

Bridging the Gap: Misperceived gender norms and intra-household demand for flexibility at work in Colombia

Marie Boltz ^{*} Ana Maria Diaz [†] Luz Magdalena Salas[‡]

February 16, 2024

Preliminary version - please do not cite

Abstract

This paper examines the influence of gender norms on work-family balance and the gender gap in labor force participation, with a specific focus on the role of flexibility in working arrangements. We investigate how these norms are sustained within households and explore the decision-making process surrounding the willingness to accept flexible jobs. We propose a study design that combines survey data and a discrete choice experiment (DCE) to capture couples' beliefs and preferences regarding flexible working arrangements at the couple level. Our findings indicate a strong preference for hybrid work, with gender differences and variations influenced by factors such as childcare responsibilities, employment status, income, and pluralistic ignorance.

JEL Codes: J22, J31, J41, J51, J71

Keywords: Willingness to Pay, Flexible Work Arrangements, Discrete Choice Experiment, Latin America, Gender Differences, Work-Life Balance, Job Seekers, Male-Dominated Occupations, Demand for Flexibility, Women's Attitudes towards Workplace Flexibility.

^{*}Strasburg University, m.boltz@unistra.fr

[†]Pontificia Universidad Javeriana, Departamento de Economía, a.diaze@javeriana.edu.co

[‡]Pontificia Universidad Javeriana, Departamento de Economía, JPAL LAC invited researcher, salas.luz@javeriana.edu.co

1 Introduction

Gender norms refer to the concept of how men and women are expected to act and how they should behave in a given society. Recent literature has focused on the norm that a husband should be the main breadwinner in the household. In a cross-country analysis, (Bertrand et al., 2015) find that in couples where this norm is not met – women earning more than their male partners –, women do more unpaid domestic work, offer fewer hours of paid work, take lower-paying jobs, or even drop out of the labor force altogether to undergo such gender norms and identities. They refer to this process as “women, by adhering to gender norms, end up bringing the glass ceiling from their homes to the labor market”.

While previous research has identified the negative effects of gender norms on female labor force participation, less is known about how these norms are perpetuated within households and how they can be changed. This study aims to explore the role of flexibility in working arrangements as a potential driver of work-family balance and gender equality in the labor market. Specifically, we will investigate how the willingness to take flexible jobs is decided at the household level and driven by gender norms.

Gender specialization in domestic tasks could be driven by (i) gendered preferences for those tasks, (ii) gender roles dictated by social norms (Lundberg et al., 1993), or (iii) gender-stereotyped beliefs. In an experimental setting with French couples, (Couprie et al., 2020) find that couples make inefficient production decisions because of strong gender stereotypes. Indeed, informing couples about their individual respective productivity reduces deviations from the efficiency outcome.

Other studies argue that women’s labor market outcomes have a cultural component, which has been linked to the importance of gender norms (e.g., Aloud et al. (2020); Bertrand (2019); Bursztyn et al. (2020); Fernandez et al. (2004). In this literature, plural-

istic ignorance contributes to the low rate of female labor force participation in different countries. Pluralistic ignorance entails public support but private rejection — or public rejection but private support — of a perceived norm thought to be endorsed by others. Disapproval of women working outside the home may be a perceived norm that households assume most others support even though they themselves, privately, do not. In situations of pluralistic ignorance, individuals actively enforce norms they mistakenly believe to be widely held to avoid public censure.

Group identification lies at the heart of pluralistic ignorance (Prentice and Miller, 1993), whereas individuals often act out of the desire to be good group members, they often interpret similarly motivated behavior in others to be reflective of personal beliefs. However, social norms are malleable, suggesting some scope for economic policy to foster norms that are socially beneficial (Bartoš and Pertold-Gebicka, 2018; Bursztyn et al., 2020; Gauri et al., 2019; Smerdon et al., 2020). When strong feeling of group identity is paired with full information about the preferences of others, first and second-order beliefs align (Smerdon et al., 2020). In some contexts, men misperceive social norms on female labor force participation, since they expect more disapproval among their peers than is actually warranted. In this case, a simple information intervention reduces the misperception of social norms in Saudi Arabia and unfolds the potential to raise women's labor supply (Bursztyn et al., 2020).

Everyone — not just women or parents — desires work-family balance. But, people often behave in ways that are congruent with what they mistakenly believe to be the norm. Therefore, we want to explore whether couples may unintentionally perpetuate family-unfriendly workplace standards, by studying the role of flexibility in working arrangements since working time and workplace flexibility has been advocated as essential driver for improving work-life balance, especially for working parents (OECD, 2016). They are also key instruments for reducing the gender gap in both labor force par-

ticipation and earnings if used by both men and women (Bertrand, 2018; Goldin, 2014, 2015). However, part-time work is mostly used by women: it accounts for 25.4 percent of female employment in OECD countries vs. 9.6 of male employment – and comes at a price of reduced earnings. We still know little about how the willingness to take flexible jobs – i.e., in terms of working place and working schedule and time – for both men and women is decided at the household level and driven by gender norms. This project also aims at collecting beliefs on gender norms associated with flexibility in the job market for both spouses.

This paper aims to contribute to the existing literature by providing insights into how gender norms affect work-family balance and the gender gap in labor force participation, and by offering policy recommendations to promote more equitable outcomes in the labor market. To achieve this goal, we will use a combination of survey data and experimental methods to collect information on the beliefs and behaviors of couples regarding flexible working arrangements in Colombia.

Building on Bursztyn et al. (2020), we will study how gender norms, task sharing, and gender roles affect intra-household decisions about labor market participation and the likelihood for each spouse to accept more flexibility in their working conditions. Specifically, we will first elicit gender norms and study how the decisions vary according to gender. Then, we set up a discrete choice experiment (DCE) among job seekers living in couples to reveal their preferences for different degrees and forms of flexibility in the labor supply and labor market participation for both themselves and their spouse. The DCE consisted of nine different job offers, including options for full-time traditional on-site employment and hybrid employment with a combination of on-site (3 out of 5 days a week) and remote work (2 days a week). Participants' reservation wages were used to create the choice sets, ensuring the exercise was incentive-compatible. Each choice set presented two job options and an opt-out choice, with participants selecting their

preferred option in some sets and choosing the option they desire their partner should select in others. Random variations in the wage offered were introduced to estimate the willingness to pay for flexibility (WTP). To account for inattention, one scenario was repeated randomly among the eight presented, resulting in a total of nine choice sets per participant. The order of screens and job ad sequences were randomized to investigate potential participant inattention.

We find strong preference for hybrid work, indicated by highly significant positive coefficients in the estimation. This preference is observed for both individuals' own choices and choices made on behalf of their partners. There are evident gender differences. Wives show a stronger inclination than husbands towards maintaining control over their work environment, indicating a greater preference for flexibility. However, interesting disparities emerge when considering partners' working conditions. Husbands demonstrate a higher willingness to pay for their partners' flexibility compared to wives. The presence of young children and individuals requiring permanent care positively influences wives' WTP for a hybrid job. In contrast, husbands with children are less likely to make wage sacrifices, but they suggest that their wives should make greater sacrifices. Wives consistently exhibit a willingness to pay, regardless of their own employment status or if both spouses are employed. Employed wives express a desire for their partners to make wage sacrifices for flexibility, while unemployed wives show less concern in this regard. Husbands' willingness to pay remains relatively consistent across different employment statuses. Income strata do not significantly affect WTP. Wives' willingness to pay remains consistent regardless of differences in their reservation wage compared to their husbands. However, husbands exhibit a willingness to make wage sacrifices regardless of their wives' reservation wage. Finally, there is evidence of the influence of social norms on WTP. When wives hold inaccurate beliefs about their husband's conservative attitudes (pluralistic ignorance), they express a greater desire to make wage

sacrifices. Husbands' WTP remains unaffected by their wives' pluralistic ignorance.

The remainder of the paper is structured as follows. Section 2 outlines the study design, including the creation of hypothetical job postings and the measurement of pluralistic ignorance. In Section 3, we present the sample characteristics and provide descriptive statistics. Section 4 introduces the empirical methodology based on the discrete choice experiment (DCE) and presents the results, including the estimation of willingness to pay for flexible work arrangements and an analysis of heterogeneity. Lastly, Section 5 offers concluding remarks.

2 Empirical Design and Data

Data collection

We conducted a baseline survey with 410 couples in Bogota, interviewing both partners. The survey has two primary objectives: (1) the measure of social norms about female labor participation and the identification of potential pluralistic ignorance – i.e., a misperception about social norms; (2) the measure of the willingness-to-pay for flexibility in labour arrangements for each spouse of the couples. The originality of this paper precisely relies on the combination of these two measures.

Concerning social norms, the survey was built to identify to key measures: (1) to measure the first-order beliefs about female labor participation for both husbands and wives, and (2) to measure the second-order beliefs of each spouse, which refers to their expectations regarding how other people, such as their spouse or neighbors, adhere to social gendered norms.

Using these two measures, we built two main measures of pluralistic ignorance, one for husbands and one for neighbors. First, we measure the difference between the first-

order beliefs of the husband with the second-order beliefs as stated by the wife about the husband. Second, we aggregate the first-order beliefs at the neighborhood level of our sample and compute the difference between the first-order beliefs at the neighborhood level and the second-order beliefs of each spouse about their neighbors. Hence, we are able to investigate whether women expect their spouses and neighbors to hold more conservative views towards female labor force participation and certain forms of flexibility than they actually do. Through this analysis, we aim to gain a deeper understanding about how social norms influence intra-household decisions about labor market participation and the take-up of flexible working arrangements, and how these norms can change through policy interventions.

Concerning the second objective of the survey, participants were presented with a discrete choice experiment (DCE) to examine their job preferences regarding flexibility among potential job candidates. The experiment included nine different job offers, such as full-time employment with traditional on-site hours and hybrid employment, which combined on-site and remote work. Although the offers presented in the choice sets were hypothetical, participants' reservation wages were used as input for creating the choice sets. To ensure the exercise was incentive-compatible, we informed participants during the consent process that we would be hiring six individuals for a one-month employment opportunity at the university, and that their responses would significantly impact the decision-making process.

Each choice set in the survey contained two job offer options and a opt-out option. Participants were asked to choose which option aligned most closely with their job preferences in half of the options, and for the other half, to select which option they would like their partner to choose. Table 1 presents an example of the first four screens, where participants were asked to choose their own job, conditional on their spouse working full-time (first two screens) and in a hybrid work situation (third and fourth screens).

Table 2 displays an example of the last four screens, where participants were asked to select the job they would like their partner choose, conditional on their own full-time work (first two screens) and in a hybrid work situation (third and fourth screens). To estimate the willingness to pay for flexibility, we varied randomly both δ_1 and δ_2 using four different ranges: 0-5 percent, 6-10 percent, 11-15 percent, and 16-20 percent.

One of the eight scenarios was randomly presented again to account for inattention, resulting in each participant receiving a total of nine choice sets. Additionally, the order of the screens and the sequence of the job ads were randomized to further investigate potential inattention among participants.

Sample description: descriptive statistics

In Tables 3 and 4 we present descriptive statistics of our sample, which is representative of the three lower socioeconomic strata.¹ Our data reveals that a majority of couples (85%) have at least one child, half of them with a child below 5 years old. On average, households consist of 5 members. In terms of educational attainment, 20% of the women from our sample reached only primary school, while 41% pursued higher education. Interestingly, the mothers of these women exhibit lower education attainment: 20% had no education, 36% completed primary education, while only 13% entered into higher education.

Examining the descriptive statistics in Table 4, we observe that the average age of wives is 36 years, while husbands are approximately three years older. In terms of employment status, 30% of women are employed and 27% work as independent workers, while nearly 19% are unemployed and 21% identify as housewives. In contrast, almost

¹Socioeconomic stratification is a classification system for residential properties receiving public services. It primarily establishes differential utility rates for public services, enabling the allocation of subsidies and collection of contributions. Lower strata correspond to less favorable socioeconomic conditions.

Table 1. Own decision set with partner’s framing

	Offer 1	Offer 2
Framing	Suppose that your partner has a full-time job with an on-site schedule (from 8 am to 5 pm, from Monday to Friday), and he/she has to commute to the workplace every day. If you were looking for a job, which of the following job offers would you prefer for you?	
Screen 1	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_1$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X
Screen 2	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_2$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X
Framing	Suppose that your partner has a full-time job (40 hours weekly) in a combined modality, he/she works some days from home and other days has to commute to the workplace. If you were looking for a job, which of the following job offers options would you prefer for you?	
Screen 3	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_1$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X
Screen 4	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_2$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X

90% of men are currently employed, with half working as employees and the other half as independent workers. Additionally, 9% of men are unemployed, while very few

Table 2. Partner’s decision set with own’s situation framing

	Offer 1	Offer 2
Framing	Suppose that you have a full-time job with an on-site schedule (from 8 am to 5 pm, from Monday to Friday), and you have to commute to the workplace every day. If your partner were looking for a job, which of the following job offers would you prefer for him/her ?	
Screen 5	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_1$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X
Screen 6	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_2$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X
Framing	Suppose that you have a full-time job (40 hours weekly) in a combined modality, you work some days from home and other days has to commute to the workplace. If your partner were looking for a job, which of the following job offers options would you prefer for him/her?	
Screen 7	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_1$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X
Screen 8	A University is seeking a person for temporary full-time employment (40 hours weekly) in a combined modality: 3 days on-site (from 8 am to 5 pm) and 2 days remote (out of the university) that you can choose. The salary is $Xx\delta_2$	A University is seeking a person for temporary full-time employment (40 hours weekly) in an on-site modality: you must attend the university from Monday to Friday, from 8 am to 5 pm. The salary is X

assume the role of stay-at-home caregivers for children or relatives requiring permanent care.

Table 3. Descriptive statistics at the household level

Variable	N	Mean (SE)
<i>Demographics</i>		
Strata 1	410	0.595 (0.024)
Any child	410	0.851 (0.018)
below 5 yrs old	349	0.476 (0.035)
below 6 months	138	0.101 (0.028)
Number of children	349	2.189 (0.062)
Household size	410	4.949 (0.074)
Any dependent hh member	410	0.324 (0.023)
<i>Wife's Education</i>		
Primary or below	410	0.198 (0.020)
Secondary	410	0.390 (0.024)
Higher	410	0.412 (0.024)
<i>Wife's Mother's Education</i>		
No education	410	0.220 (0.020)
Primary	410	0.361 (0.024)
Secondary	410	0.239 (0.021)
Higher	410	0.132 (0.017)
Missing	410	0.049 (0.011)

Source: Data provided by the authors.

Table 4. Descriptive statistics at the individual level

Variable	(1)		(2)		(3)		T-test
	N	Wife Mean/SE	N	Husband Mean/SE	N	Total Mean/SE	Difference (1)-(2)
Age - in years	410	36.602 (0.569)	410	39.400 (0.575)	820	38.001 (0.407)	-2.798***
<i>Current employment status</i>							
Employed	407	0.300 (0.023)	410	0.454 (0.025)	817	0.377 (0.017)	-0.154***
Independent worker	407	0.273 (0.022)	410	0.439 (0.025)	817	0.356 (0.017)	-0.166***
Unemployed	410	0.188 (0.019)	410	0.093 (0.014)	820	0.140 (0.012)	0.095***
Student	410	0.032 (0.009)	410	0.012 (0.005)	820	0.022 (0.005)	0.020*
House-wife/-husband	407	0.206 (0.020)	410	0.002 (0.002)	817	0.104 (0.011)	0.204***

Notes: The value displayed for t-tests are the differences in the means across the groups. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

Eliciting social norms about female labor participation

In Table 5, we investigate the differences in the first-order beliefs between wives and husbands within our sample. The final column of the table displays the t-test for the

mean differences, which incorporates household fixed effects. Our findings indicate that husbands consistently exhibit more conservative attitudes than their wives across all domains explored in the survey. Specifically, husbands are more likely than wives to believe that it is inappropriate for both single and married women to work late into the night, as well as for married women or mothers to work outside of the home. Although the mean differences are not statistically significant for the rest of the questions asked, the direction of the discrepancy also reflects that men generally maintain more conservative viewpoints compared to their wives.

Our primary focus lies in examining women's first and second-order beliefs about their husbands' and neighbors' perceptions of gender norms. Tables 6 and 7 investigate the possibility of pluralistic ignorance, in which women may erroneously over- or underestimate the conservatism of their husbands or neighbors. This could have significant implications, particularly if women overestimate conservatism, as it may subsequently influence their labor market participation decisions.

We find evidence of pluralistic ignorance even among couples who cohabit daily, particularly in regard to beliefs about single women working outside their homes, married women working from home, or married women engaging in hybrid work arrangements (see Table 6). In other cases, the direction of the discrepancy between first and second-order beliefs is consistent but not statistically significant. The discrepancy in beliefs implies that women may incorrectly assess their husbands' beliefs concerning outcomes related to their own labor market participation, particularly in relation to various forms of labor market flexibility. This finding is particularly noteworthy, given the increasing popularity of alternative work arrangements. Nonetheless, women generally anticipate their husbands' beliefs accurately, which supports the validity of our measurement of spouses' beliefs.

Table 7 examines the correlation between wives' labor market outcomes and their

Table 5. Gender differences in first-order beliefs (percentage)

Variable	(1) Wife's belief		(2) Husband's belief		(3) Total		T-test Difference (1)-(2)
	N	Mean/SE	N	Mean/SE	N	Mean/SE	
W working = hh in fin. needs	410	0.388 (0.024)	410	0.376 (0.024)	820	0.382 (0.017)	0.012
<i>Is it wrong for...</i>							
<i>A single woman to work:</i>							
from home	410	0.037 (0.009)	409	0.059 (0.012)	819	0.048 (0.007)	-0.022
outside home	410	0.046 (0.010)	410	0.061 (0.012)	820	0.054 (0.008)	-0.015
hybrid	410	0.071 (0.013)	410	0.093 (0.014)	820	0.082 (0.010)	-0.022
late	410	0.268 (0.022)	410	0.329 (0.023)	820	0.299 (0.016)	-0.061*
<i>A married woman to work:</i>							
from home	410	0.029 (0.008)	410	0.044 (0.010)	820	0.037 (0.007)	-0.015
outside home	410	0.041 (0.010)	410	0.088 (0.014)	820	0.065 (0.009)	-0.046***
hybrid	410	0.059 (0.012)	409	0.066 (0.012)	819	0.062 (0.008)	-0.007
late	410	0.324 (0.023)	409	0.406 (0.024)	819	0.365 (0.017)	-0.081**
<i>A mother to work outside home</i>	410	0.217 (0.020)	410	0.280 (0.022)	820	0.249 (0.015)	-0.063**

Notes: The value displayed for t-tests are the differences in the means across the groups. Fixed effects using variable hh_id2 are included in all estimation regressions. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

second-order beliefs about their husbands' beliefs. The findings indicate that when wives perceive their husbands as disapproving of women with children under five years old working outside the home, the probability of being employed decreases by approximately 12 percentage points. This belief is also positively correlated with unemployment and inactivity, although these associations are not statistically significant. Furthermore,

Table 6. Pluralistic Ignorance test: Wife 2nd order beliefs about Husband's beliefs vs Husband's 1st-order beliefs

Variables	Wife's 2 nd order belief N	(1) Mean/SE	Husband's 1 st order belief N	(2) Mean/SE	N	(3) Total Mean/SE	T-test Difference (1)-(2)
W work = hh in needs	408	0.346 (0.024)	410	0.376 (0.024)	818	0.361 (0.017)	-0.030
<i>Is it wrong that a...</i>							
Single W work home	409	0.076 (0.013)	409	0.059 (0.012)	818	0.067 (0.009)	0.017
Single W work outside	409	0.108 (0.015)	410	0.061 (0.012)	819	0.084 (0.010)	0.047***
Single W work hybrid	409	0.090 (0.014)	410	0.093 (0.014)	819	0.092 (0.010)	-0.002
Single W work late	409	0.350 (0.024)	410	0.329 (0.023)	819	0.339 (0.017)	0.020
Married W work home	409	0.078 (0.013)	410	0.044 (0.010)	819	0.061 (0.008)	0.034**
Married W work outside	409	0.115 (0.016)	410	0.088 (0.014)	819	0.101 (0.011)	0.027
Married W work hybrid	409	0.130 (0.017)	409	0.066 (0.012)	818	0.098 (0.010)	0.064***
Married W work Late	409	0.418 (0.024)	409	0.406 (0.024)	818	0.412 (0.017)	0.012
Mom work outside	408	0.284 (0.022)	410	0.280 (0.022)	818	0.282 (0.016)	0.004

Notes: The value displayed for t-tests are the differences in the means across the groups. Fixed effects using variable hh_id2 are included in all estimation regressions. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

if a wife believes her husband disapproves of a married woman working late hours, this belief is negatively correlated with unemployment and positively correlated with inactivity. The other examined beliefs do not exhibit significant correlations with labor market outcomes.

As for women's expectations about their neighbors' views on female labor force participation, we observe that women's beliefs about their neighbors are consistently more

Table 7. Correlation between labor market outcomes and wife’s second-order beliefs about husband’s beliefs

	Employment	Unemployment	Inactivity
Your partner believes that it is wrong for a:			
Woman with child (under 5) to work outside home	-.121* (.067)	.044 (.055)	.088 (.062)
Married woman to work late hours	.001 (.056)	-.099** (.041)	.095* (.050)
Married woman to work hybrid	-.041 (.095)	.070 (.080)	-.061 (.081)
Married woman to work outside home	-.012 (.102)	.002 (.080)	.023 (.090)
Married woman to work from home	-.051 (.113)	-.038 (.086)	.105 (.102)
Working woman’s relationship with child	.084 (.072)	-.038 (.060)	-.040 (.064)
Additional controls:			
Any dependent in the household	-.040 (.053)	.008 (.042)	.031 (.046)
Education: Secondary	-.063 (.071)	.057 (.058)	-.005 (.064)
Education: Tertiary	.178** (.070)	-.083 (.052)	-.098 (.062)
Low Income	.004 (.050)	.033 (.039)	-.041 (.044)
Constant	.559*** (.076)	.208*** (.058)	.233*** (.069)
N	407	407	407

Note: Robust standard errors in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

conservative than the neighbors’ actual beliefs. Women’s second-order beliefs about their neighbors are overestimated in comparison to the neighbors’ true, first-order beliefs. This indicates that neighbors are significantly less conservative than what women in our sampled couples anticipate. While not presented here for the sake of brevity, husbands exhibit a similar pattern towards neighbors. The only ambiguous variable concerns opinions on whether it is wrong for single or married women to work late, as neighbors’ actual beliefs are less conservative than what women expect them to think (see Table 8).

Table 8. Pluralistic Ignorance test: Women’s 2nd order beliefs about Neighbors’ beliefs vs Neighbors’ 1st-order beliefs

	Women’s 2 nd order beliefs about neighbors	Neighbors’ 1 nd order own beliefs	Diff	pvalue
Women working = Financial needs	38.85	38.21	-0.64	0.7236
<i>Is it wrong that a...</i>				
Single women work home	31.09	4.79	-26.30	0.0000
Single women work outside	17.91	5.41	-12.50	0.0000
Single women work hybrid	19.73	8.12	-11.61	0.0000
Single women work late	18.67	29.85	11.17	0.0000
Married women work home	16.27	3.69	-12.57	0.0000
Married women work outside	18.06	6.51	-11.55	0.0000
Married women work hybrid	18.18	6.15	-12.03	0.0000
Married women work late	24.30	36.67	12.37	0.0000
Mother work outside	44.28	25.08	-19.20	0.0000

The Discret Choice Experiment: empirical methodology

This design allows us to quantify participants’ willingness to pay (or sacrifice) in terms of salary for hybrid employment. Our data consists of a panel of eighteen job postings for each individual. For each posting, we have information about the salary offered, the type of employment (either onsite non-flexible - the baseline - or hybrid), and the position of the posting on the screen (left or right). Additionally, we recorded the job posting that participants preferred.

Our underlying model posits that the utility participant i derives from a job j presented on screen s is given by

$$U_{ijs} = \alpha_0 + \alpha_1 X_{1,ijs} + \alpha_C C_j + \mu_{is} + \varepsilon_{ijs}$$

where X_1 represents the amenities (hybrid work) of job j , C_j is the cost of the alternative, μ_i represents elements constant about individual i , and ε_{ijs} is an error term. A job j is selected if $U_{ijs} > U_{iks}$ for all other k employment options available on the same screen.

Let Y_{ijs} be a dummy variable indicating that option j was selected by individual i in screen s . The estimation we can perform is:

$$Pr(Y_{ijs} = 1) = Pr(\text{Max}(U_{i1s}, U_{i2s}) = U_{ijs})$$

We estimate the parameters α using a conditional logit model. We allow for the errors to be correlated within the pair screen-individual. Using these coefficients, we estimate the willingness to pay for job attribute X_k with the following equivalence:

$$WTP(X_k) = -\frac{\frac{\partial U}{\partial X_k}}{\frac{\partial U}{\partial C_j}} = -\frac{\alpha_k}{\alpha_c}$$

We will utilize the point estimates of α to ascertain the willingness to pay (WTP) for hybrid work arrangements. To accommodate the uncertainty in parameter estimation, we will compute confidence intervals using the delta-method. We aim to estimate four distinct measures of WTP. The first two measures gauge the participant's WTP for their own flexibility in two different scenarios: one in which their partner holds a full-time, exclusively on-site job, and the other in which their partner is engaged in a full-time hybrid job. These will be referred to as treatment 1 and treatment 2, respectively. The remaining two measures focus on the participant's perception of how much their partner should be willing to sacrifice in terms of salary for the sake of job flexibility, again under two conditions: when the participant themselves is committed to a full-time on-site job, and when they are in a hybrid job role. These will be referred to as treatment 3 and treatment 4, respectively.

3 Results

3.1 Average willingness to pay

The findings from our primary estimation are summarized in Table 9, with the first column representing the full sample and subsequent columns providing a gender-based breakdown. Across the entire sample, there is a pronounced preference for hybrid work, indicated by highly statistically significant positive coefficients, regardless of whether the choice is made for oneself or on behalf of a partner. This trend is evident in both genders when analyzed separately, yet we observe that wives display a stronger predilection than husbands for maintaining control over their work environment. However, interesting disparities emerge when preferences are solicited regarding their partners' working conditions. We observe a significant gender contrast in the willingness to pay (WTP) for partner flexibility; husbands demonstrate a higher WTP for their partners than wives, suggesting nuanced interplay of gender roles and personal preferences in workplace flexibility.

Upon converting these values into a measure of willingness to pay (WTP) by calculating the ratio between the coefficients of each treatment and the cost coefficient, the results reveal pronounced disparities. When considering self-perceived WTP, women appear willing to forego up to 19 percent of their reservation wage, about USD \$ 72, in exchange for a hybrid work arrangement. In stark contrast, men would only be willing to sacrifice approximately 4 percent of their reservation wage for the same flexibility. These differences become even more striking when evaluating the perspectives individuals hold concerning their partners' sacrifices for workplace flexibility. Women perceive that their male partners should not need to relinquish any wage for a flexible work arrangement. Conversely, men believe their female partners should be prepared

Table 9. Conditional Logit Coefficients for Chosen Jobs

	Total	Wife	Husband
Monthly Cost (Δ)	-4.450*** (.350)	-4.725*** (.500)	-4.355*** (.500)
T1: Own's Decision Hybrid (Partner: In-Office)	.429*** (.062)	.705*** (.089)	.173* (.088)
T2: Own's Decision Hybrid (Partner: Hybrid)	.519*** (.062)	.866*** (.090)	.196** (.087)
T3: Partner Decision Hybrid (Own: In-Office)	.528*** (.062)	.127 (.087)	.951*** (.090)
T4: Partner Decision Hybrid (Own: Hybrid)	.583*** (.063)	.245*** (.089)	.944*** (.091)
N	14564	7264	7300

Notes: This table reports the results of the conditional logit model, where the dependent variable is a binary variable Y_{ijs} indicating whether option j was selected by participant i in screen s . The model includes contract characteristics and monthly cost (in terms of delta) as independent variables. Standard errors are clustered within screen-by-participant and presented in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

to sacrifice more than 20 percent, about USD \$ 212, of their wage to secure such a job. These divergent perceptions might underscore the gender dynamics at play in household decisions.

In exercises of this nature, a prevalent concern is that participant responses may be random, potentially generating noise instead of reflecting authentic preferences. To mitigate this issue, we adopt the methodology proposed by (Bustelo et al., 2023). This involves restricting the sample to participants who consistently select the same option when presented with identical job postings. This approach facilitates a comparative analysis between the results derived from our original estimation and those generated by this constrained sample.

Our analysis identified 105 participants, constituting 13 percent of the sample, who were inattentive. We then proceeded to explore the WTP for the remaining 87 percent,

Table 10. Willingness to Pay in percentage

	Total	Wife	Husband
T1: Own's Decision Hybrid (Partner: In-Office)	0.096**	0.149**	0.040**
95% Conf. Interval	[0.074, 0.118]	[0.118, 0.180]	[0.004, 0.075]
T2: Own's Decision Hybrid (Partner: Hybrid)	0.117**	0.183**	0.045
95% Conf. Interval	[0.094, 0.138]	[0.149, 0.217]	[0.010, 0.079]
T3: Partner Decision Hybrid (Own: In-Office)	0.119**	0.026	0.218
95% Conf. Interval	[0.096, 0.141]	[-0.006, 0.060]	[0.177, 260]
T4: Partner Decision Hybrid (Own: Hybrid)	.131**	0.051**	0.217
95% Conf. Interval	[0.108, 0.153]	[0.020, 0.083]	[0.176, 257]

Notes: This table presents the estimated willingness to pay for each contract attribute (i.e, Hybrid and Telecommuting), as the ratio of the coefficient of that attribute, from Table 9, to the negative of monthly cost (measured here in terms of delta). We use the delta method to estimate the variance of the willingness-to-pay, see Hole (2007) for a discussion. Computed 95% confidence interval reported within brackets. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

whom we consider to be attentive participants. Their findings are displayed in Table 11. It is noteworthy that all results from this attentive subset are congruent with those presented earlier in Table 9. This consistency between the two sets of findings lends support to the conjecture that participant inattention did not significantly distort our initial estimates reinforcing the credibility of our original conclusions.

Heterogenous willingness to pay

This study underscores the existing disparities in the valuation of flexible work arrangements within couples. Furthermore, it shows a pronounced divergence in the perceived willingness to pay between partners, wherein one partner's perceived optimal trade-off often directly contradicts their own. This discordance could potentially mirror ingrained social norms. To investigate this, we delve into the correlation between the willingness to pay for hybrid work arrangements and different attributes of the house-

Table 11. Conditional logit coefficients for attentive participants

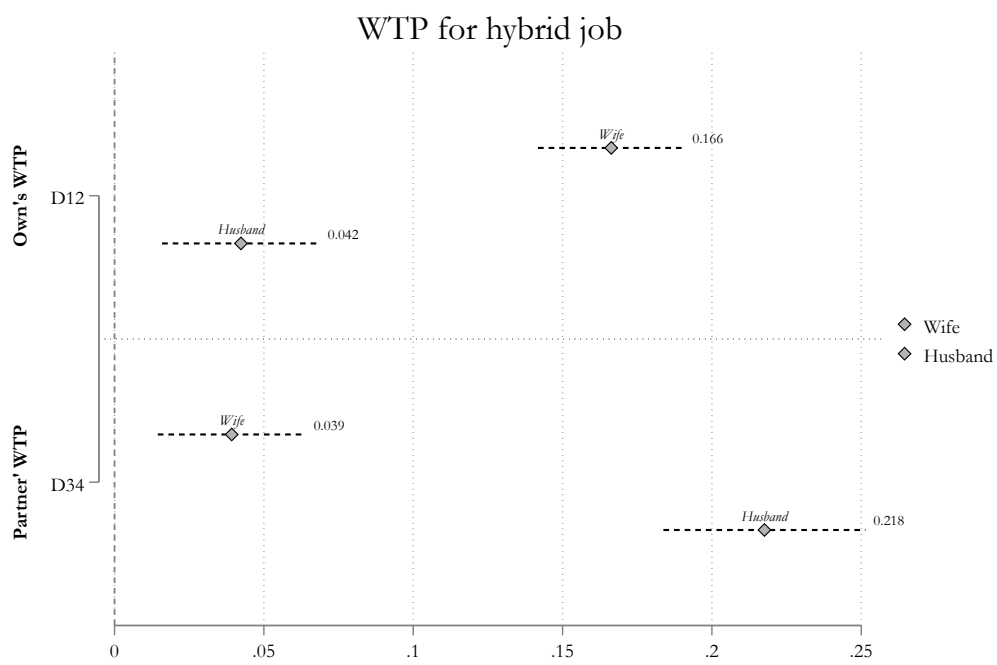
	Total Sample	Wife	Husband
Monthly Cost (Δ)	-4.636*** (.375)	-4.837*** (.537)	-4.618*** (.537)
T1: Own's Decision Hybrid (Partner: In- Office)	.465*** (.067)	.737*** (.096)	.214** (.095)
T2: Own's Decision Hybrid (Partner: Hybris)	.527*** (.066)	.853*** (.096)	.224** (.094)
T3: Partner Decision Hybrid (Own: In- Office)	.530*** (.066)	.120 (.094)	.963*** (.097)
T4: Partner Decision Hybrid (Own: Hybrid)	.556*** (.067)	.207** (.095)	.927*** (.098)
N	12664	6318	6346

Notes: This table reports the results of the conditional logit model, where the dependent variable is a binary variable Y_{ijs} indicating whether option j was selected by participant i in screen s , restricting the sample to attentive participants. The model includes contract characteristics and monthly cost as independent variables. Standard errors are clustered within screen-by-participant and presented in parentheses. ***, **, and * indicate significance at the 1, 5, and 10 percent critical level.

holds.

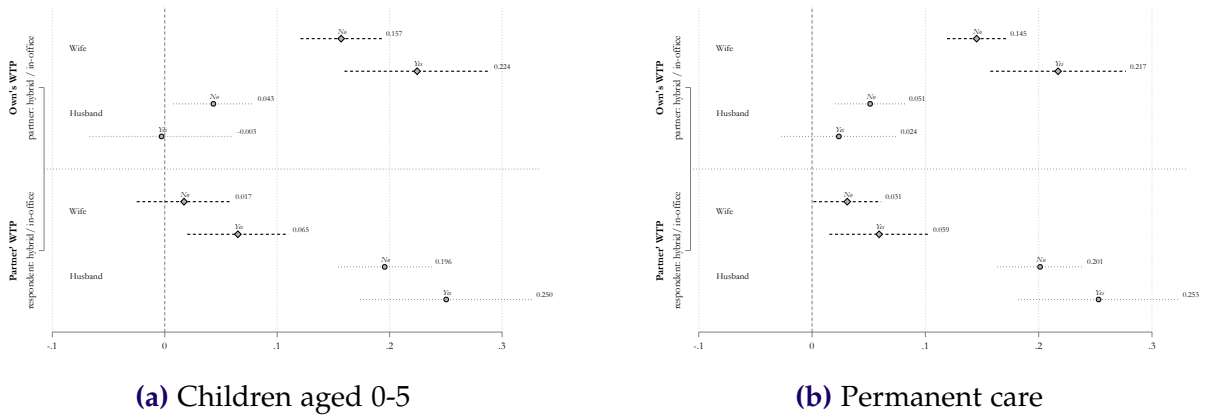
Given that the outcomes for Treatment 1 and 2, and for Treatment 3 and 4, are statistically identical, indicating that the framing of the choice has no discernible impact. Moving forward, we will consolidate these groups in our presentation of results. In essence, we will establish one treatment group to represent individual willingness to pay, and a second group to represent the desired willingness to pay for their partner. The aggregated results, as shown in Figure 1, reveal interesting insights. Wives are willing to sacrifice 16.6 percent of their wage for an hybrid job, while husbands only 4.2 percent (now statistically different from zero due to increased statistical power). Conversely, partner's' desire that their couples give up wage is a mirror the previous findings: wives state that their husband should give up 3.9 percent of their wage, whereas husbands suggest a higher sacrifice of 21.8 percent by their wives.

Figure 1. Willingness to pay for a hybrid job.



(a) Wife is working

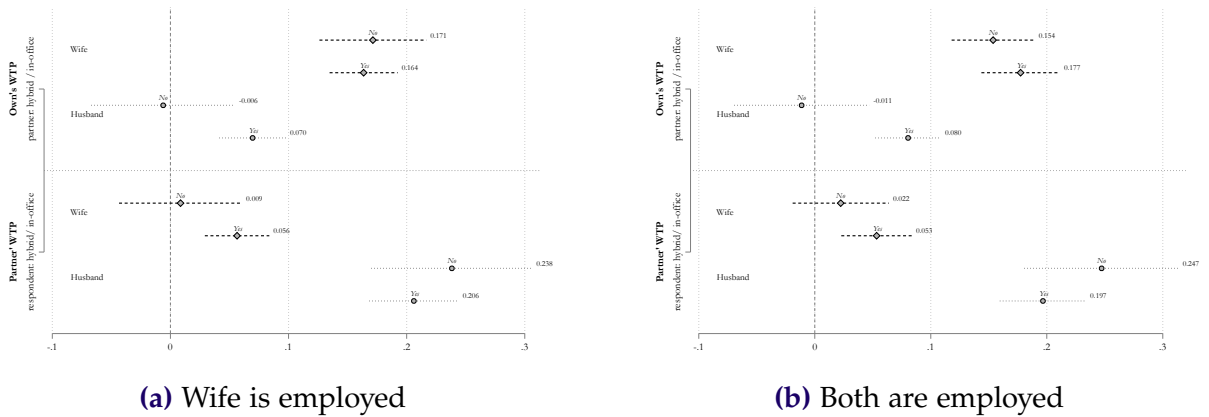
Figure 2. Heterogeneous willingness to pay for a hybrid job with and without dependents.



We now delve into exploring the heterogeneous effects on willingness to pay based on attributes that may influence differences in how wives and husbands value flexibility. Specifically, we examine the presence of children aged 0 to 5 in the household and the presence of individuals requiring permanent care. Figure 2 illustrates intriguing findings, where each dot represents the estimated willingness to pay for the respective subpopulations analyzed. Notably, women with young children and individuals requiring permanent care exhibit a higher willingness to pay compared to women without such responsibilities. Moreover, these women express a desire for their partners to make wage sacrifices for a hybrid job. Conversely, husbands with children are less likely to make sacrifices compared to husbands without children, but they also suggest that their wives should make greater sacrifices compared to husbands without children.

These differences may stem from variations in employment status, with wives being less likely to be employed. Figure 3 illustrates the impact of wife employment status and the employment status of both spouses. Notably, wives exhibit a consistent willingness to pay regardless of their own employment status or if both spouses are employed. Additionally, employed wives express a desire for their partner to make wage sacrifices for flexibility while unemployed wives do not seem to care. Conversely, the results for

Figure 3. Heterogeneous willingness to pay for a hybrid job by employment status.



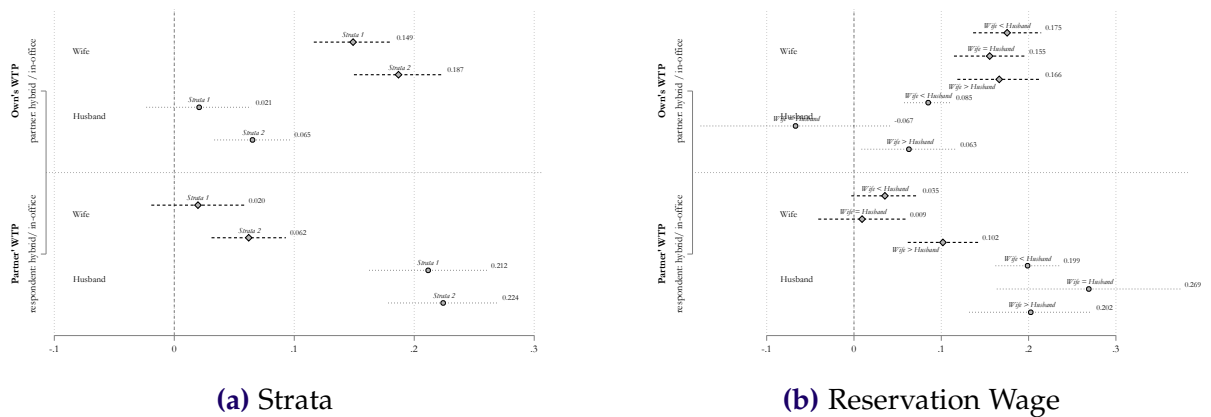
Notes: In this figure, 'Yes' represents households that satisfy the condition, 'No' represents households that do not.

husbands remain relatively consistent across different employment statuses.

There may also be variations in willingness to pay based on income. To investigate this possibility, we divide the sample by strata and reservation wage and the results shown in Figure 4. Surprisingly, we did not observe any significant differences by income strata. However, another concern was whether the differences between own and partner's willingness to pay could be attributed to disparities in reservation wage. Notably, wives demonstrate a consistent percentage of willingness to pay regardless of whether their reservation wage is larger, smaller, or equal to that of their husband. Additionally, wives with higher reservation wages than their husbands exhibit a higher willingness to pay than wives with equal or lower reservation wages than their husbands. Conversely, husbands display a willingness to make wage sacrifices when their wives have a lower or higher reservation wage, with no noticeable change in their desire for their wives' willingness to pay across these reservation wage differences.

We investigate the relationship between willingness to pay (WTP) and social norms, specifically examining the presence of heterogeneous effects when wives hold inaccurate

Figure 4. Heterogeneous willingness to pay for a hybrid job by income.

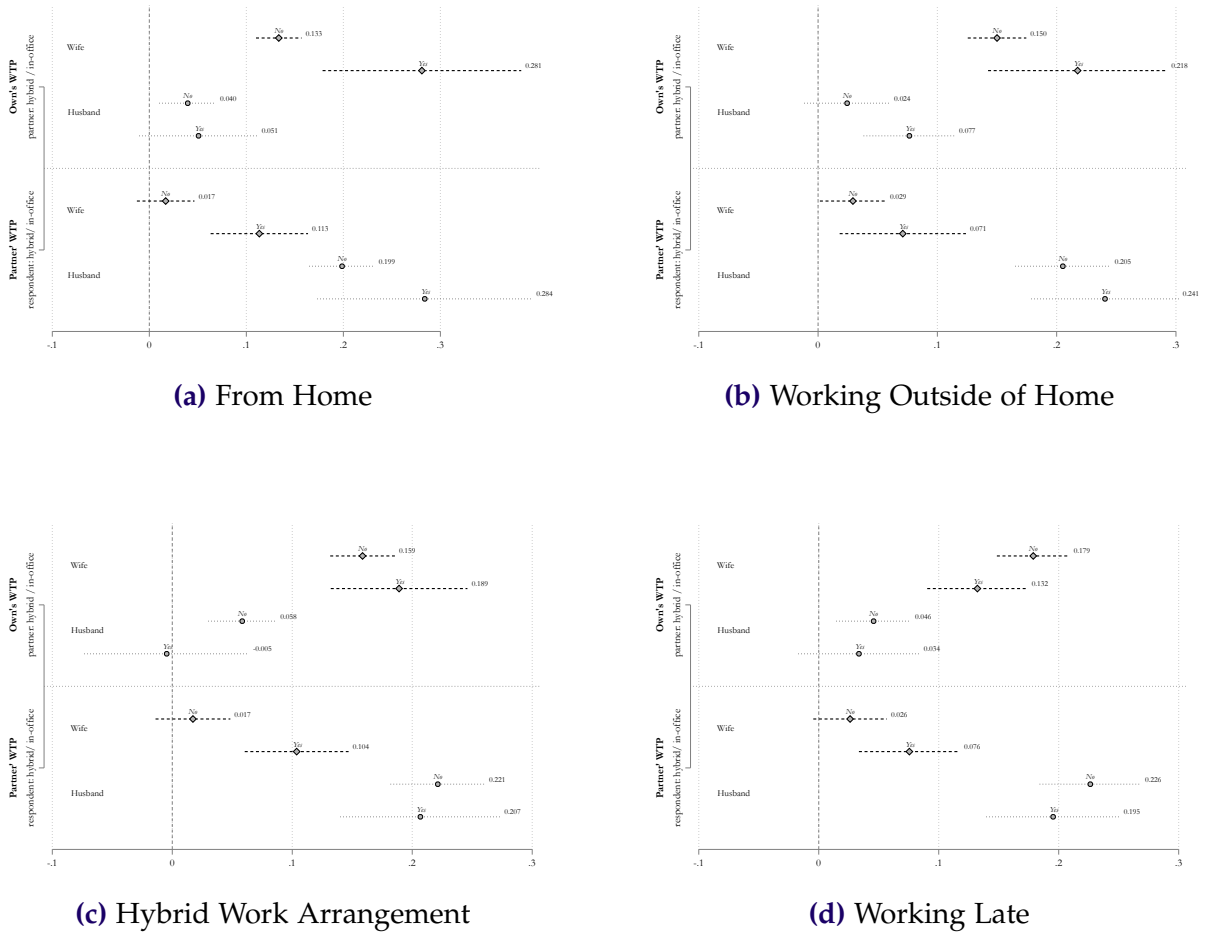


Notes: In this figure, 'Yes' represents households that satisfy the condition, 'No' represents households that do not.

rate beliefs about their husband's conservative attitudes. In other words, we explore whether pluralistic ignorance exists. We assess these effects for each of the previously mentioned questions and present the results in Figures 5, 6, and 7, where participants were asked about their beliefs regarding single women, married women, and mothers, respectively. As anticipated, we find that husbands' WTP remains unaffected whether their wives experience pluralistic ignorance or not. Conversely, we observe that wives' own desire to make wage sacrifices is greater when they hold incorrect beliefs, except for the question pertaining to working late as a single woman. However, it is worth noting that the estimates were less precise, and in most cases, not statistically different from those without pluralistic ignorance. Additionally, wives express a preference for their husbands to make greater wage sacrifices for hybrid options, further highlighting the influence of social norms.

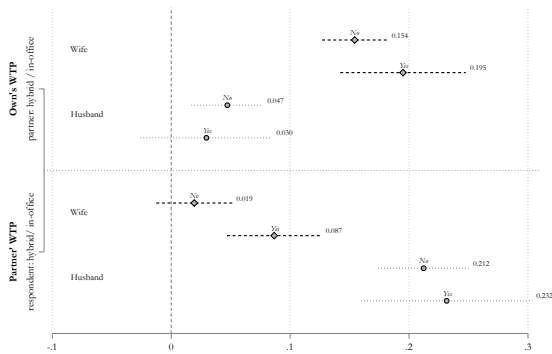
In summary, the study's findings reveal notable patterns in heterogeneous willingness to pay (WTP) for a hybrid job. Overall, there is a strong preference for flexibility, as indicated by significant positive coefficients in the estimation. While both genders

Figure 5. Heterogeneous willingness to pay for a hybrid job. It is inappropriate for a single woman to work:

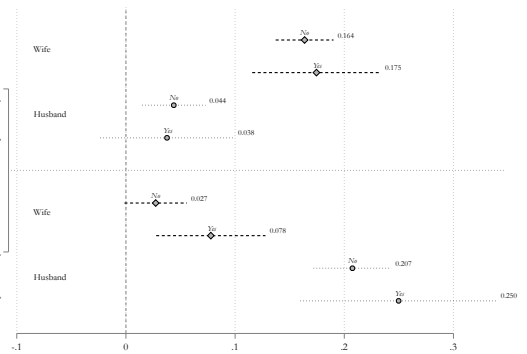


Notes: In this figure, 'Yes' represents situations with pluralistic ignorance, 'No' represents situations without.

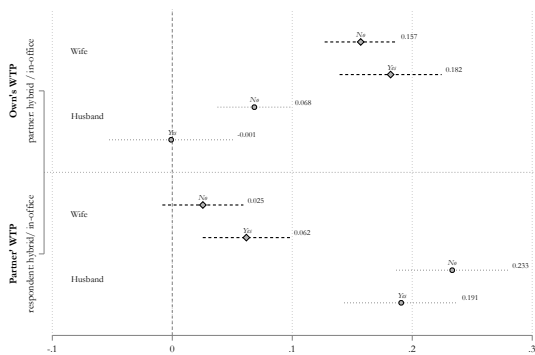
Figure 6. Heterogeneous willingness to pay for a hybrid job. It is inappropriate for a married woman to work:



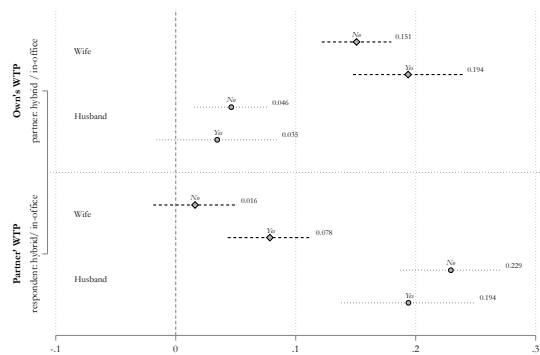
(a) From Home



(b) Working Outside of Home



(c) Hybrid Work Arrangement



(d) Working Late

Notes: In this figure, 'Yes' represents situations with pluralistic ignorance, 'No' represents situations without.

Figure 7. Heterogeneous willingness to pay for a hybrid job. It is inappropriate for a mother to work:

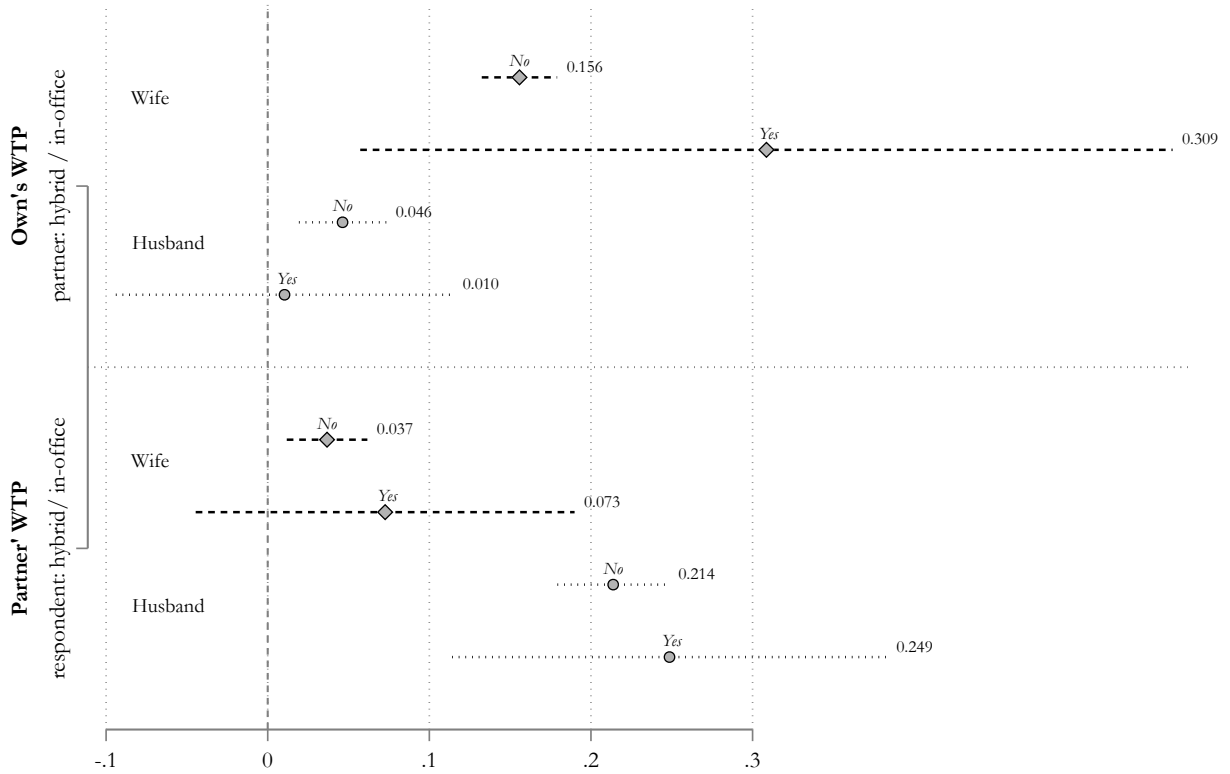


Figure 8. Working Outside of Home

Notes: In this figure, 'Yes' represents situations with pluralistic ignorance, 'No' represents situations without.

display a preference for hybrid work, wives show a larger inclination towards maintaining control over their work environment. Disparities emerge when considering partners' working conditions, with husbands demonstrating a higher WTP for their partners' flexibility. Moreover, the heterogeneous findings shed light on the complex interplay of factors shaping WTP, encompassing gender dynamics, household attributes, employment status, income, and social norms.

4 Conclusion

This paper explores the influence of gender norms on female labor force participation, with a specific focus on the role of flexibility on working arrangements for a sample of 410 cohabiting couples in Bogotá, Colombia. We find that husbands tend to hold more conservative attitudes compared to their wives across different domains explored in the survey. Husbands are more likely to believe that it is inappropriate for both single and married women to work late into the night, as well as for married women or mothers to work outside of the home. While some mean differences between spouses' beliefs were not statistically significant, the overall trend suggests that men generally hold more conservative viewpoints compared to their wives.

Furthermore, we investigated the phenomenon of pluralistic ignorance, where individuals may overestimate or underestimate the conservatism of others' beliefs. We found evidence of pluralistic ignorance within couples, particularly concerning beliefs about women's work arrangements. Women often overestimate their husbands' conservative beliefs, which may have implications for their labor market participation decisions. Moreover, women's second-order beliefs about their neighbors' attitudes were consistently more conservative than the actual beliefs reported by the neighbors themselves. This suggests that women in our sample anticipate more conservative views

among their neighbors than what is actually the case.

We conducted a discrete choice experiment to explore preferences for hybrid work, aiming to estimate individual willingness to pay as well as preferences for their partners. Our analysis revealed a strong and significant preference for hybrid work, supported by the highly positive coefficients in our estimations. This preference was evident when individuals made choices for themselves and when making choices on behalf of their partners. Notably, gender differences were observed. Wives exhibited a stronger inclination than husbands to maintain control over their time, indicating a greater desire for flexibility. Wives were willing to sacrifice 17 percent of their wage, while husbands were willing to sacrifice only 4 percent. However, intriguing disparities emerged when considering partners' working conditions. Husbands showed a higher desire for their partners to sacrifice wages to obtain flexibility, whereas wives did not display this same desire, potentially reflecting differences in social norms.

We also examined the factors influencing willingness to pay (WTP) for a hybrid job. We found that wives consistently demonstrated a willingness to pay, regardless of their own employment status or whether both spouses were employed. Those with young children and individuals requiring permanent care showed a higher WTP and desired their partners to make wage sacrifices. Husbands with children were less likely to make sacrifices but expected their wives to make greater sacrifices. Income differences did not significantly impact WTP, and wives' willingness to pay remained consistent regardless of differences in their reservation wage. Husbands, on the other hand, showed a willingness to sacrifice wages regardless of reservation wage differences. These findings highlight the complex interplay of employment status, dependents, and income in shaping WTP.

In light of these findings, targeted interventions and policies are needed to challenge traditional gender norms, promote shared responsibilities, and create a more equitable

and supportive work environment for all individuals.

References

- Aloud, Monira, Sara Al-Rashood, Sara Al-Rashood, Sara T. Al-Rashood, Ina Ganguli, and Basit Zafar**, “Information and Social Norms: Experimental Evidence on the Labor Market Aspirations of Saudi Women,” *National Bureau of Economic Research*, 2020.
- Bartoš, Vojtech and Barbara Pertold-Gebicka**, “Parental leave length, social norms, and female labor market re-entry frictions,” *International Journal of Manpower*, 2018, 39 (4), 600–620.
- Bertrand, Marianne**, “Coase lecture—the glass ceiling,” *Economica*, 2018, 85 (338), 205–231.
- , “The Gender Socialization of Children Growing Up in Nontraditional Families,” *AEA Papers and Proceedings*, 2019.
- , **Emir Kamenica, and Jessica Pan**, “Gender identity and relative income within households,” *The Quarterly Journal of Economics*, 2015, 130 (2), 571–614.
- Bursztyin, Leonardo, Alessandra L. González, and David Yanagizawa-Drott**, “Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia,” *The American Economic Review*, 2020.
- Bustelo, Monserrat, Ana Maria Diaz, Jeanne Lafortune, Claudia Piras, Luz Magdalena Salas, and José Tessada**, “What Is the Price of Freedom? Estimating Women’s Willingness to Pay for Job Schedule Flexibility,” *Economic Development and Cultural Change*, 2023, 71 (4), 000–000.
- Couprie, Hélène, Elisabeth Cudeville, and Catherine Sofer**, “Efficiency versus gender roles and stereotypes: an experiment in domestic production,” *Experimental Economics*, 2020.

Fernandez, Raquel, Alessandra Fogli, and Claudia Olivetti, “Mothers and Sons: Preference Formation and Female Labor Force Dynamics,” *Quarterly Journal of Economics*, 2004.

Gauri, Varun, Tasmia Rahman, and Iman Kalyan Sen, “Measuring social norms about female labor force participation in Jordan,” *World Bank Policy Research Working Paper*, 2019, (8916).

Goldin, Claudia, “A grand gender convergence: Its last chapter,” *American Economic Review*, 2014, 104 (4), 1091–1119.

—, “Hours Flexibility and the Gender Gap in Pay,” *Center for American Progress*, 2015.

Lundberg, Shelly, Shelly Lundberg + Robert A. Pollak, and Robert A. Pollak, “Separate spheres bargaining and the marriage market,” *Journal of Political Economy*, 1993.

Prentice, Deborah A. and Dale T. Miller, “Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm.,” *Journal of Personality and Social Psychology*, 1993.

Smerdon, David, Theo Offerman, and Uri Gneezy, “‘Everybody’s doing it’: On the persistence of bad social norms,” *Experimental Economics*, 2020, 23, 392–420.