation of this is a valorization women’s traditional roles while emphasizing that women deserve help at home from supportive partners. In prior work, I found that 94% of Moroccans (equally among men and women) agreed or strongly agreed with the statement that “men should guard and cherish women,” while 76% of women and 73% of men agreed or strongly agreed that “men should sacrifice to provide for the women in their lives” (Barnett 2022).¹⁹ Other recent research has found that while hostile sexist beliefs have declined substantially in the MENA region, benevolent sexist beliefs remain prevalent and are often called upon to justify expansions in women’s formal rights (Jones, Mitchell, and Martin 2021; Maitner and Henry 2018). The strength of benevolent sexism may account for both the relative interest in “equalizing” household contributions (and men’s interest in emphasizing the extent to which they currently contribute) co-existing with the continued preference men hold for women not working, where feasible. Thus, while openness to more equal divisions of household labor could bode well for women’s potential labor market participation, such expressions of interest in supporting women’s work may be conditional on women’s continued embrace of distinct gender roles. Alongside structural obstacles to women’s employment, the combination of benevolent sexism and commitment to the male breadwinner model may jointly form an equilibrium that makes shifting either women’s labor force participation or the actual distribution of household labor especially challenging.

The results also suggest that what may matter most for altering the distribution of labor is not abstract attitudes toward gender roles, but men’s reactions to their own life circumstances and how these intersect with conceptions of masculinity. Research from other contexts has shown that high-earning women may compensate for their violation of gender role norms by taking on a disproportionate share of household labor (Bittman,

19. These figures are not reported in the dissertation but are calculated from responses to the telephone survey described therein.

England, Sayer, Folbre, and Matheson 2003) or face higher rates of intimate partner violence (Krishnan, Rocca, Hubbard, Subbiah, Edmeades, and Padian 2010), and their relationships may also be more likely to end in divorce (Bertrand, Kamenica, and Pan 2015). Male psychological distress is elevated when men are solo breadwinners, but reaches its peak when men are economically dependent on their wives (Syrda 2020). In Morocco, researchers have argued that many women see protection of male dignity as a source of security for themselves and their communities (El Hajjami 2018) and have emphasized the pressure men place on themselves to fulfill the expected social role of family provider (El Feki, Heilman, and Barker 2017). The high value this study's participants placed on men's employment outside the home, relative to their preferences over who does which household tasks, suggests the maintenance of male dignity with respect to breadwinner expectations is relevant not only for whether women participate in market labor in the first place, but for how the distribution of household labor evolves—or not—when they do. More direct engagement with norms of masculinity may be essential to alleviating women's double burden and ultimately facilitating their participation in paid labor on more equal terms.

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Appendix for “Gender Role Attitudes, Perceived Norms, and the ‘Double Burden’ in Morocco”

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A Survey Design

A.1 Survey Quotas

Moroccan adults who participate in an established online survey panel (accessed via Qualtrics) were invited to participate in the study in exchange for incentives typically offered for participation in a study taking 20-25 minutes to complete. The target sample size was 1,000. The consent form and survey instrument (all written materials) were in Modern Standard Arabic.

Existing demographic information and screener questions were used to ensure participants met the following criteria:

- At least 18 years old
- Fluent in Arabic
- Currently residing in Morocco

The following quotas were applied:

- 50 percent male, 50 percent female
- Age: 25% in 18-24; up to 25% in 25-34; 15-25% in 35-44; 15-25% in 45-54, 10-20% in 55+¹
- Geography: at least 1% from the regions Eddakhla-Oued Eddahab, Laayoune-Sakia El Hamra, and Guelmim-Oued Noun; no more than 30% of respondents from Casablanca-Grand-Settat; and at least 5% of respondents from each of Morocco's other administrative regions.

Participants who were identified as suitable on this basis were directed via a unique link to the online survey, which I programmed in Qualtrics software. There participants provided informed consent before proceeding to begin the study. An initial pilot study gathered 50 responses, after which the study paused. Qualtrics screened responses after both the initial pilot and among the full sample for signs that they had been completed by bots or inattentive respondents. Responses were rejected if they were completed in less than half the median time to completion, if they were incomplete, or if there was evidence of "straight-lining" through responses. I also checked several built-in measures for indications that participants understand the treatments and tasks included in the instrument. The study resumed and a further 996 responses were collected, for a total of 1,046 responses that passed quality checks, including the pilot data. Toward the end of this data collection process, Qualtrics advised that it did not anticipate being able to collect the requested proportion of respondents from the Draa-Tafilalet region, so the quota for this region was relaxed. Of these 1,046 responses, I identified a further 56 that raised quality concerns either because of time to completion or straight-lining through critical question batteries (the personal attitudes and perceived norms questions). Excluding those responses, Qualtrics resumed data collection and gathered an additional 48 responses that passed quality checks, for a total of 1,038 responses.

¹This distribution skews slightly younger than the Moroccan population as a whole.

A.2 Survey Sample Demographics and Weight Construction

Table 1 shows the composition of the raw online survey sample, as well as the comparable raw numbers from Wave 7 of the Arab Barometer, a nationally representative survey conducted face-to-face in 2022. In comparison to the Arab Barometer sample, the survey conducted as part of this study oversampled urban, educated, employed, and less religious individuals. To adjust for these imbalances, I constructed survey weights which are employed in all analyses, unless otherwise indicated. To construct the weights, I employ the same procedure as that used by the Arab Barometer to adjust their data for Wave 6, which was conducted via telephone. The raking procedure accounts for discrepancies between the achieved sample and (a) Moroccan census data from 2014 as well as (b) the demographics of Moroccan respondents in Wave 5 of the Arab Barometer, which was conducted face to face. Survey weights are calculated on the basis of age, urban/rural residence, educational achievement, and region of Morocco, using the *survey* package in R (Lumley, 2021).

Table 1: Survey Sample Comparisons

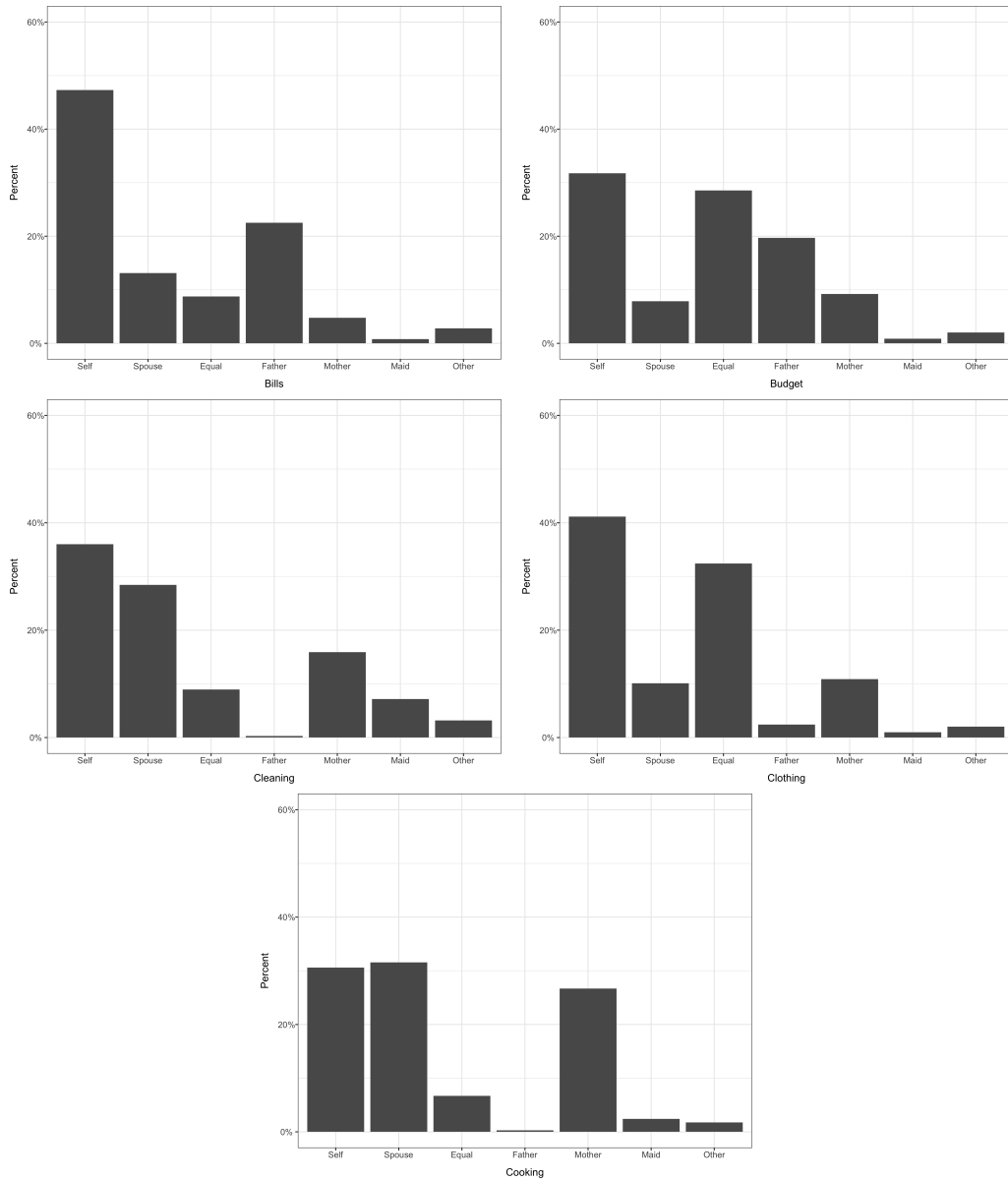
Attribute	Category	Original (Online)	AB W7 (Face to Face)
Gender	Male	0.505	0.502
	Female	0.495	0.498
Age	18-24	0.219	0.194
	25-34	0.289	0.302
	35-44	0.202	0.18
	45-54	0.189	0.168
	55+	0.101	0.155
Education	Prepatory or Less	0.092	0.494
	Secondary	0.481	0.377
	Higher	0.428	0.128
Status	Employed	0.582	0.379
	Housewife	0.094	0.254
	Student	0.143	0.124
	Unemployed	0.125	0.166
	Retired	0.031	0.216
	Other	0.025	0.025
Urban	Urban	0.917	0.646
Marital Status	Single Never Married	0.415	0.389
	Currently Married	0.548	0.485
	Other	0.037	0.126
Has Kids	Has Kids	0.51	0.888
Religiosity	Very Religious	0.321	0.497
	Somewhat Religious	0.561	0.418
	Not Religious	0.118	0.053
Economic Security	Good and Can Save	0.129	0.168
	No Difficulties	0.302	0.3
	Some Difficulties	0.452	0.341
	Major Difficulties	0.118	0.138
N		1038	2404

B Time Use

B.1 All Responses, by Individual Task

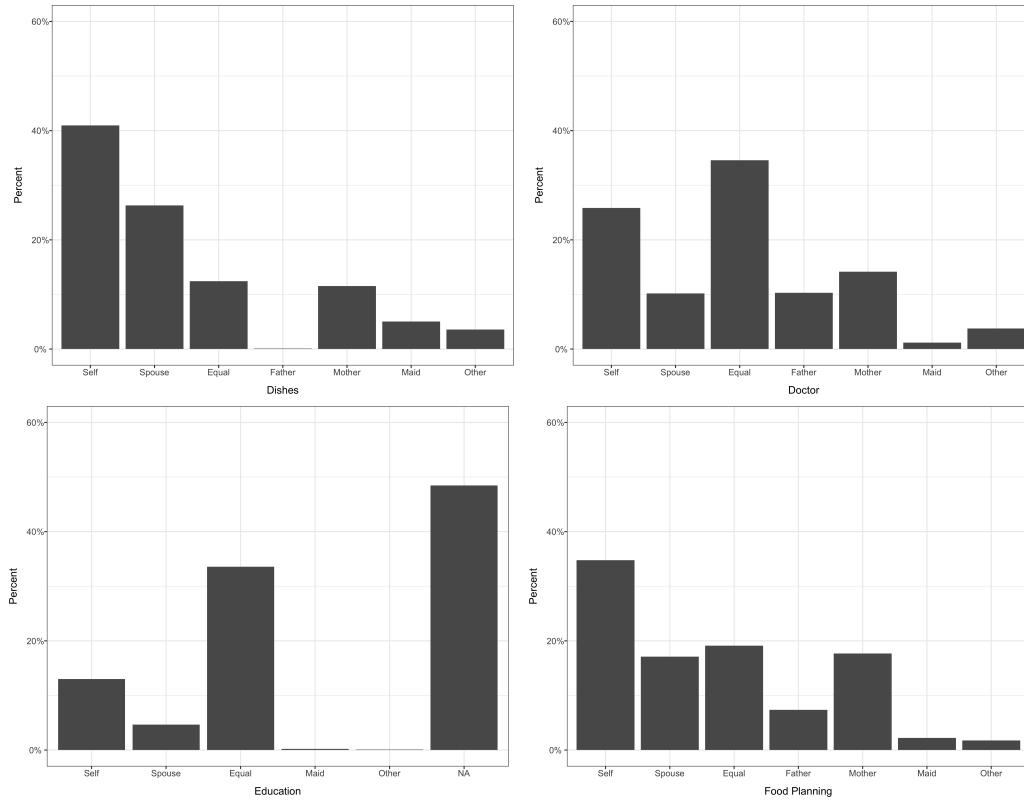
The figures in this section display the (unweighted) percentage of respondents who indicated, with respect to each household task, who was primarily responsible for that task in their home: themselves, their spouse, they and their spouse equally, their mother, their father, a maid or domestic servant, or someone else.

Figure 1: Task Responsibility Distributions (1)



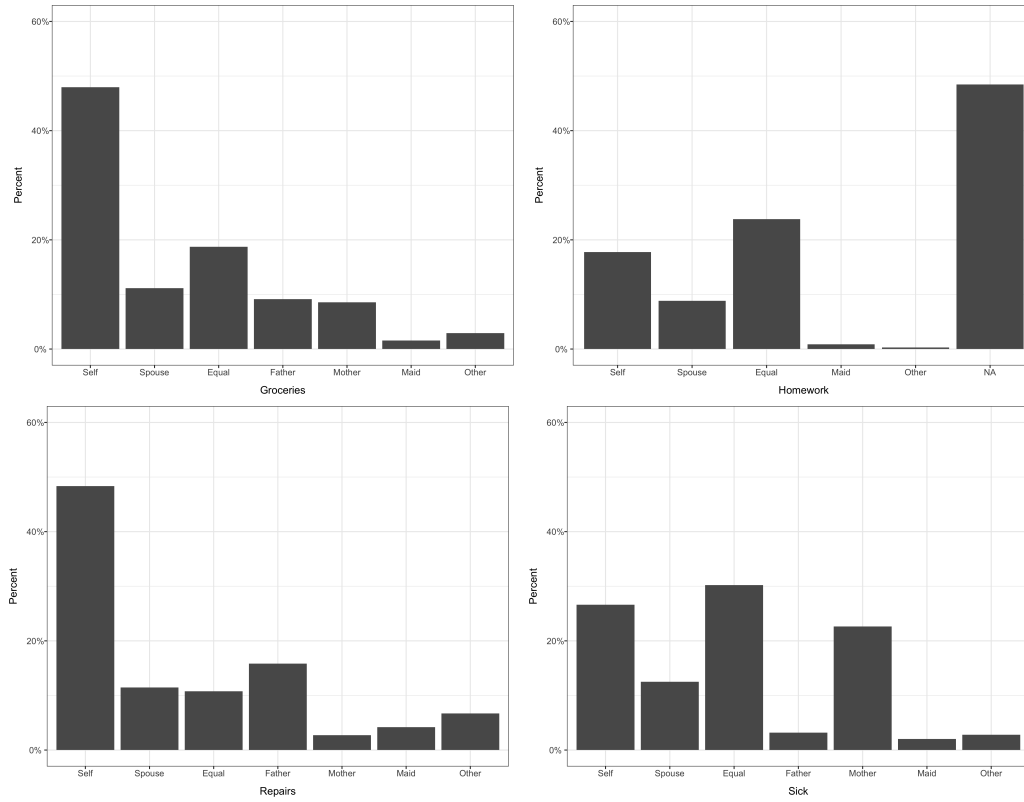
Note: The figure displays the distribution of responses for the following items: paying the bills (top left), making the family budget (top right), cleaning the house (middle left), planning clothing purchases (middle right), and cooking (bottom).

Figure 2: Task Responsibility Distributions (2)



Note: The figure displays the distribution of responses for the following items: doing the dishes (top left), deciding when to see a doctor (top right), researching options for children's education (only asked of married respondents) (bottom left), and planning food purchases (bottom right).

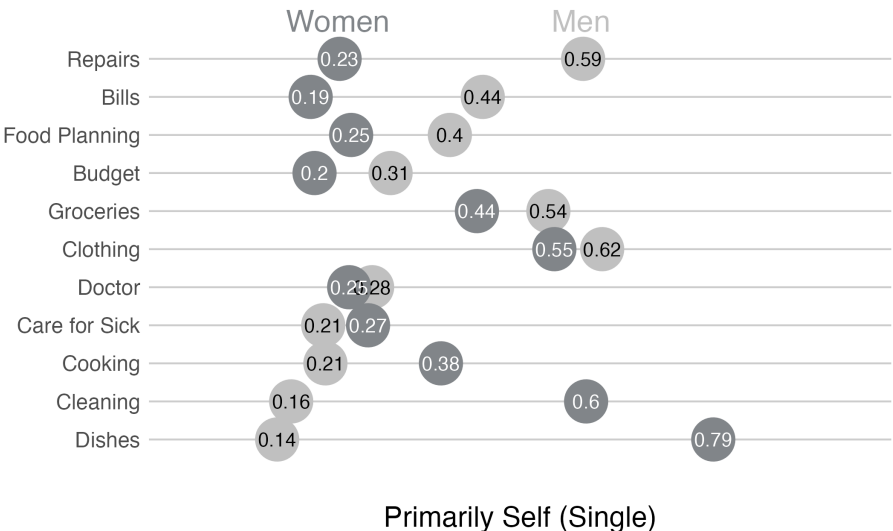
Figure 3: Task Responsibility Distributions (3)



Note: The figure displays the distribution of responses for the following items: shopping for groceries (top left), helping children with homework (only asked of married respondents) (top right), making small repairs around the house (bottom left), and caring for sick family members (bottom right).

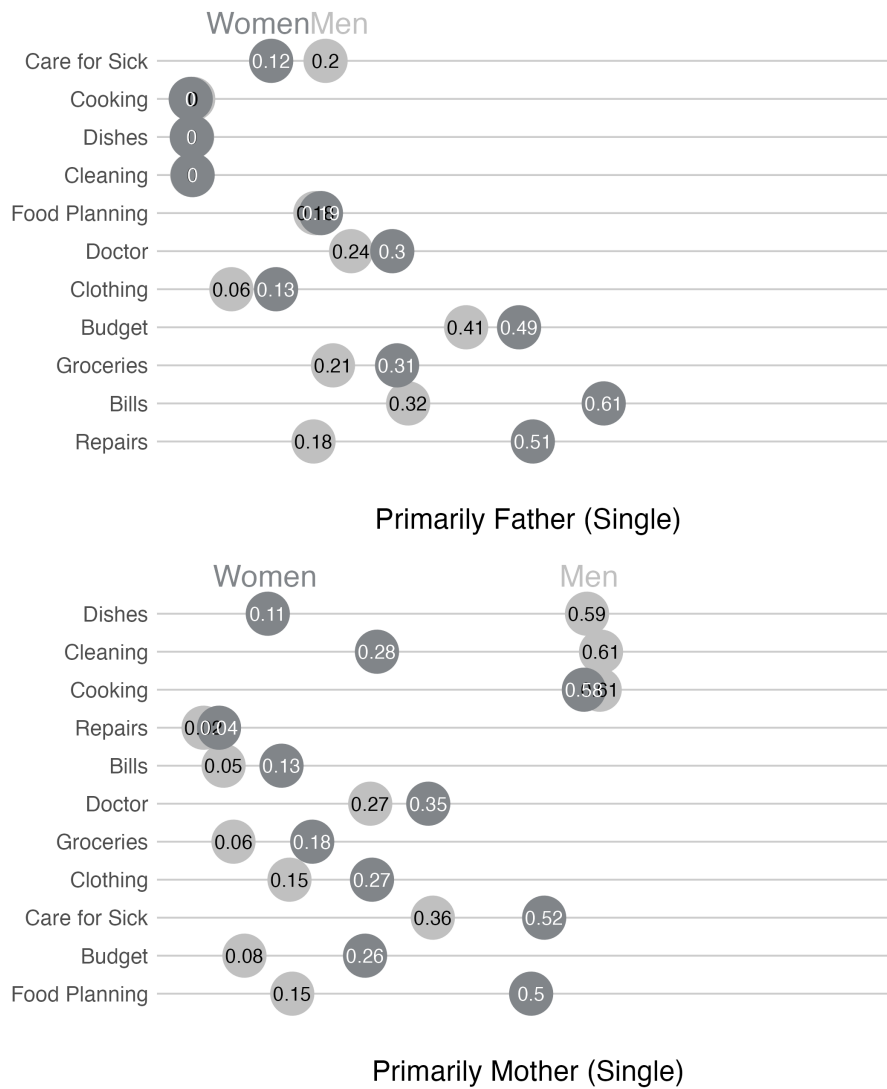
B.2 Single Respondents' Claims of Responsibility by Task

Figure 4: Single Respondents: Primary Responsibility for Tasks (Self)



Note: The figures compare the weighted proportion of male and female single respondents who indicated, for each task, whether they personally are usually responsible for the task.

Figure 5: Single Respondents: Primary Responsibility for Tasks (Parents)



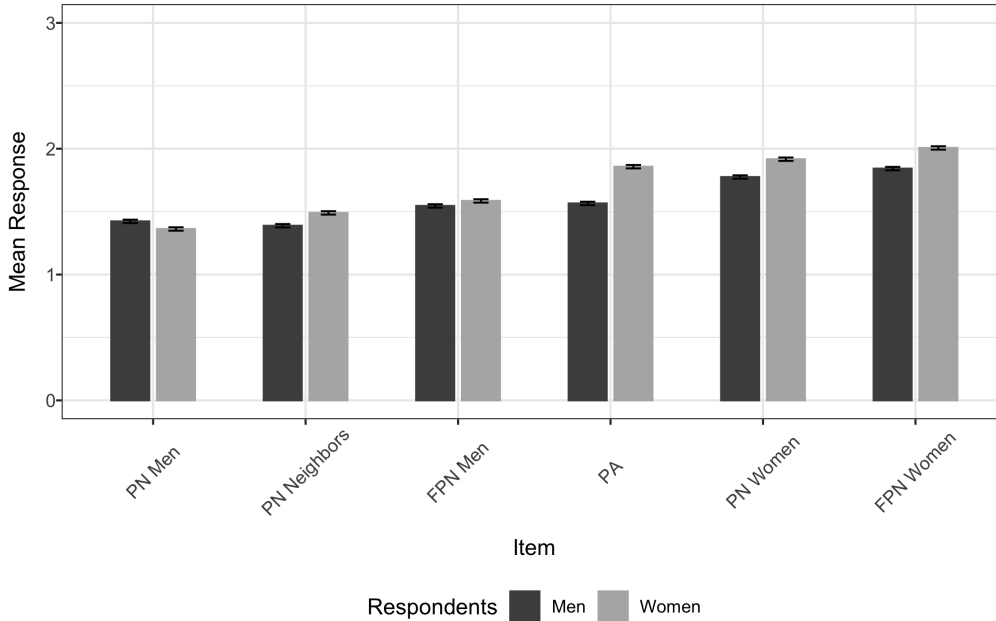
Note: The figures compare the weighted proportion of male and female single respondents who indicated, for each task, whether their father is usually responsible for the task (top panel) or their mother is usually responsible for the task (bottom panel).

C Attitudes and Perceived Norms

C.1 Attitudes Compared to Perceived Norms

Figure 6 shows the mean values of the personal attitudes score, current perceived norms scores with respect to men, women, and neighbors, and the future perceived norms scores with respect to men and women separately among male (dark bars) and female (light bars) respondents. Both male and female respondents tend to report expectations about future norms that are more equivalent to their own current personal attitudes than their perceptions of current norms are. Respondents believe that things are trending in an egalitarian direction. Both male and female respondents are more likely to expect a majority of women to hold egalitarian views five years from now than perceive women holding such views today. Similarly, all respondents are more likely to expect a majority of men to hold egalitarian views five years from now than perceive men holding such views today.

Figure 6: Attitudes, Current Perceived Norms, and Future Perceived Norms

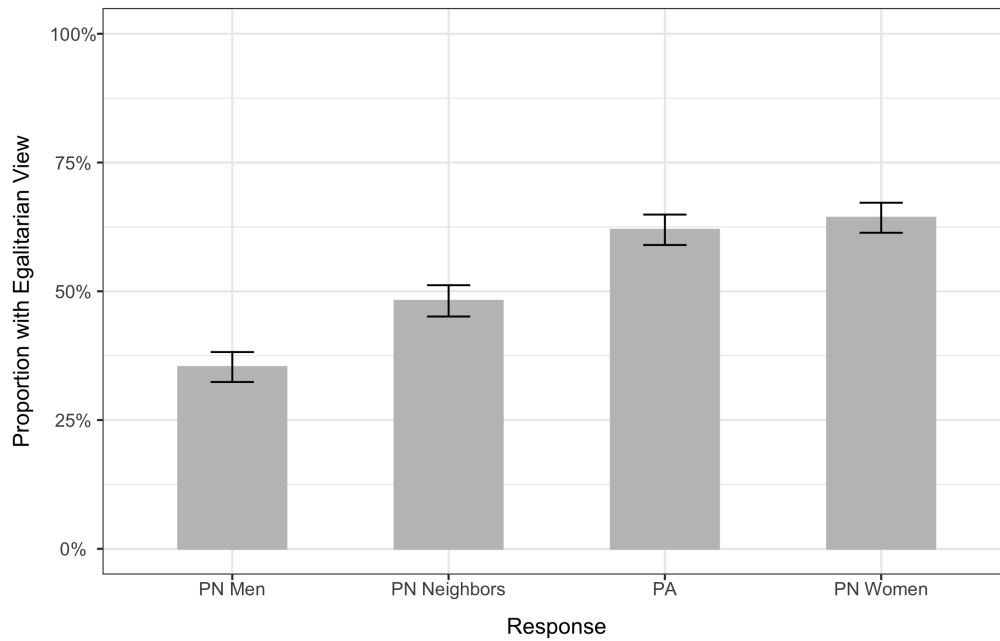


Note: The figure plots the average current perceived norm scores (with respect to men, women, and neighbors), current personal attitudes, and future perceived norm scores (with respect to men and women) for male and female respondents, respectively.

Figures 7 and 8 visualize the proportion of respondents who hold egalitarian attitudes (agreeing or strongly agreeing with egalitarian items, or disagreeing or strongly disagreeing with conservative items) on each issue and the proportion that perceive that most others hold egalitarian attitudes. Note that these comparisons give insight into respondents' optimism or pessimism about current norms vis-à-vis their own attitudes, not necessarily of their *(mis)perception* of aggregate norms, given the unrepresentative nature of the sample. Across all items, respondents' perceptions of what men believe are the most pessimistic and the most distant from

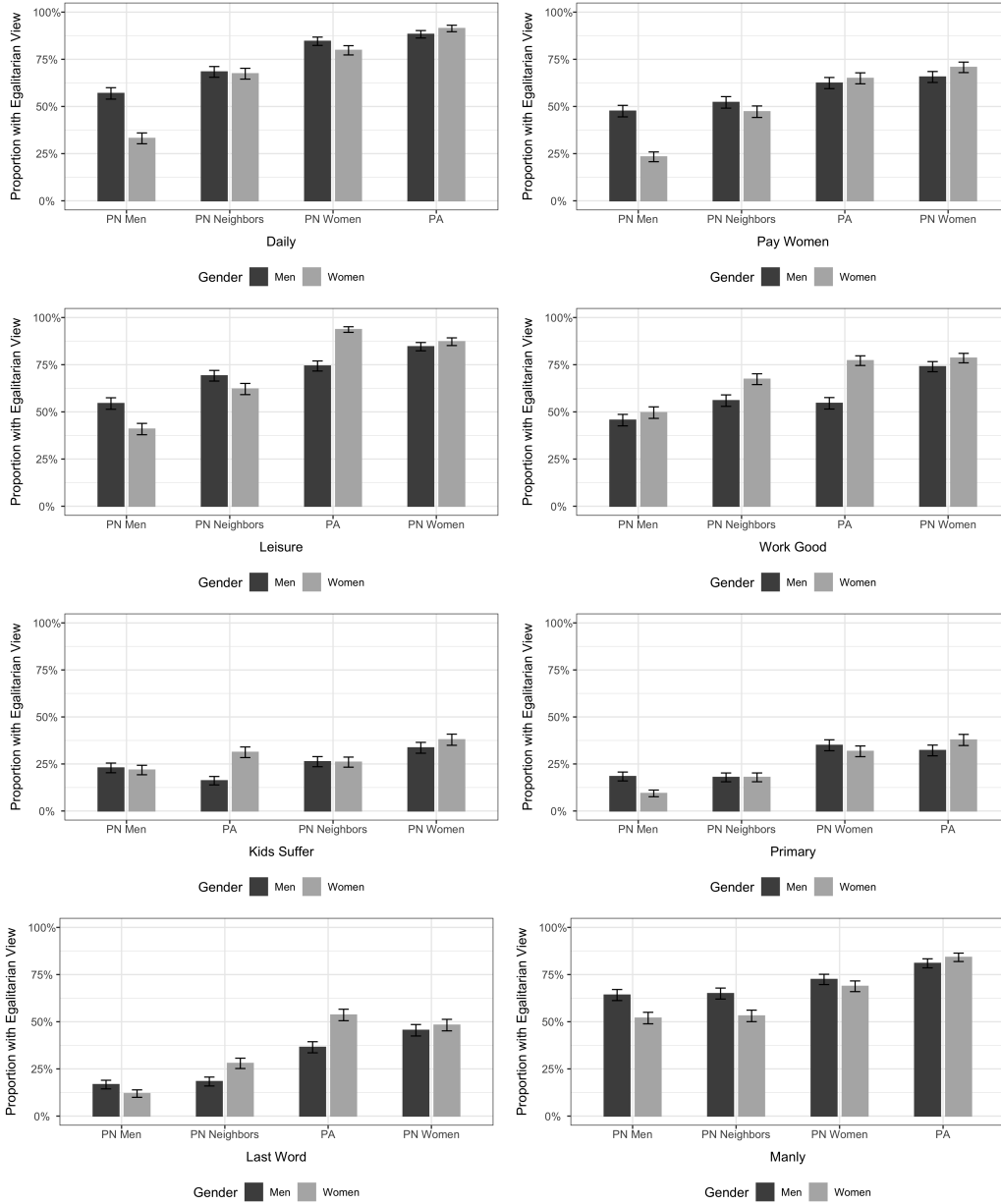
what they personally claim to believe. Conversely, whether respondents claim the most egalitarian attitudes or see women as a group as holding the most egalitarian attitudes varies across survey items. Perceptions of what neighbors believe always fall somewhere in the middle, but are typically more pessimistic than respondents' personal attitudes.

Figure 7: Average Attitudes and Perceived Norms (1)



Note: The figure plots the weighted percentage of respondents holding egalitarian personal attitudes (PA) or perceiving egalitarian attitudes in each reference group, averaged across survey items.

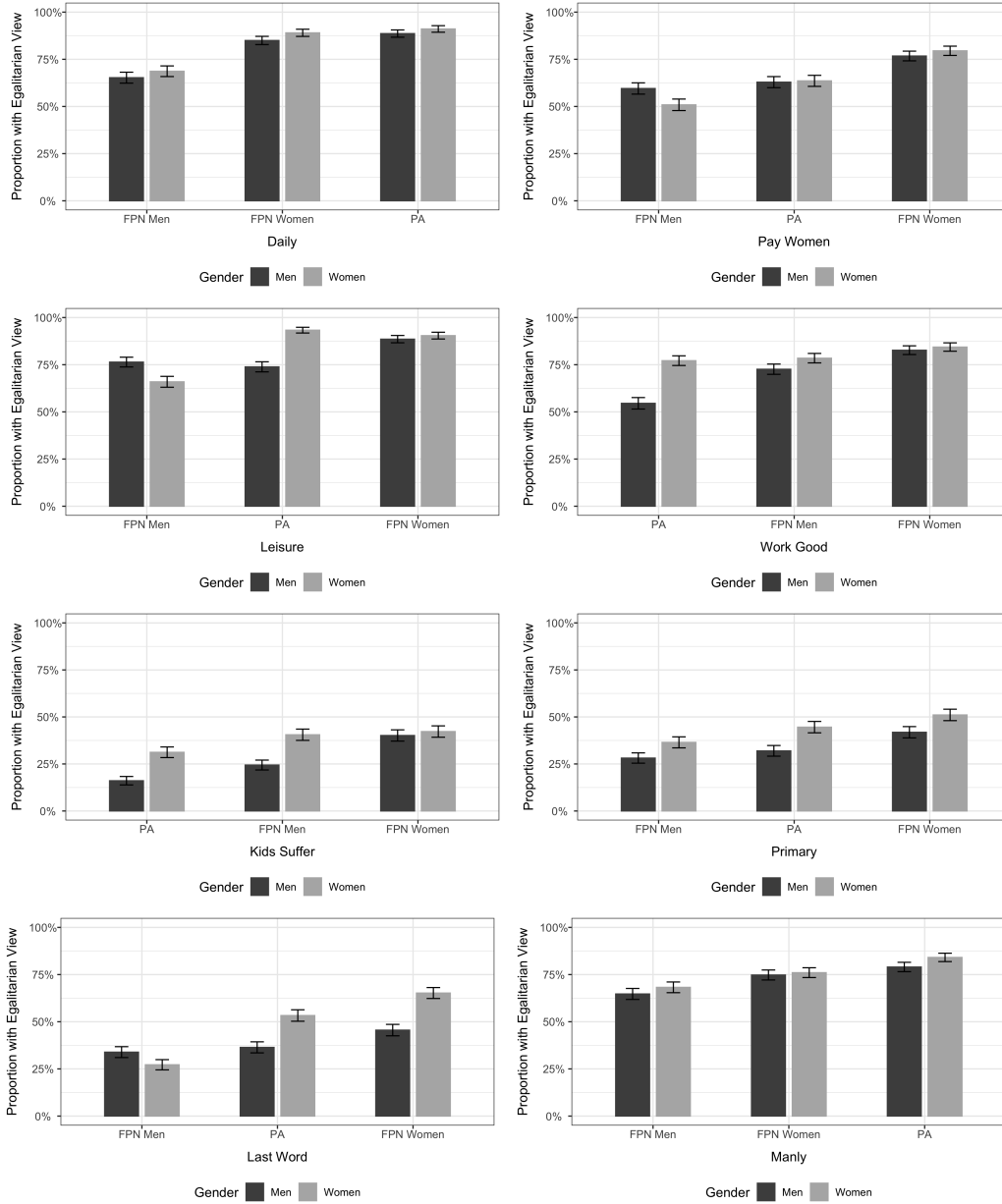
Figure 8: Average Attitudes and Perceived Norms (2)



Note: The figures plot the weighted percentage of male (darker bars) and female (lighter bars) respondents, respectively, holding or perceiving egalitarian attitudes in each reference group (men, women, and neighbors). Refer to the description of survey items in the main text of the paper for the full text of the survey items to which each plot refers.

Figure 9 compares personal attitudes and the average future perceived norm separately for each survey item and disaggregates the responses by respondent gender, presenting the proportion of respondents who hold (currently) or perceive a future majority holding (in five years) an egalitarian view on each item. The top four panels display the survey items that were phrased to support the egalitarian view, while the bottom four panels display the survey items that were phrased to support the conservative view.

Figure 9: Average Attitudes and Future Perceived Norms



Note: The figures plot the weighted percentage of male (darker bars) and female (lighter bars) respondents, respectively, holding or anticipating (in five years) egalitarian attitudes in each reference group. Refer to the description of survey items in the main text of the paper for the full text of the survey items to which each plot refers.

C.2 FHS, Attitudes, and Perceived Norms: Full Regression Results

The first table in this section provides full results of the regressions for which only relevant coefficients were shown in the main text Table 1. Table 3 provides results from models using the future perceived norms scores as predictors instead of the current perceived norms scores.

Table 2: Female Household Share, Attitudes, and Perceived Norms (Current)

	Attitudes	Pooled PN	PN Men	PN Women	PN Neighbors
FHS	−0.009 (0.075)	−0.128* (0.050)	−0.212** (0.066)	−0.052 (0.073)	−0.114 (0.082)
Male	−0.321*** (0.033)	−0.121*** (0.022)	0.028 (0.029)	−0.203*** (0.032)	−0.248*** (0.036)
Age Cat.	0.006 (0.012)	0.019* (0.008)	−0.002 (0.011)	0.026* (0.012)	0.051*** (0.014)
Urban	0.035 (0.037)	0.061* (0.025)	0.002 (0.032)	0.138*** (0.036)	0.015 (0.041)
Married	0.085 (0.055)	0.070+ (0.037)	−0.004 (0.048)	0.120* (0.053)	0.136* (0.060)
Has Children	0.008 (0.050)	0.000 (0.033)	0.059 (0.044)	−0.065 (0.048)	0.003 (0.054)
Education Cat.	0.177*** (0.018)	0.051*** (0.012)	0.002 (0.016)	0.127*** (0.017)	−0.008 (0.019)
Employed	−0.065* (0.028)	−0.012 (0.019)	0.007 (0.025)	−0.042 (0.027)	0.011 (0.031)
Religiosity	−0.005 (0.020)	−0.036** (0.013)	−0.017 (0.017)	−0.053** (0.019)	−0.038+ (0.022)
Subj. SES	0.020 (0.015)	0.033** (0.010)	0.067*** (0.013)	−0.006 (0.015)	0.048** (0.016)
Num.Obs.	888	888	888	888	888
R2	0.238	0.105	0.050	0.156	0.093
R2 Adj.	0.229	0.094	0.039	0.146	0.083
AIC	1406.2	692.9	1164.9	1341.7	1564.4
BIC	1463.7	750.4	1222.3	1399.2	1621.9
Log.Lik.	−691.107	−334.475	−570.438	−658.844	−770.210
F	27.330	10.256	4.611	16.153	9.016
RMSE	0.42	0.28	0.36	0.40	0.46

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: Female Household Share, Attitudes, and Perceived Norms (Future)

	Pooled FPN	FPN Men	FPN Women
FHS	−0.118+ (0.068)	−0.238** (0.082)	0.002 (0.087)
Male	−0.123*** (0.030)	−0.048 (0.036)	−0.199*** (0.038)
Age Cat.	0.001 (0.011)	−0.019 (0.013)	0.020 (0.014)
Urban	0.114*** (0.034)	0.107** (0.040)	0.122** (0.043)
Married	−0.023 (0.050)	−0.097 (0.060)	0.052 (0.064)
Has Children	0.023 (0.045)	0.116* (0.054)	−0.069 (0.058)
Education Cat.	0.096*** (0.016)	0.067*** (0.019)	0.124*** (0.021)
Employed	−0.022 (0.026)	−0.015 (0.031)	−0.029 (0.033)
Religiosity	−0.039* (0.018)	−0.028 (0.022)	−0.049* (0.023)
Subj. SES	0.008 (0.014)	0.030+ (0.016)	−0.015 (0.017)
Num.Obs.	888	888	888
R2	0.101	0.057	0.110
R2 Adj.	0.091	0.046	0.100
AIC	1233.8	1554.1	1668.8
BIC	1291.2	1611.6	1726.2
Log.Lik.	−604.881	−765.053	−822.389
F	9.904	5.275	10.843
RMSE	0.38	0.46	0.48

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

C.3 Outside Work Aspirations, Attitudes, and Perceived Norms: Full Regression Results

The tables in this section present the full results of the regression models for which abbreviated results were presented in the main text in Table 2. Table 4 presents the full results among female respondents (with the main predictor of interest being whether they would ideally work outside the home), and Table 5 presents the full results among male respondents (with the main predictor of interest being whether their wife would ideally work outside the home).

Table 4: Women’s Ideal Work Status, Attitudes, and Perceived Norms (Women)

	Attitudes	Pooled PN	Future PN
Ideal Work	0.397*** (0.034)	0.127*** (0.023)	0.181*** (0.032)
Age Cat.	−0.018 (0.015)	0.030** (0.010)	−0.017 (0.014)
Urban	−0.052 (0.041)	0.046+ (0.028)	−0.018 (0.039)
Married	0.052 (0.054)	0.004 (0.036)	−0.001 (0.051)
Has Children	−0.010 (0.051)	0.033 (0.034)	−0.020 (0.048)
Education Cat.	0.105*** (0.022)	0.012 (0.015)	0.078*** (0.021)
Employed	−0.010 (0.037)	−0.017 (0.025)	−0.030 (0.035)
Religiosity	−0.015 (0.024)	−0.039* (0.016)	−0.071** (0.023)
Subj. SES	0.034+ (0.018)	0.035** (0.012)	0.010 (0.017)
Num.Obs.	514	514	514
R2	0.304	0.119	0.128
R2 Adj.	0.292	0.104	0.113
AIC	736.0	320.3	674.8
BIC	782.6	367.0	721.4
Log.Lik.	−356.989	−149.157	−326.386
F	24.468	7.582	8.245
RMSE	0.41	0.27	0.39

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Women's Ideal Work Status, Attitudes, and Perceived Norms (Men)

	Attitudes	Pooled PN	Future PN
Ideal Work	0.084* (0.040)	0.095** (0.029)	0.160*** (0.037)
Age Cat.	0.041** (0.015)	0.015 (0.011)	0.003 (0.014)
Urban	-0.003 (0.054)	0.090* (0.039)	0.239*** (0.050)
Married	0.073 (0.065)	0.030 (0.047)	0.033 (0.060)
Has Children	0.031 (0.063)	0.020 (0.045)	0.020 (0.058)
Education Cat.	0.156*** (0.022)	0.065*** (0.016)	0.075*** (0.021)
Employed	-0.063+ (0.034)	0.001 (0.024)	0.022 (0.031)
Religiosity	-0.068** (0.026)	-0.042* (0.019)	-0.051* (0.024)
Subj. SES	-0.021 (0.018)	0.011 (0.013)	-0.011 (0.017)
Num.Obs.	524	524	524
R2	0.173	0.114	0.138
R2 Adj.	0.158	0.099	0.123
AIC	769.0	428.7	680.2
BIC	815.8	475.5	727.1
Log.Lik.	-373.485	-203.333	-329.117
F	11.910	7.365	9.157
RMSE	0.41	0.28	0.37

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

D Information Experiment

D.1 Information Treatments

Treatment 1: Men

Now you will read some information related to the questions you just answered.

The COVID-19 pandemic disrupted many patterns in Moroccan life. One of the consequences of the pandemic was an increase in the amount of time many Moroccan men spent contributing to household tasks and childcare as quarantines confined people inside, children stayed home from school, and opportunities to earn money outside the home declined. **44% of Moroccan men** reported they spent **more** time on at least one domestic activity as a result of the pandemic.

Treatment 2: General

Now you will read some information related to the questions you just answered.

The COVID-19 pandemic disrupted many patterns in Moroccan life. One of the consequences of the pandemic was an increase in the amount of time many Moroccans spent on household tasks and childcare as quarantines confined people inside, children stayed home from school, and opportunities to earn money outside the home declined. **48% of Moroccans** reported they spent **more** time on at least one domestic activity as a result of the pandemic.

Treatment 3: No Information

Respondents in this condition did not read any information.

D.2 Balance Table

Table 6 presents the mean values of the personal attitudes score (PA Score), pooled current perceived norms score (PN Score), and the standard covariates across the three treatment groups, along with a p-value from an ANOVA test for a difference in means across the three groups.

Table 6: Balance Table

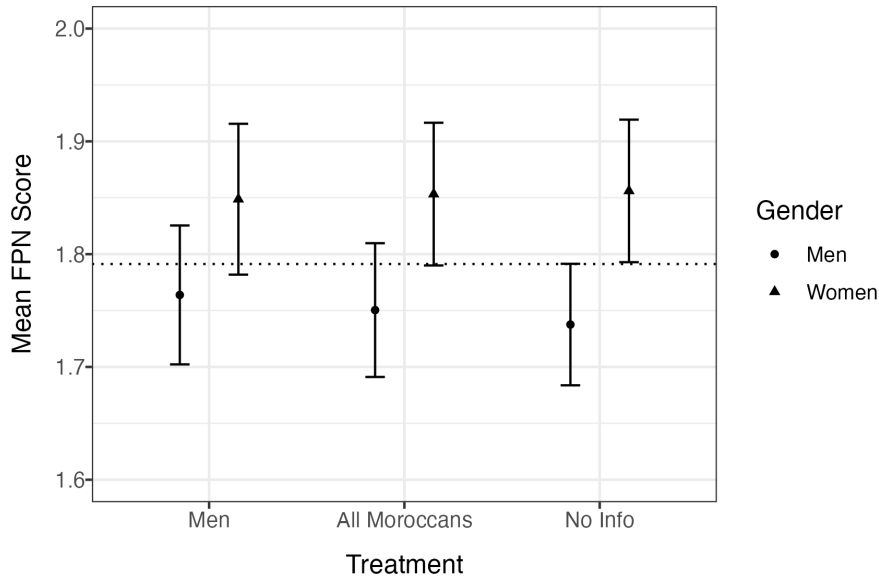
Variable	Group 1	Group 2	Group 3	p-value
PA Score	1.77	1.80	1.79	0.70
PN Score	1.59	1.60	1.61	0.29
Male	0.51	0.50	0.51	0.93
Age	36.08	35.89	36.65	0.56
Education	2.33	2.31	2.37	0.45
Employed	0.56	0.61	0.57	0.78
Urban	0.93	0.88	0.94	0.55
Married	0.54	0.53	0.58	0.22
Has Kids	0.50	0.49	0.54	0.28
Religiosity	2.18	2.21	2.22	0.37
Subj. SES	2.43	2.40	2.50	0.31

Note: The table presents the mean value of each covariate in each treatment group and the p-value from an Anova test for differences in means across groups where the null hypothesis is no difference in means.

D.3 Results with Restricted Sample

After reading their information, Groups 1 and 2 answered a brief attention check question asking whether the group about which they read had increased or decreased time spent on household labor. Respondents who answered incorrectly were reminded of the correct information, which also served to reinforce the treatment. 83% of respondents in Groups 1 and 2 answered correctly on the first attempt with no significant difference in this rate across groups. Those who did not answer correctly on the first attempt were reminded of the key information. Respondents in Group 3 were not asked the attention check question because they had not been provided any information. Figure 10 recreates Figure 5 from the main text using only respondents who passed the attention check question successfully on the first attempt.

Figure 10: Information Experiment Results



Note: The figure plots the average pooled future perceived norm (FPN) score for men and women, respectively, in each treatment group. Treatment 1 was the information about men, Treatment 2 the information about all Moroccans, and Treatment 3 was the no-information treatment. The black dotted line shows the overall mean FPN score. The figure displays results excluding respondents who failed the post-treatment attention check.

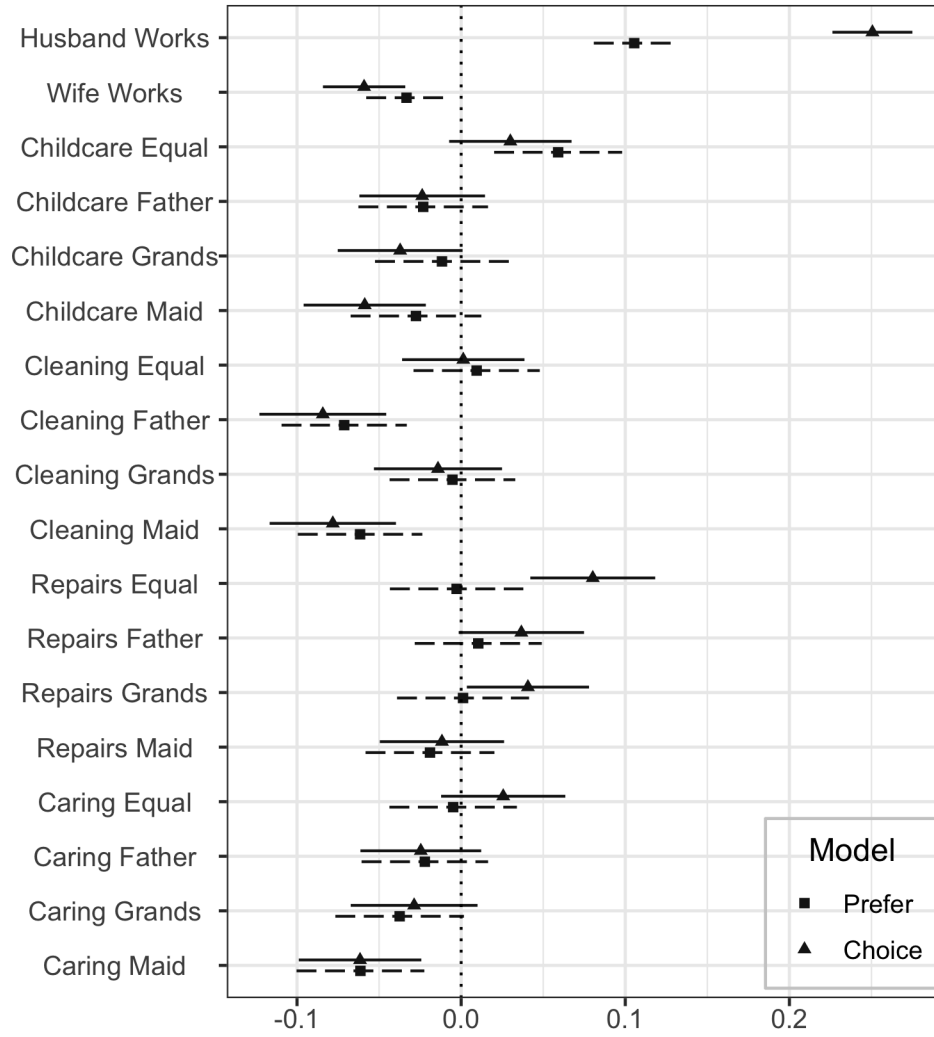
E Conjoint Experiment

Figure 11 displays the estimated Average Marginal Component Effects (AMCEs) with respect to two outcomes: first, the binary *choice* of one profile over another. This AMCE represents the percentage change in the likelihood that a respondent would select a profile with the given attribute level, compared to a profile in which the reference level of the attribute is present. The second outcome is the response to a question asking whether the respondent actually *preferred* the profile they selected, liked both profiles equally, or liked neither profile, transformed into a binary variable taking the value of 1 if the respondent actually preferred the profile. This AMCE represents the percentage change in a respondent’s likelihood of genuinely preferring the profile selected with a given attribute value present, compared to a profile in which the reference level of the attribute is present.² For the items about whether the husband and wife, respectively, work outside of the home, the reference category is that they do not work. For the other items, the reference category is that the mother has primary responsibility for that task.

A pre-registered power analysis of this experiment, following analysis proposed by (Stefanelli and Lukac, 2020) and employing their online power analysis Shiny app (Lukac and Stefanelli, 2020), showed that this design had sufficient power (0.8) to detect an average marginal component effect (AMCE) of 0.05 (or 5 percentage points), using a p-value of 0.05 as the critical value. The AMCE is an estimate of the effect of switching to a given value of an attribute on the likelihood of choosing that overall profile in the forced-choice design.

²For a discussion of the methodological rationale for including this question, refer to the pre-registration plan.

Figure 11: Labor Distribution Preferences: Conjoint Experiment AMCEs



Note: The figures plots the average marginal component effects (AMCEs) calculated for each attribute level. The triangles show the AMCEs for the binary choice of which profile is selected, and the squares show the AMCEs for the outcome of whether the respondent genuinely preferred the profile they selected. For the top two attributes, the AMCE for the husband or wife working outside the home, compared to the reference category of not working, is presented. For the other attributes, the mother being primarily responsible for the task is the reference category against which the AMCEs are calculated.

References

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