

UNPAID DOMESTIC LABOR, GENDER AND CAREER

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Unpaid Domestic Labor Gender and Career

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ABSTRACT

Unpaid Domestic Labor, Gender and Career

This study investigates the distribution, perception, and career implications of unpaid care work and mental load among white-collar employees in Turkey. Using data from a household survey conducted across 12 provinces and comprising 2,104 respondents, the analysis draws on a comprehensive inventory of physical and cognitive domestic tasks. Ordinary Least Squares regression models were applied. The results reveal gender disparities in both perceived and actual care and mental responsibilities, with the burden intensifying for women after marriage and parenthood. Men's perceived physical and mental burdens are notably lower than the actual responsibilities they undertake, indicating a limited level of awareness. The unequal distribution of care work and mental load is found to be an essential factor that influences women's professional lives by increasing the likelihood of refusing promotions. The results showed that marriage and parenthood is significantly increased the likelihood of quitting their jobs due to housework responsibilities for women. Lastly, cognitive empathy is linked to higher awareness and more equitable task-sharing within the household.

ÖZET

Ücretsiz Ev İçi Emek, Zihinsel Yük, Cinsiyet ve Kariyer

Bu çalışma, Türkiye'deki beyaz yaka çalışanlar arasında karşılıksız bakım emeği ve zihinsel yükün dağılımını, algılanış biçimini ve kariyer üzerindeki etkilerini incelemektedir. 12 ilde gerçekleştirilen ve 2.104 katılımcıdan oluşan bir hanehalkı anketine dayanan analiz, fiziksel ve bilişsel ev içi görevleri kapsayan kapsamlı bir envanteri temel almaktadır. Regresyon analizlerinde Ortalama En Küçük Kareler (OLS) yöntemi kullanılmıştır. Bulgular, hem algılanan hem de fiili bakım emeği ve zihinsel yük açısından cinsiyet temelli eşitsizlikler olduğunu ortaya koymaktadır. Bu yük, kadınlar için özellikle evlilik ve ebeveynlik sonrasında artmaktadır. Erkeklerin algıladıkları fiziksel ve zihinsel yükler, üstlendikleri gerçek sorumluluklara kıyasla anlamlı ölçüde daha düşüktür; bu durum farkındalığın sınırlı olduğunu göstermektedir. Bakım emeği ve zihinsel yükün eşit olmayan dağılımı, kadınların kariyer yaşamını doğrudan etkileyen önemli bir unsur olup, terfileri reddetme olasılığını artırmaktadır. Bulgular ayrıca, evlilik ve ebeveynliğin kadınların ev içi sorumluluklar nedeniyle işten ayrılma olasılığını anlamlı biçimde yükselttiğini göstermektedir. Son olarak, bilişsel empatinin daha yüksek farkındalık ve ev içi görevlerde daha adil bir iş bölümü ile ilişkili olduğu görülmüştür.

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CHAPTER 1

INTRODUCTION

The unequal sharing of unpaid care work between women and men has remained a major issue in all economies, regardless of their development level. The most probable reason women carry out most care work is that traditional gender norms still prevail in many societies. It has been shown that the underlying reason why domestic responsibilities are mostly carried out is not that women gain more utility by doing so (Auspurg et al., 2017). According to a large-scale study conducted by the International Labor Organization (Addati et al., 2018), in 64 countries, women undertake over 75% of the total care work carried out worldwide. Although the total time spent on unpaid care work has decreased due to technological advancements and improvements in infrastructure, the gap between the time women and men devote to domestic work has narrowed by only seven minutes (OECD, 2019) which is not a significant change. This situation undermines women's participation in the labor force and, in turn, has adverse implications for the long-term growth and development of the economy. According to TurkStat 2023 labor force statistics ¹, unpaid domestic care responsibilities constitute the primary reason why approximately 10 million women remain outside the labor force, whereas this figure is virtually nonexistent for men.

Although women's participation in the labor market has increased over time, the time poverty and stress caused by care work and the mental load it brings with it can prevent them from reaching their full potential. Mental load can be most easily illustrated through an example: While shopping for groceries, cooking, and cleaning represent the physical aspects of care work, there is an equally demanding cognitive dimension. Mental load includes deciding what to cook, identifying missing ingredients, creating a shopping list, and determining the appropriate time to begin cooking so the meal is ready at the desired hour, in this case. These tasks, though less visible, require substantial time and mental effort. Recent studies also suggest that

¹Turkish Statistical Institute (TÜİK), Labor Force Statistics, 2023.
<https://data.tuik.gov.tr/Bulten/Index?p=Labour-Force-Statistics-June-2024-53512&dil=2>

mental load is unevenly distributed to the detriment of women, causing time stress, the overall decline in life satisfaction, and hence negative impacts on worklife (Reich-Stiebert et al., 2023). Care work has traditionally been measured using time-use surveys; however, mental load is more difficult to quantify due to its nature.

This topic has been studied for many years from various academic perspectives — ranging from mental and emotional load to the extent of economic impacts — separately. This study aims to quantify the distribution of care work and mental load using a comprehensive inventory and identify the factors that shape this distribution by measuring individuals' adherence to gender norms and their empathy skills through cognitive tools. In addition, the study seeks to assess awareness of these burdens and examine their impact on career-related decisions. Moreover, the unequal distribution of care, labor, and mental load is not only a challenge faced by families but also an issue that companies should actively engage in addressing. For this reason, conducting the study on a white-collar sample is expected to help firms more accurately recognize the care and mental burdens their employees face, better understand how these responsibilities affect them, and implement appropriate support tools accordingly.

The results of this study briefly show that there are significant gender differences in both the physical and mental dimensions of domestic labor, with these disparities becoming more evident after marriage and parenthood to the disadvantage of women. Women also demonstrate greater awareness of mental load compared to men. Importantly, increased empathy among men is associated with higher awareness of these burdens and contributes to a more equitable division of domestic responsibilities. Inclination towards traditional gender norms reportedly has no significant effect on care work and mental load distribution or on career-related decisions. However, another important finding shows that although women, on average, show lower endorsement of traditional gender norms, they believe that in an ideal distribution of housework responsibilities, women should carry a greater burden than men.

The rest of this paper consists of 6 parts: Chapter 2 summarizes the findings of existing literature, Chapter 3 describes the survey and the data in detail, Chapter 4 details the models and methods used in the analysis, Chapter 5 presents the results in 5 sections, and the last chapter concludes the paper.



CHAPTER 2

LITERATURE REVIEW

The literature contains numerous studies on unpaid domestic labor and mental load since it is an interdisciplinary topic that concerns economists, sociologists, and psychologists. It is also a topic that has been discussed in every household for a long time. Some of the research focuses on the reasons underlying the unequal allocation of housework, while some of them focus on the economic consequences. Several studies that particularly addressed the concept of mental load are relatively small. In general, the findings support each other in that the inequality in the division of care work negatively affects women in varying ways.

The number of studies on this topic increased during and after the COVID-19 pandemic, as the rise in time spent at home and the expansion of remote work made the unequal division of domestic tasks within households more visible. Boring and Moroni, 2023 uses data from two surveys: one prepared by the authors and the second using selected questions from the European Values Study for France to see how beliefs about gender roles have changed during the COVID-19 lockdown period. The authors estimated the beliefs before the lockdown using the Nearest-Neighbor Match method, and changes in beliefs were estimated using Ordinary Least Squares regression models. The main result of the study is that there is a reversion to traditional beliefs about gender roles during the initial lockdown phase, especially for men. Further analysis shows that men whose partners are almost equally available for housework became even more inclined towards traditional gender norms. The study suggests that men prefer traditional views when discussing how to share housework, possibly because these views benefit them by placing more of the responsibility on women. Supporting these results, Del Boca et al., 2020 found evidence that women's domestic workload has increased during the COVID-19 lockdown period, even though men started to spend more time on childcare. This study was conducted in Italy, where lockdown conditions were relatively strict among couples where both partners are working.

The unequal distribution of care work and mental load affects women's professional lives in various ways, most notably through lower labor market participation, reduced productivity, and gender pay gaps. The following papers focus on these economic impacts.

Abigail and Berg, 2017 used data from the 2015 ILO Survey of Crowdworkers to analyze the pay gap between men and women using the Oaxaca-Blinder wage decompositions method. They found evidence of the pay gap. However, the reason was not employer discrimination since the sex of the workers was unknown to the employer. The results showed that in households where childcare or eldercare must be provided while working, women tend to choose less complex and easier tasks, leading to relatively lower earnings.

Cortés and Pan, 2017 studied how barriers—especially time constraints linked to household responsibilities—contribute to the gender pay gap among highly-skilled women. Analyzing U.S. Census and survey data spanning 1980-2011, researchers examined whether increased availability of low-skilled immigrant workers, who provide more affordable and flexible household services, helps reduce these barriers. They used OLS regression models for their analysis. They found that when such support is more available, highly-skilled women, especially married ones, are more likely to work longer hours, which narrows the gender pay gap in jobs where overwork is highly rewarded. The study finds that when women have better access to help with household tasks, they are more likely to join the workforce and earn more compared to men, and younger women tend to move into higher-paying jobs.

Another study examined the effects of housework division, marriage, and family size on employment, as noted by Hundley, 2000. The main finding of this research is that self-employed women earn less when they are married, have a larger family, and spend more time on housework. In contrast, the opposite relationship is observed for men. The author concludes that women tend to prefer self-employment because it offers greater flexibility to manage family responsibilities.

Campolo et al., 2016 found in their study conducted on Italian two-earner couples that once women have a baby, they spend 17 hours less on paid work per week. They used the Seemingly Unrelated Regression Equations-Difference-in-Differences procedure to see the effect of becoming parents on both time spent on housework and also on paid work. For men, no significant effect was found on hours spent on paid work, but an increase was seen in time spent on housework.

Reich-Stiebert et al., 2023 aimed to encourage further studies on the mental load that is the relatively invisible counterpart of physical housework. Based on the findings of a large-scale research and a synthesis of numerous related articles, the authors suggest that mental load constitutes five main components: cognition, management, communal orientation, anticipation, and invisibility. Hence, defined mental labor as cognitive and managerial tasks focused on achieving shared goals. These future-oriented efforts are often invisible and unrecognized as part of unpaid work. Also, by its nature, it seems very individual, but in reality, it can be distributed among household members.

Daminger, 2019 contributes to the literature by clearly defining cognitive labor -called mental load in this paper- as a distinct aspect of household work, consisting of four components: anticipating needs, identifying options, making decisions, and monitoring outcomes. The research highlights that cognitive labor is a largely invisible and abstract form of work. It finds that women carry a heavier cognitive load in most couples, especially in the anticipation and monitoring stages. Although decision-making is often shared, men tend to participate only after women have completed the earlier steps. The study argues that the invisible nature of cognitive labor—especially the parts typically undertaken by women—may lead to underestimations of gender gaps in traditional time-use surveys. By outlining the gendered structure of cognitive labor, the study sheds light on an often-overlooked source of stress, inequality, and its potential consequences for women's well-being and career outcomes.

Daminger, 2020 using the same data in the previous article, shows that despite egalitarian values, women continue to carry a larger share of household responsibilities—particularly in the cognitive domain. Women are found to dominate the anticipation and monitoring aspects, even when men participate in decision-making or physical tasks. The study introduces the concept of “de-gendering,” where couples explain unequal divisions of labor as neutral decisions based on efficiency or personal traits rather than gender. This approach allows them to minimize conflict and justify inequality, often by downplaying structural constraints—for example, framing men’s lack of involvement as a personality trait rather than a gendered pattern. While this strategy reduces tension, it conceals the deeper gender dynamics, making them harder to challenge. By revealing how these everyday justifications sustain unequal arrangements, the study helps explain the continued stagnation in achieving true gender equality at home, emphasizing that shifts in attitudes alone are not enough to change behaviors.

Similar to care work, the mental load that comes with it also negatively affects women’s work lives. It has been shown that the more housework responsibilities, the more it negatively affects work (Badawy & Schiemann, 2019). After that, Kincaid, 2021 in their article, suggested that through the effect of gender norms, decision-making about children, which is a mental aspect of the childcare burden, is heavily expected from mothers, and this results in negative family-work spillover.

CHAPTER 3

DATA

3.1 Data description

Data were collected by a field company for a large-scale project in two stages in November and December 2024. The data obtained from the first stage survey were analyzed, and the set of questions for the second stage was revised. In both stages, participants completed the survey via tablets. The survey is programmed using Qualtrics. For the first stage, the pilot stage, the sample consists of 524 white-collar workers from Istanbul, Izmir, and Ankara. The second stage data covers 2104 white collar workers from Istanbul, Izmir, Ankara, Antalya, Adana, Trabzon, Van, Kayseri, Erzurum, Gaziantep, and Samsun. Figure 1 shows the distribution of provinces. The majority of observations are from Istanbul, Izmir, and Ankara due to quotas on firm size and white-collar workers. The sample is restricted to individuals aged between 25 and 65 who do not live alone. A firm size quota is also applied by limiting the proportion of respondents employed in micro firms (2–10 employees) to 15% of the sample, and those in small firms (11–50 employees) to a maximum of 30%. Unless otherwise stated, the second stage data are the main data used in all analyses.

3.2 Survey description

The main survey (Stage 2) consists of 9 sections. In the first section, participants are asked some preliminary information: age, marital status, number of kids, and whether they live with a partner. The second section covers general questions about employment status, firm size, managerial status, work schedule, work experience, gender of their manager, and number of subordinates. In the third section, participants are asked several questions about factors that affect their productivity when working from home. In the fourth section, "Reading the mind in the eye test" (Baron-Cohen et al., 2001) is applied to participants in order to measure the level of their empathetic skills. Detailed information about the test is provided in the following section. The fifth section covers questions about attitudes and opinions

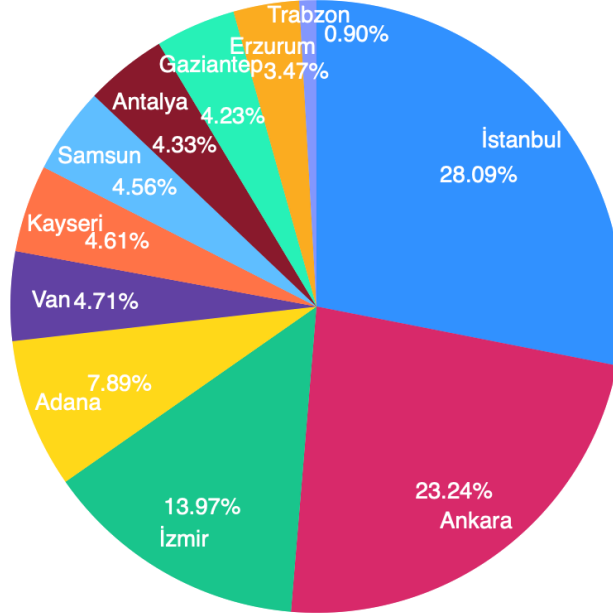


Figure 1. Provinces

towards work. Participants are asked if they have ever quit their jobs or declined a promotion due to their domestic responsibilities, which is one of the main outcomes of this study. In the sixth section, respondents are presented with statements reflecting conventional gender norms and asked to indicate the extent to which they agreed with them. The seventh section is the care load and mental load test. First, the participants were asked to report their shares of physical and mental household labor. They are referred to as perceived loads. Then, to measure the actual allocation of housework and mental load, an inventory of 19 and 16 items is listed respectively.² Participants are asked to mark which household member(s) is(are) responsible for these items. Detailed calculation of care work and mental load is explained in the methodology section. In section eight, participants are asked some questions about their current mental health status, the emotional burden of the housework, and also about time management. The survey ends with closing questions consisting of the household size, income, household income, and education status.

²See Appendix A

3.3 Descriptive statistics

Table 1 presents descriptive statistics for the full sample and by gender. The sample consists of 52.6% women. Most respondents are married (71.3%) and have children (57%). Educational attainment is relatively high since the sample consists of exclusively white-collar workers, with 60.8% holding a bachelor's degree and 4.9% holding a graduate degree.³ Regarding household income, 49% fall into the interval 35,001–75,000 TL, while 42.4% earn between 75,001–150,000.⁴ Most respondents have a working partner (80.1%) and around 70.2% hold managerial positions. 23.4% of women are in managerial roles compared to 36.9% of men, and 27.1% of women report having a female manager versus 10.3% of men. Additionally, the mean age of the sample is 38.04.

Differences in means between the female and male subsamples were also examined in the descriptive statistics for further analysis. They are not shown on Table 3. Household income was statistically significantly higher among women. This can be attributed to the fact that, among women, it is much more common for their partner to be working compared to men. The difference in the mean of working partner is also statistically significant. The difference in the share of managerial positions between men and women is also quite significant. Considering the general context in Turkey, this is a gap that can be expected to emerge in this sample as well. No statistically significant differences were observed between female and male subsamples in terms of marital status, kids, or education variables.

³The rate of bachelor's degree aged 25 and over in the total population aged 25 and over is 48.3% in 2023. <https://data.tuik.gov.tr/Bulten/Index?p=Ulusal-Egitim-Istatistikleri-2023-53444>

⁴According to the announcement by the Ministry of Labour and Social Security of the Republic of Turkey, the minimum wage during the survey period—November and December 2024—was 17,002.12 TL.

Table 1. Descriptive Statistics

		Pooled		Male		Female	
Variable		%	N	%	N	%	N
Female		52.57	2104				
Marital Status	Married	71.30	542	73.19	729	69.59	769
	Single	25.80	1498	25.40	253	26.15	289
	Divorced	2.38	50	1.10	11	3.59	39
	Widowed	0.52	11	0.30	3	0.72	8
Kids	Yes	56.99	1198	56.67	565	57.29	633
	No	43.01	904	43.33	432	42.71	472
Education	Highschool Graduate	19.00	399	19.50	194	18.55	205
	Associate Degree	13.33	322	13.27	132	17.19	190
	Bachelor's Degree	60.76	1276	62.01	617	59.64	659
	Graduate Degree	4.90	103	5.23	52	4.62	51
Household Income	17.002–35.000	5.69	85	5.34	38	5.99	47
	35.001–75.000	49.03	733	53.87	383	44.64	350
	75.001–150.000	42.41	634	37.55	267	46.81	367
	150.001+	2.88	43	3.23	23	2.56	20
Working Partner	Yes	80.09	1368	67.48	554	91.77	814
	No	19.91	340	32.52	267	8.23	73
Manager Role	Yes	70.17	1475	36.91	368	23.44	259
	No	29.83	627	63.09	629	76.56	846
Manager's Gender	Female	19.22	392	10.27	98	27.07	294
	Male	80.78	1648	89.73	856	72.93	792

CHAPTER 4

METHODOLOGY

4.1 Variables

4.1.1 Independent variables

Independent variables are divided into three sets.

- X_i is the set that contains individual characteristics: gender, age, marital status and kids, working partner, household income, managerial status, gender norms score, cognitive empathy score.
- W_i contains the work characteristics: work experience, work-from-home dummy, gender of manager
- δ_i is the set of fixed effects. It contains pollster id, pollster gender, province, industry, firm size.

Gender is added to the regressions using a *female* dummy. Marital status and kids is a categorical variable that consists of: single people without kids (*Single_NoKids*), married people without kids (*Married_NoKids*) and married people with kids (*Married_Kids*). *workingpartner* is a dummy that takes value 1 if the partner of the participant is working. Household income is divided into 4 parts: 17002 – 35000, 35001 – 75000, 75001 – 150000, 150001+. Managerial status is a dummy (*b_manager*) that takes value 1 if the participant has a managerial role. Gender norms score and cognitive empathy scores are explained in detail in the following subsections.

Work experience is calculated in years. *work_from_home* is a dummy that takes value 1 if the participant works from home at least one day a week. Gender of the manager is also a dummy, *b_manager_gender*, that takes value 1 if the participant's manager is a female.

For the fixed effects, *pollster_id* is given to each pollster by the field company. *pollster_gender* is a gender dummy. *province* contains 12 provinces that were listed previously. *industry* variable is categorized using Statistical classification

of economic activities in the European Community-NACE's revision 2.1 (Communities, 2008). Firm size is categorized into four groups by the number of people working in the company: *Micro* (2-10 people), *Small* (11-50 people), *Medium* (51-250 people), *Large* (251 and more people)

4.1.1.1 Gender norms score

Gender norms score was calculated through factor analysis based on responses to a set of statements regarding traditional gender roles. Respondents evaluated each statement using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Higher (positive) factor scores indicate stronger agreement with traditional gender norms, whereas lower (negative) scores reflect stronger disagreement. The items included in the analysis were as follows:

- A man should focus more on his career, while a woman should focus more on her family.
- For a woman, a good marriage leads to a better life than a good job.
- When job opportunities are limited, men have more rights to a job than women.
- Men are naturally more suited for leadership than women.

4.1.1.2 Cognitive empathy score

The cognitive empathy score was derived from participants' performance on the Reading the Mind in the Eyes Test (Baron-Cohen et al., 2001), a psychological instrument designed to assess individuals' ability to recognize the emotional states of others. In this test, participants are shown a series of photographs displaying only the eye region of different faces and are asked to identify the emotional state depicted (Figure 2). The test aims to evaluate empathic abilities and social understanding. The score is calculated as the ratio of correct answers to wrong answers. Hence higher scores indicate a greater capacity for empathic perception. In this study, the resulting empathy scores were incorporated into regression analyses to provide insights into

decisive

amused



aghast

bored

Figure 2. Reading the mind in the eye test - sample question

participants' awareness of the physical, mental, and emotional dimensions of unpaid domestic labor.

4.1.2 Dependent variables

All variables in this section are self-reported.

- Perceived Care Load and Perceived Mental Load
(*perceived_care* and *perceived_mental*)

These variables are the answers of the respondents to the following questions:

What percentage of household chores and caregiving responsibilities (e.g., laundry, meal preparation, house cleaning, childcare, etc.) do you personally handle?

What percentage of the mental load in your household do you feel responsible for thinking about and managing?

- Actual Care Work and Actual Mental Load

(*housework_score* and *mentalload_score*)

Two separate inventories are utilized to assess the distribution of unpaid domestic responsibilities: one comprising 19 items related to physical housework (e.g., cooking dinner), and another consisting of 16 items representing mental load (e.g., deciding what to cook).⁵ Participants are asked to indicate who is responsible for each task by selecting from the following options: Myself, My partner, Other household members, and Professional help for the care work and Myself, My partner, and Other household members for the mental load. These questions are exceptionally asked to the participants who previously declared that they live with a partner.

Each task is assigned a specific weight based on three parameters: the time required to complete it, its frequency, and its cognitive or emotional complexity⁶. The total burden for each household (total housework or mental load) is calculated by summing the weights of all tasks marked as being performed by at least one member of the household.

For each participant, personal scores are computed. When a task is shared among multiple individuals, its weight is divided equally among all those reported as responsible. The total burden of the participant is then obtained by summing the weighted shares of all relevant tasks.

The individual contributions are called *houseworkscore* and *mentalloadscore* and expressed as a percentage of the total household burden using the following formula:

$$houseworkscore = \frac{Participant's\ Housework}{Total\ Housework} \times 100 \quad (4.1)$$

Scores were calculated separately for physical care work and for mental load, allowing for distinct analyses of each domain. The scores are also calculated separately for the partner (*housework_partnerscore* and

⁵See Appendix A

⁶For the weights TUIK time-use survey data and data coming from an online survey conducted by the project coordinators is used <https://data.tuik.gov.tr/Bulten/Index?p=Zaman-Kullanım-Arastırması-2014-2015-18627>

mentalload_partnerscore) , other people living in the house and professional help.

- Care Work Awareness and Mental Load Awareness

$$awareness_care = perceived_care - housework_score$$

$$awareness_mental = perceived_mental - mentalload_score$$

- Within Household Equality

$$diff_housework = housework_score - housework_partnerscore$$

$$diff_mental = mentalload_score - mentalload_partnerscore$$

- Promotion and Separation Costs of Care Work and Mental Load

(*nopromotion* and *separation*)

No promotion dummy is equal to 1 if the participant replied “Yes” to one of the following statements:

1. I declined additional responsibilities or a promotion because it would affect the time and effort I devote to childcare.
2. I declined additional responsibilities or a promotion because it would affect the time and effort I devote to household duties.
3. I declined additional responsibilities or a promotion because I preferred to dedicate the extra time required for the new position to my family.

Separation dummy is equal to 1 if the participant replied “Yes” to one of the following statements:

1. I had to leave my job to care for a person with special needs (e.g., a child, elderly or sick family member).
The professional help I need for household tasks (such as a cleaner or babysitter) is too costly compared to my income.
2. I left my job because household responsibilities (e.g., cleaning, grocery shopping, cooking) required too much time.

3. I left my job because I wanted to spend more time with my family (e.g. children's hobbies, shared family activities).

4.2 Empirical methodology

In this study, the data are analyzed in five parts. This section describes the methodologies used in each part in detail.

4.2.1 Distribution of care work and mental load

In this part, the distribution of care work and mental load is analyzed and visualized using descriptive figures by gender with respect to marital status, education level, household income, and managerial status. The results were presented in Section 5.1.

4.2.2 Determinants of care work and mental Load

4.2.2.1 Determinants of perceived and actual care work and mental load

To identify the determinants of perceived mental load, an Ordinary Least Squares regression model is used. The regression equation is as follows:

$$Y_i = \alpha_0 + X_i' \gamma + \delta_i + \epsilon_i \quad (4.2)$$

$$Y_i \in \{perceived_care, perceived_mental\}$$

As described previously, X_i is a set of control variables consisting of individual characteristics. Pollster, pollster gender, sector, and province fixed effects in δ_i are partialled out.

Similar OLS regression procedures are run for the actual care and mental loads. Control variables and fixed effects are the same as Equation 4.2. In this equation, *Gender * Education* interaction terms are also added.

$$Y_i = \alpha_0 + X_i' \gamma + \beta(Gender * Education) + \delta_i + \epsilon_i \quad (4.3)$$

$$Y_i \in \{housework_score, mentalload_score\}$$

4.2.3 Awareness

Awareness is measured using the difference between the perceived and actual care work, and mental load. OLS models are used to analyze the factors that affect the participants' awareness. The regression equations are as follows:

$$Y_i = \alpha_0 + X_i' \gamma + \beta(\text{MarriedKids} * \text{Manager}) + \delta_i + \epsilon_i \quad (4.4)$$

$$Y_i \in \{\text{awareness_care}, \text{awareness_mental}\}$$

The same set of control variables is used as in the regressions from the first part. However, *MarriedKids * Manager* interaction terms are added since both of them were significant when determining the awareness scores.

4.2.4 Within household equality

This section analyzes the determinants of within-household equality regarding care, labor, and mental load. The OLS regression equations are provided below:

$$Y_i = \alpha_0 + X_i' \gamma + \delta_i + \epsilon_i \quad (4.5)$$

$$Y_i \in \{\text{diff_care}, \text{diff_mental}\}$$

The dependent variables in these equations are calculated as the difference between the participant's own housework and mental load scores and their partner's related scores.

4.2.5 Career costs of care work and mental load

Lastly, the career costs of care work and mental load are analyzed using a Linear Probability Model. The detailed explanations of the dependent and independent variables used in this part are provided in the previous sub-section.

$$P(Y_i = 1 | X) = \alpha_0 + X_i' \gamma + W_i' \theta + \beta(\text{housework_score})_i + \delta_i + \epsilon_i \quad (4.6)$$

$$P(Y_i = 1 | X) = \alpha_0 + X_i' \gamma + W_i' \theta_i + \beta(\text{mentalload_score})_i + \delta_i + \epsilon_i \quad (4.7)$$

$$Y_i \in \{\text{nopromotion}, \text{separation}\}$$

In models 4.6 and 4.7 both individual (X_i) and work (W_i) characteristics are added to the regressions. Also firm size and industry fixed effects are added to δ_i .



CHAPTER 5

RESULTS AND DISCUSSION

5.1 Distribution of care work and mental load

In this section, the distribution of perceived and actual care work and mental load by several variables and gender is visualized.

Figure 3 shows the distribution of average perceived and actual care and mental loads by gender. When looking at perceived burdens, both mental and physical loads exceed 60% among women, while in actual reported behavior, both remain above 50% hence there is an apparent inequality. Among men, only the perceived mental load surpasses 50%, whereas the actual mental load is just 31%, suggesting that men may perceive their mental burden as greater than it truly is.

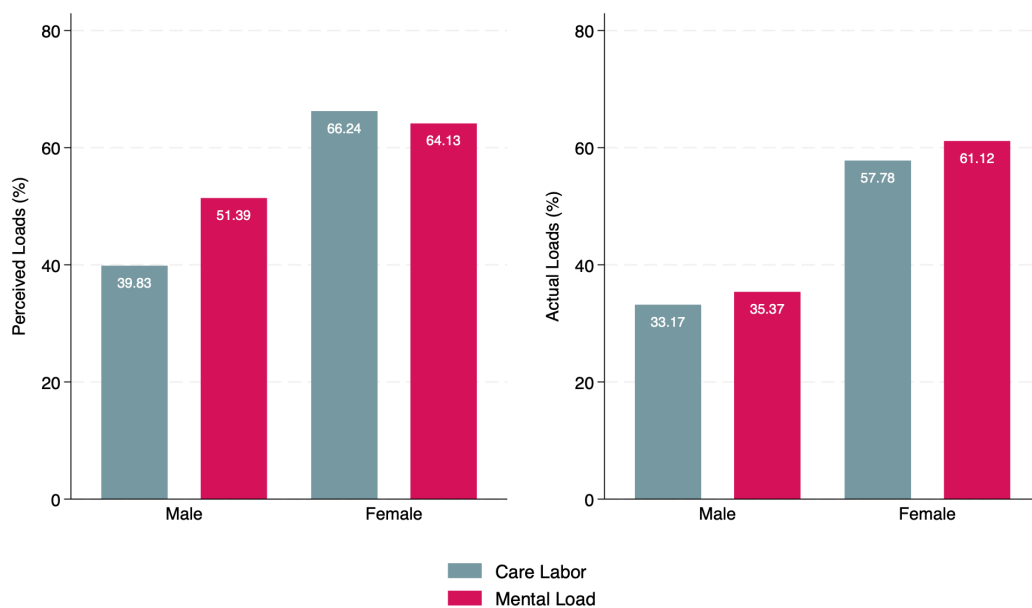


Figure 3. Distribution by gender

When we exclude the observations where the participant's partner is not working, the results indicate an even higher inequality between genders. Figure 4 shows the same distribution among households where both partners work. Women take on approximately two-thirds of both the physical and mental workload.

Even though the empirical results did not indicate gender norms as a significant factor that determines the actual care and mental loads, results of stage 1

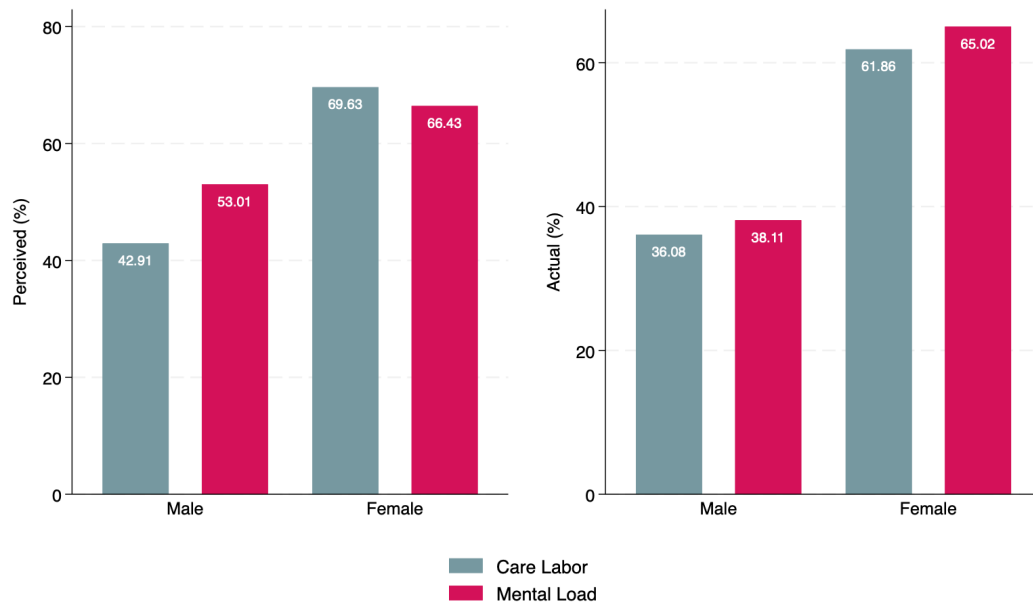


Figure 4. Distribution by gender (for workingpartner=1)

survey showed that even women, who are all white collar workers, stated that ideal care burden of women in the household should be 58% on average.⁷ This can be considered as the inclination towards traditional gender roles (Figure 5).

Figure 6 shows the distribution of care and mental loads by marital status and kids. The actual care work of women increases by almost 19 percentage points on average, but for men, the increase is only two percentage points. The increase in mental load of women is 16 percentage points higher than that of men after getting married. It may seem like having kids does not change the actual loads. However, Figure 7 shows the total housework and mental load scores to understand the change better. The household with the highest total work score (where all the items on the lists are applicable) gets 100, and the remaining scores are normalized accordingly. This figure shows that for the married people with kids, the total care work is 33 percentage points higher, and the total mental load is 37 percentage points higher.

When examining the distribution of care work by education level presented in Figure 8, it is observed that among men, actual care responsibilities increase with

⁷Using the answers to the question "In your opinion, what percentage of the household responsibilities you just read about should ideally fall on you in a well-functioning home?" which was asked only in the Stage 1 survey.

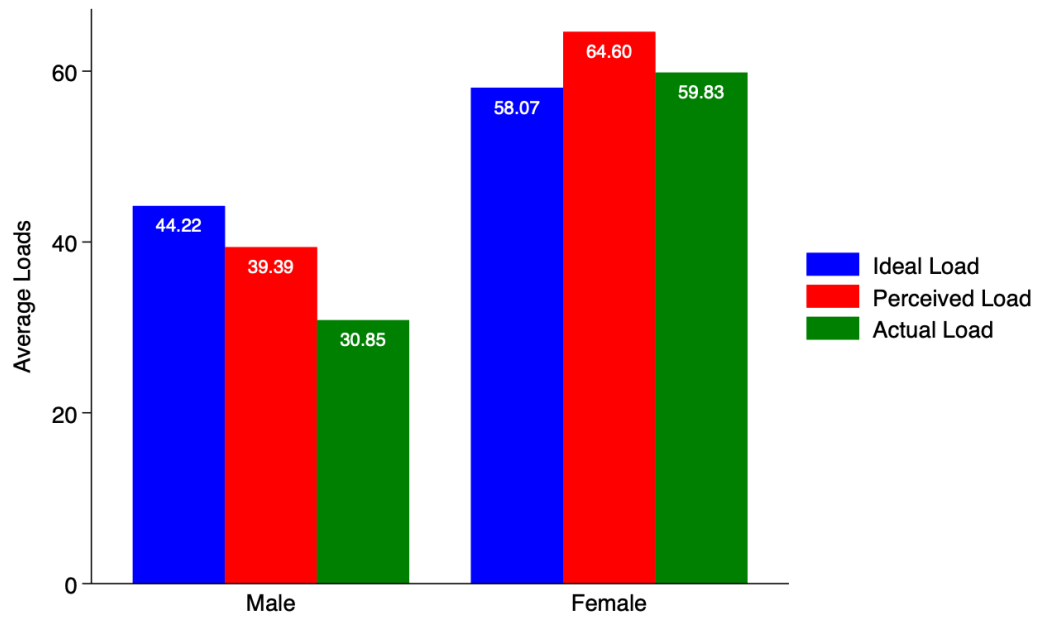


Figure 5. Distribution of perceived, actual and ideal care loads - stage 1

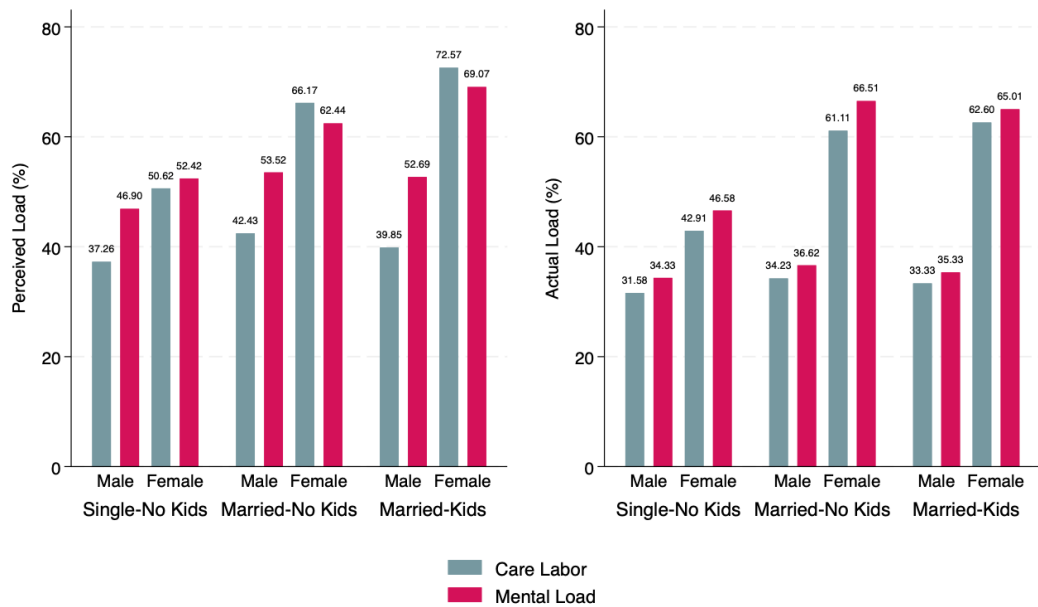


Figure 6. Distribution by marital status and gender

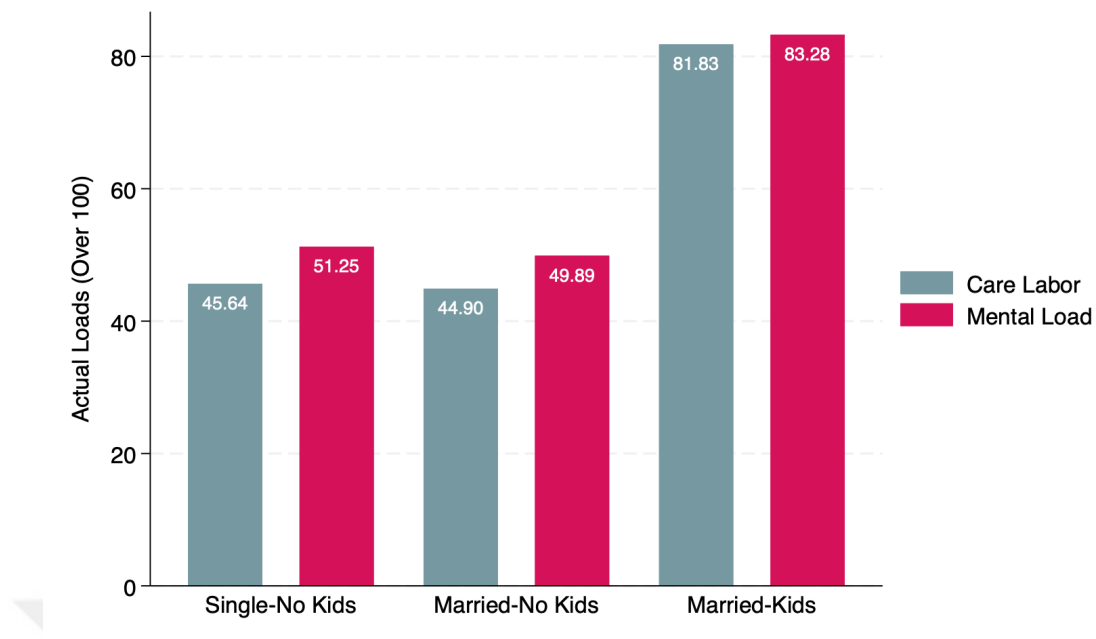


Figure 7. Total care work and mental load scores

higher levels of education. There is nearly 10 point difference between men with a high school diploma and those with a graduate degree. A decrease is also observed for women, but the decline does not exceed four percentage points, indicating that the distribution remains unequal. For men, also the gap between the perceived and actual loads of both care work and mental load decreases gradually with education level. This gap shrinks mainly due to an increase in the actual loads.

Figure 9 presents the average perceived and actual scores of care and mental workload across four household income groups, disaggregated by gender. For both men and women, there are no major shifts in these scores across income brackets, except for a marked decline in the highest income group. Gender gaps in perceived care workload remain consistently around 30 percentage points, while gaps in perceived mental load range from 14 to 17 points. In contrast, differences in actual scores vary more notably: gender gaps in actual care workload range from 17 to 29 percentage points, and in mental load from 21 to 28. Also, the gender gap in actual mental load approaches—and in the highest income group, exceeds—that of care workload (21 vs. 17 points). Additional analyses indicate that rising household

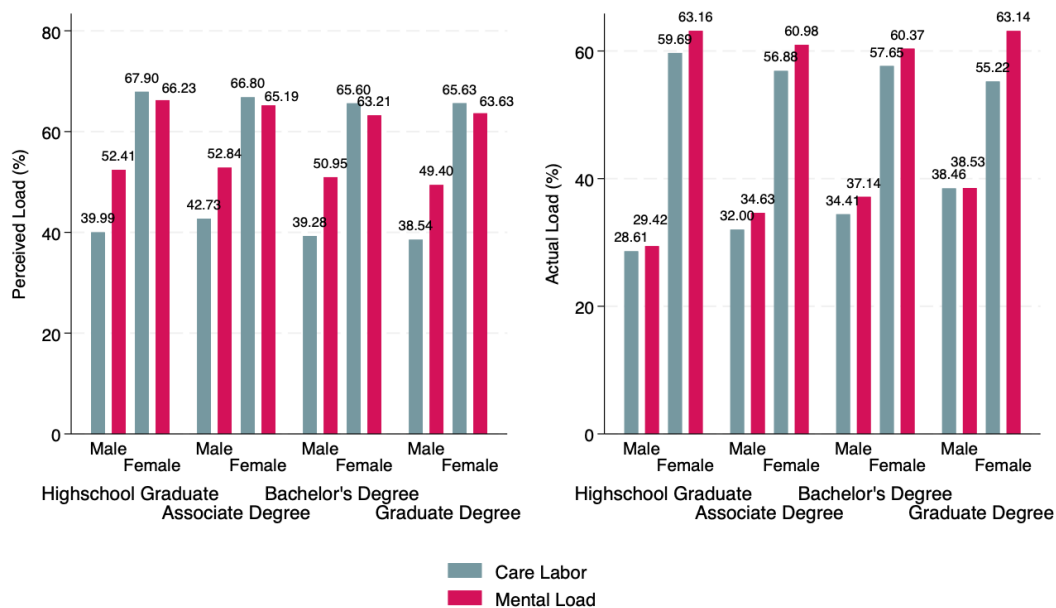


Figure 8. Distribution by education level and gender

income is significantly associated with a reduction in actual care responsibilities only among women (Table 3).

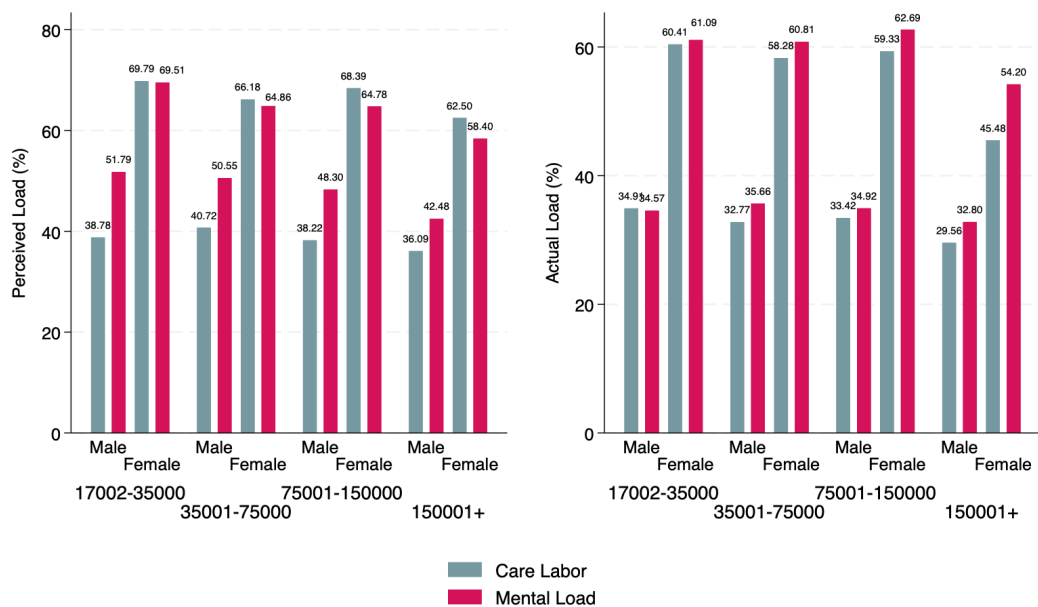


Figure 9. Distribution by household income level and gender

5.2 Determinants of care work and mental load

Table 2 shows OLS regression results for the determinants of perceived care work and mental load. In terms of mental load perceptions, gender is again a significant determinant. The results indicate that women's perceived care load is 26 percentage points higher compared to men which accounts for 49 percent of the mean care work score. The perceived mental load of women is 27 percent higher than the average mental load score. Women with higher education level reported higher perceived care work. Married women without kids reported 10 percentage points more perceived care and 6 percentage points more mental load compared to single women without kids. For married women with kids the perceived loads are 4 percentage points higher. For men, however, there is not a significant change after marriage or after becoming a parent. Another factor associated with perceived care and mental load among women is age. As age increases, perceived burdens also tend to rise, which may be explained by a greater susceptibility to physical and mental fatigue. However, the magnitude of this effect appears to be very small. Perceived care work of men whose partner also works increases by 3 percentage points compared to men whose partner is not working while there is no significant change in women's perception of care work. The perceived mental load of women increases by 7 percentage points. Increase in household income level, reportedly, increases the perceived care work of men.

The regression results analyzing the determinants of actual care and mental load are presented in Table 3. Column 1 shows that, actual care work of women is 72 percent higher than the mean care work which is 46.11. Mental load of women is 72 percent higher than the outcome mean as seen in column 4. Moreover, individuals with a bachelor's degree have higher levels of care work (7 points in the pooled sample, 4 for males) and mental load (8 points pooled, 5 for males) than those with a high school education. Women with a bachelor's degree have higher care work scores by 22 percentage points than their male counterparts (same for graduate degree). The difference is slightly lower for associate degree. One of the most important

Table 2. Determinants of Perceived Care and Mental Load

	Care Work			Mental Load		
	(1) (Pooled)	(2) (Male)	(3) (Female)	(4) (Pooled)	(5) (Male)	(6) (Female)
Female (=1)	26.39*** (22.68)			15.65*** (15.40)		
Age	0.130** (2.01)	0.0875 (0.91)	0.144* (1.73)	0.0813 (1.59)	0.0779 (1.00)	0.186*** (2.75)
Associate Degree	2.315 (1.21)	0.274 (0.09)	2.404 (1.09)	-0.688 (-0.42)	-2.125 (-0.80)	-0.582 (-0.29)
Bachelor's Degree	2.949* (1.96)	2.420 (1.03)	4.818** (2.55)	1.400 (1.01)	0.439 (0.19)	1.405 (0.88)
Graduate Degree	4.726* (1.81)	0.470 (0.14)	7.796** (2.36)	0.894 (0.35)	0.309 (0.08)	-0.196 (-0.06)
Married-No Kids	4.836** (2.42)	-2.158 (-0.90)	10.25*** (3.85)	4.981*** (3.15)	3.140 (1.56)	6.375*** (2.74)
Married-Kids	6.578*** (3.30)	-3.057 (-1.24)	14.33*** (5.78)	6.040*** (3.94)	0.814 (0.41)	9.991*** (4.58)
Working Partner(=1)	3.419** (2.17)	3.201* (1.79)	3.807 (1.18)	1.513 (1.13)	1.242 (0.73)	7.133** (2.46)
HHinc:35001-75000	1.135 (0.43)	5.358** (2.10)	-3.951 (-0.90)	-0.683 (-0.30)	1.016 (0.28)	-1.908 (-0.59)
HHinc:75001-150000	0.534 (0.18)	5.459* (1.79)	-6.043 (-1.31)	-0.829 (-0.34)	0.881 (0.23)	-2.402 (-0.68)
HHinc:150001+	-0.0602 (-0.01)	6.384 (1.24)	-4.384 (-0.74)	-5.259 (-1.31)	-2.481 (-0.43)	-3.316 (-0.61)
Manager(=1)	-1.786 (-1.33)	-1.383 (-0.81)	-0.976 (-0.51)	-1.037 (-0.92)	-0.376 (-0.24)	-1.349 (-0.84)
Gender Norms	-2.620*** (-4.05)	-0.967 (-1.02)	-0.228 (-0.25)	-0.456 (-0.73)	1.048 (1.02)	-0.272 (-0.32)
Cognitive Empathy	0.640 (0.16)	-6.549 (-1.04)	3.987 (0.74)	0.733 (0.20)	-0.740 (-0.11)	-2.828 (-0.62)
Observations	1218	594	624	1221	598	623
R-squared	0.560	0.423	0.328	0.387	0.303	0.370
Outcome Mean	53.741	39.830	66.238	58.083	51.387	64.134

Note: Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

determinants of actual care work and women's mental load are marriage and kids. Married individuals report higher levels of care work and mental load, with married women without children showing the highest scores (9.6 pp for care work, 8.7 pp for mental load). As also discussed in Part II, the fact that being married alone results in a slightly greater difference may be explained by the near doubling of the total household workload in families with children, which may lead to non-child-related tasks losing their relative importance.

Those with working partners display higher care work scores across all groups (5 points in the pooled sample, 6 for males, 8 for females) compared to individuals whose partners do not work. Individuals in the highest household income group (150,001 Turkish liras and more) show lower care work scores (14 points in the pooled sample, 8 for males, 13 for females) compared to lower income groups. People in managerial positions report lower care work scores (3 pp for pooled sample, 4 pp for males and 5 pp for females) compared to non-managers. Also, individuals with higher empathy levels report higher mental load scores, particularly among men. This turns out to be one of the most important results of the analysis.

Table 3. Determinants of Actual Care and Mental Load

	Care Work			Mental Load		
	(1) (Pooled)	(2) (Male)	(3) (Female)	(4) (Pooled)	(5) (Male)	(6) (Female)
Female	32.98*** (12.77)			35.43*** (14.07)		
Associate Degree	2.701 (1.05)	2.186 (0.91)	-4.240 (-1.56)	3.662 (1.37)	2.409 (0.96)	-3.477 (-1.37)
Bachelor's Degree	6.890*** (3.63)	4.225** (2.39)	0.683 (0.30)	7.719*** (3.88)	5.057*** (2.66)	-0.583 (-0.25)
Graduate Degree	8.624*** (3.30)	3.396 (1.31)	5.263 (1.27)	5.761** (2.09)	1.493 (0.54)	4.669 (1.26)
Female × Associate Degree	-8.207** (-2.30)			-8.603** (-2.41)		
Female × Bachelor's Degree	-10.59*** (-3.94)			-12.18*** (-4.50)		
Female × Graduate Degree	-11.22** (-2.46)			-6.257 (-1.49)		
Age	-0.0266 (-0.44)	0.0239 (0.38)	0.0861 (0.85)	-0.0266 (-0.46)	-0.0608 (-0.89)	0.114 (1.27)
Married-No Kids	3.472* (1.67)	-2.339 (-0.98)	9.616*** (3.02)	2.142 (1.00)	-3.821 (-1.57)	8.699*** (2.69)
Married-Kids	3.611* (1.78)	-0.477 (-0.20)	7.268** (2.38)	1.568 (0.75)	-1.379 (-0.57)	4.276 (1.34)
Working Partner(=1)	4.881*** (3.37)	5.676*** (3.75)	7.688** (2.20)	3.578** (2.56)	4.596*** (2.84)	4.664 (1.53)
HHinc:35001-75000	-4.468* (-1.72)	-1.833 (-0.68)	-6.473 (-1.30)	-1.683 (-0.59)	0.904 (0.27)	-4.388 (-0.84)
HHinc:75001-150000	-6.124** (-2.19)	-2.693 (-0.93)	-7.723 (-1.48)	-4.103 (-1.36)	-1.798 (-0.51)	-5.665 (-1.05)
HHinc:150001+	-13.75*** (-3.24)	-7.658* (-1.69)	-13.09* (-1.69)	-9.842** (-2.51)	-5.635 (-1.18)	-7.930 (-1.23)
Manager(=1)	-2.967** (-2.19)	-3.770*** (-2.79)	-5.506** (-2.04)	-2.092 (-1.50)	-2.440* (-1.68)	-2.981 (-1.06)
Gender Norms	-0.971 (-1.33)	0.397 (0.49)	0.189 (0.15)	-1.867** (-2.54)	-0.298 (-0.32)	-0.285 (-0.23)
Cognitive Empathy	6.022 (1.44)	8.455 (1.62)	4.303 (0.69)	10.17** (2.41)	11.76** (2.05)	7.159 (1.20)
Observations	1226	599	627	1226	599	627
R-squared	0.509	0.386	0.310	0.532	0.365	0.329
Outcome Mean	46.115	33.170	57.782	48.920	35.370	61.121

Note: Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

5.3 Awareness

Table 4 shows the OLS estimation results for care work and mental load awareness. Awareness is measured using the difference between perceived and actual loads as the dependent variable. Awareness is an essential output in this study because an individual's ability to assess their own actual care and mental load accurately may indicate a greater capacity to understand their partner's burden as well. Therefore, raising awareness could be an effective way to prevent or correct the unequal distribution of these responsibilities. Perceived loads are always greater than actual loads, so negative coefficients indicate a greater awareness level. Column 4 indicates that women have significantly higher mental load awareness (11 percentage points) than their male counterparts. In care work awareness, the gender difference is not statistically significant.

Marriage reportedly affects mental load awareness of women in a negative way. Their awareness score almost doubles which means they become 100 percent less aware of their actual loads. Married men with kids tend to overstate their mental load even more compared to both single men and married men without kids. The interaction terms indicate that both male and female managers who are married without kids show reduced mental load awareness compared to their non-manager counterparts, however not significantly.

Men with a bachelor's degree have 30 percent higher mental load awareness than the mean awareness score. Men with higher cognitive empathy scores reportedly doubled their care work awareness compared to the mean meaning they perceive the burden of their responsibilities more accurately. Additionally, men with working partners are 21 percent more aware of their actual mental load.

5.4 Within household equality

In the fourth section of the analysis, the factors determining within-household equality were examined. The dependent variable in these models was defined as the difference between the respondent's own score and their partner's score. Since male

Table 4. Determinants of Care Work and Mental Load Awareness

	Care Work Awareness			Mental Load Awareness		
	(1) (Pooled)	(2) (Male)	(3) (Female)	(4) (Pooled)	(5) (Male)	(6) (Female)
Female(=1)	1.629 (1.27)			-10.73*** (-8.17)		
Age	0.165** (2.21)	0.0647 (0.62)	0.0543 (0.55)	0.115* (1.70)	0.142 (1.57)	0.0639 (0.66)
Associate Degree	3.766* (1.69)	-2.094 (-0.64)	6.520** (2.28)	0.456 (0.21)	-4.687 (-1.48)	3.250 (1.17)
Bachelor's Degree	1.299 (0.74)	-2.128 (-0.87)	3.984* (1.76)	-0.129 (-0.07)	-4.714* (-1.79)	1.898 (0.72)
Graduate Degree	1.497 (0.53)	-3.298 (-0.86)	2.656 (0.69)	-1.608 (-0.55)	-1.259 (-0.29)	-4.753 (-1.21)
Married-No Kids	1.902 (0.95)	-0.531 (-0.22)	0.765 (0.25)	2.072 (0.99)	7.080*** (2.73)	-4.656 (-1.52)
Married-Kids	3.564* (1.84)	-3.241 (-1.32)	7.681*** (2.86)	4.363** (2.18)	1.489 (0.58)	5.783* (1.94)
Manager(=1)	0.423 (0.13)	-3.476 (-0.93)	8.105 (1.56)	-3.376 (-0.72)	-0.165 (-0.02)	-1.958 (-0.27)
Married-No Kids × Manager	2.842 (0.61)	6.386 (1.21)	-1.983 (-0.26)	9.867* (1.66)	-0.183 (-0.02)	15.87* (1.69)
Married-Kids × Manager	0.508 (0.14)	6.263 (1.54)	-4.119 (-0.71)	4.090 (0.84)	2.878 (0.43)	2.086 (0.28)
Working Partner	-1.631 (-1.02)	-2.536 (-1.36)	-3.592 (-1.33)	-2.324 (-1.39)	-3.465* (-1.71)	2.292 (0.74)
HHinc:35001-75000	5.716* (1.94)	7.232** (2.26)	2.841 (0.67)	1.104 (0.36)	0.0665 (0.01)	2.950 (0.63)
HHinc:75001-150000	6.777** (2.13)	8.411** (2.34)	1.829 (0.41)	3.573 (1.12)	2.730 (0.57)	4.085 (0.84)
HHinc:150001+	13.86*** (3.08)	14.60** (2.55)	9.137 (1.27)	4.614 (1.01)	3.382 (0.49)	6.488 (1.04)
Gender Norms	-1.906** (-2.51)	-1.318 (-1.38)	-0.485 (-0.38)	1.150 (1.39)	1.403 (1.09)	-0.0675 (-0.06)
Cognitive Empathy	-4.852 (-1.03)	-14.72** (-2.33)	-0.835 (-0.13)	-8.161 (-1.60)	-12.04 (-1.52)	-10.70 (-1.61)
Observations	1218	594	624	1221	598	623
R-squared	0.209	0.463	0.281	0.246	0.348	0.328
Outcome Mean	7.640	6.770	8.421	9.126	15.891	3.025

Note: Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

participants' scores were generally lower than those of female participants, negative coefficients can be interpreted as contributing to reducing inequality for the results in columns "Female", while having the opposite effect—increasing inequality—for columns "Male".

Table 5 shows the regression results for within-household equality. Firstly, the mean difference for women is +32.9 percent in care work and +36.2 in mental load, while men report -15.1 and -13.9 on average respectively, indicating they do less than their partners. Column 5 indicates that in households with men with Bachelor's degree, the mental load gap between them and their partner is 8 percentage points - which accounts for 50 percent of the mean - lower compared to high school graduates meaning less inequality within household.

The second significant variable is marriage. Married men without kids report 33 percentage points more inequality in care work which means that the inequality almost triples compared to single men. Inequality in mental load is even higher. Men with working partners reportedly share both care work and mental load more equally. Further, care work is more equally distributed among partners when women has a managerial role whereas inequality is higher for men who are managers.

Lastly, columns 2 and 5 show that empathetic skills play an important role in determining the within-household equality. Cognitive empathy score is significant among men. Men with 10 percentage points higher cognitive empathy score reports 13 percent less inequality in care work and 20 percent less inequality in mental load.

Among the survey participants, there were 102 couples living in the same household. To assess the consistency of the self-reported partner scores used in the main regression analysis, a t-test was conducted using only the couples' data. The tested variable was defined as the difference between an individual's self-reported scores and the scores reported by their partner on their behalf. The results show that both men and women were able to report their partner's care work responsibilities with a high degree of accuracy. However, in the case of mental load, both genders significantly underestimated their partner's burden. The extent of underestimation

was slightly greater among male respondents. Given that mental load is highly personal, less visible, and more difficult to measure than physical tasks, these findings are to be expected.⁸

Table 5. Determinants of Within Household Equality

	Equality in Care Work			Equality in Mental Load		
	(1) (Pooled)	(2) (Male)	(3) (Female)	(4) (Pooled)	(5) (Male)	(6) (Female)
Female(=1)	50.52*** (24.61)			54.27*** (25.48)		
Age	0.0729 (0.66)	0.167 (1.36)	0.344** (2.09)	-0.0352 (-0.32)	-0.0614 (-0.45)	0.263 (1.61)
Associate Degree	-2.569 (-0.78)	1.675 (0.40)	-5.854 (-1.38)	-0.854 (-0.25)	4.060 (0.91)	-5.495 (-1.26)
Bachelor's Degree	-0.0246 (-0.01)	4.706 (1.51)	-1.875 (-0.47)	1.594 (0.54)	8.079** (2.34)	-2.320 (-0.56)
Graduate Degree	4.146 (0.96)	5.643 (1.16)	6.863 (0.99)	3.601 (0.79)	3.739 (0.72)	6.085 (0.85)
Married-No Kids	-20.37*** (-5.55)	-33.02*** (-7.97)	-3.487 (-0.70)	-21.17*** (-5.44)	-34.84*** (-8.17)	-2.945 (-0.56)
Married-Kids	-21.63*** (-5.88)	-32.14*** (-7.70)	-10.11** (-2.10)	-21.52*** (-5.57)	-30.16*** (-6.87)	-12.06** (-2.38)
Working Partner	7.197*** (2.75)	6.607** (2.36)	11.90** (2.06)	5.017* (1.93)	5.112* (1.74)	6.143 (1.18)
HHinc:35001-75000	-2.779 (-0.61)	2.548 (0.51)	-5.725 (-0.66)	-0.425 (-0.08)	5.344 (0.88)	-4.901 (-0.52)
HHinc:75001-150000	-5.983 (-1.20)	2.722 (0.50)	-9.761 (-1.08)	-6.253 (-1.16)	0.193 (0.03)	-9.615 (-1.00)
HHinc:150001+	-14.44* (-1.90)	2.106 (0.24)	-17.35 (-1.33)	-12.44 (-1.63)	-2.260 (-0.21)	-10.80 (-0.91)
Manager(=1)	-2.764 (-1.18)	-4.233* (-1.69)	-7.765* (-1.89)	-0.469 (-0.19)	-1.543 (-0.58)	-2.029 (-0.47)
Gender Norms	-2.065 (-1.59)	0.708 (0.45)	-0.129 (-0.06)	-3.281** (-2.45)	-0.361 (-0.20)	-0.508 (-0.25)
Cognitive Empathy	8.672 (1.14)	19.50** (2.12)	5.487 (0.49)	18.65** (2.40)	27.16** (2.49)	13.39 (1.23)
Observations	1226	599	627	1226	599	627
R-squared	0.541	0.460	0.319	0.553	0.443	0.323
Outcome Mean	10.143	-15.117	32.910	12.439	-13.936	36.187

Note: Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

5.5 Career costs of care work and mental load

Table 6 presents the regression results analyzing the probability of refusing a promotion or declining additional responsibilities due to care-related burdens.

⁸See Appendix B

The regression results show that probability of declining a promotion more than doubles for married women without kids compared to single women, results are similar for married women with kids. For men, the same variable has no statistically significant effect.

When the household income increases from 17.002-35.000 TL interval to 35.01- 75.000 TL interval the likelihood of declining promotion or additional responsibilities reportedly decreases significantly compared to outcome mean. Similar results also hold for the 75,001–150,000 TL income band. For higher income interval no significant effect is present. This may be due to the fact that the mean total housework score is relatively small for households in the 150.000+ TL income band.

Women who work from home at least one day a week are 13 percentage points more likely to decline a promotion offer or additional responsibilities than women who work from the office again almost a 100 percent increase. This may be because women who are continuously exposed to care responsibilities and mental load, most of which already fall on their shoulders, lead to increased stress.

Table 7 presents the regression results examining the factors associated with the likelihood of leaving one's job due to care-related burdens.

Being female has a statistically significant effect on the likelihood of leaving one's job. After controlling for care burden, the likelihood of leaving their jobs due to household responsibilities is 26 percent higher for female than men. When controlling for mental load, this number increases to 32 percent. Marital and parental status also influence job separation. Married people with children are almost 45 percent more likely to leave their jobs compared to single people due to household responsibilities.

Having a female manager is associated with a reduced likelihood of job separation for men. Specifically, probability of leaving their jobs due to domestic responsibilities is 43 percent less for men with a female manager than men with a male manager. Further analysis shows that participants with female supervisors

Table 6. Promotion Costs of Care Work and Mental Load

	Promotion Costs of Care Work			Promotion Costs of Mental Load		
	(1) Pooled	(2) Male	(3) Female	(4) Pooled	(5) Male	(6) Female
Female (=1)	0.029 (0.030)			0.027 (0.031)		
Age	-0.002 (0.002)	-0.001 (0.003)	-0.004 (0.003)	-0.002 (0.002)	-0.001 (0.003)	-0.004 (0.003)
Associate Degree	0.078** (0.038)	0.109* (0.057)	0.045 (0.051)	0.078** (0.038)	0.109* (0.057)	0.046 (0.052)
Bachelor's Degree	0.043 (0.031)	0.041 (0.043)	0.044 (0.044)	0.042 (0.031)	0.040 (0.043)	0.041 (0.044)
Graduate Degree	0.030 (0.055)	-0.035 (0.071)	0.087 (0.084)	0.030 (0.055)	-0.036 (0.071)	0.086 (0.084)
Married-No Kids	0.078** (0.038)	0.029 (0.058)	0.160*** (0.053)	0.077** (0.038)	0.030 (0.058)	0.161*** (0.053)
Married-Kids	0.089** (0.036)	0.032 (0.055)	0.178*** (0.052)	0.087** (0.036)	0.033 (0.054)	0.173*** (0.052)
Working Partner	-0.029 (0.029)	-0.034 (0.037)	-0.030 (0.070)	-0.031 (0.029)	-0.036 (0.036)	-0.036 (0.070)
HHinc:35001-75000	-0.071 (0.057)	0.064 (0.068)	-0.281*** (0.085)	-0.068 (0.057)	0.065 (0.067)	-0.276*** (0.085)
HHinc:75001-150000	-0.038 (0.063)	0.090 (0.076)	-0.235** (0.093)	-0.035 (0.063)	0.091 (0.076)	-0.230** (0.093)
HHinc:150001+	-0.031 (0.082)	0.110 (0.099)	-0.165 (0.125)	-0.026 (0.083)	0.113 (0.099)	-0.155 (0.129)
Work Experience (years)	0.004** (0.002)	0.005 (0.003)	0.006** (0.003)	0.004* (0.002)	0.005 (0.003)	0.006* (0.003)
Managerial Role (=1)	0.007 (0.027)	-0.008 (0.038)	0.052 (0.045)	0.008 (0.027)	-0.006 (0.038)	0.057 (0.044)
Female Manager (=1)	0.087*** (0.028)	0.007 (0.046)	0.133*** (0.035)	0.089*** (0.028)	0.008 (0.046)	0.136*** (0.035)
WFH Available (=1)	0.090 (0.071)	-0.072 (0.069)	0.323*** (0.116)	0.092 (0.071)	-0.072 (0.069)	0.325*** (0.117)
Care Load Score	-0.001 (0.001)	-0.000 (0.001)	-0.002*** (0.001)			
Mental Load Score				-0.001 (0.001)	-0.000 (0.001)	-0.003*** (0.001)
Gender Norms	0.009 (0.014)	-0.001 (0.019)	0.040 (0.025)	0.009 (0.014)	-0.001 (0.019)	0.039 (0.025)
Cognitive Empathy	-0.124 (0.092)	-0.119 (0.145)	-0.034 (0.130)	-0.122 (0.092)	-0.122 (0.145)	-0.025 (0.130)
Observations	1196	578	618	1196	578	618
R-squared	0.303	0.351	0.372	0.303	0.351	0.373
Outcome Mean	0.130	0.117	0.142	0.130	0.117	0.142

Note: Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

reported, on average, higher scores regarding managerial flexibility.⁹ this may explain the previous result.

Women with working partners face 48 percent higher separation likelihood. However no such effect appears for men, pointing to a gendered tension in dual-earner households.

Cognitive empathy levels have a statistically significant and negative effect on the likelihood of job separation for both genders. Among men, ten percentage points increase in the empathy score is associated with a three percentage points decrease in the probability of leaving a job due to domestic responsibilities which means the likelihood more than doubles. Among women, the effects are slightly smaller relative to outcome mean. These findings may be explained by the fact that higher levels of cognitive empathy may result in more resilience to cope with care-related and mental burdens, leading to a lower likelihood of exiting the labor market.

⁹The managerial flexibility score was predicted through factor analysis based on participants' level of agreement with the following statements:

- My supervisor is flexible when I need to take a family member to the doctor/hospital due to health reasons (e.g., my child, spouse, or an elderly relative).
- My supervisor implies disapproval or puts pressure on me when I miss work due to family-related reasons (e.g., picking up my child from school).
- When I feel unwell, I can easily notify my supervisor, and I am granted leave without hesitation.
- My organization allows me to use my leave as I see fit.
- My organization provides flexibility to employees with children during school holidays.

Table 7. Separation Costs of Care Work and Mental Load

	Separation Costs of Care Work			Separation Costs of Mental Load		
	(1) Pooled	(2) Male	(3) Female	(4) Pooled	(5) Male	(6) Female
Female (=1)	0.086** (0.035)			0.106*** (0.035)		
Age	0.001 (0.003)	-0.003 (0.004)	0.003 (0.004)	0.001 (0.003)	-0.003 (0.004)	0.003 (0.004)
Associate Degree	-0.000 (0.046)	-0.047 (0.068)	0.025 (0.069)	-0.001 (0.046)	-0.043 (0.068)	0.026 (0.069)
Bachelor's Degree	0.022 (0.039)	0.033 (0.052)	0.036 (0.062)	0.023 (0.039)	0.042 (0.053)	0.034 (0.062)
Graduate Degree	-0.012 (0.065)	0.037 (0.086)	-0.023 (0.103)	-0.010 (0.065)	0.043 (0.087)	-0.024 (0.104)
Married-No Kids	0.080 (0.051)	0.109 (0.071)	0.075 (0.081)	0.081 (0.051)	0.104 (0.072)	0.075 (0.081)
Married-Kids	0.150** (0.048)	0.152** (0.067)	0.168** (0.076)	0.151*** (0.049)	0.151** (0.067)	0.165** (0.075)
HHinc:35001-75000	-0.024 (0.072)	0.003 (0.103)	-0.064 (0.113)	-0.025 (0.072)	-0.004 (0.103)	-0.061 (0.113)
HHinc:75001-150000	-0.073 (0.076)	0.022 (0.113)	-0.140 (0.118)	-0.077 (0.076)	0.013 (0.114)	-0.137 (0.117)
HHinc:150001+	-0.074 (0.100)	0.030 (0.139)	-0.041 (0.170)	-0.082 (0.100)	0.010 (0.139)	-0.034 (0.172)
Work Experience (years)	-0.003 (0.003)	0.003 (0.004)	-0.004 (0.004)	-0.003 (0.003)	0.003 (0.004)	-0.004 (0.004)
Managerial Role (=1)	-0.015 (0.033)	0.001 (0.044)	-0.003 (0.053)	-0.017 (0.033)	-0.006 (0.044)	-0.000 (0.053)
Female Manager (=1)	-0.003 (0.032)	-0.121** (0.051)	0.025 (0.042)	-0.005 (0.032)	-0.127** (0.051)	0.027 (0.042)
WFH Available (=1)	0.026 (0.073)	-0.100 (0.102)	0.171 (0.128)	0.028 (0.073)	-0.096 (0.100)	0.172 (0.127)
Care Load Score	0.000 (0.001)	0.002 (0.001)	-0.001 (0.001)			
Mental Load Score				-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)
Gender Norms	0.005 (0.017)	-0.004 (0.025)	0.002 (0.028)	0.004 (0.017)	-0.003 (0.025)	0.002 (0.028)
Cognitive Empathy	-0.323*** (0.107)	-0.326* (0.173)	-0.329** (0.152)	-0.318*** (0.108)	-0.306* (0.173)	-0.325** (0.154)
Working Partner(=1)	0.109*** (0.037)	0.008 (0.048)	0.185** (0.082)	0.112*** (0.037)	0.021 (0.049)	0.181** (0.082)
Observations	1196	578	618	1196	578	618
R-squared	0.414	0.455	0.484	0.414	0.452	0.484
Outcome Mean	0.335	0.281	0.383	0.335	0.281	0.383

Note: Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

CHAPTER 6

CONCLUSIONS

Having direct implications on people's daily lives, the distribution of unpaid domestic labor and mental load within households has long been the subject of research. However, existing literature on domestic care, mental load, women's time poverty, and the career consequences of these concepts tends to examine these topics separately and to a limited degree. This research aims to understand the worklife implications of unpaid domestic care work and the mental load it brings with it from a broader perspective, with a particular focus on the gender differences.

Research shows that women continue to carry a larger share of both unpaid domestic work and mental load. These responsibilities increase after marriage or having children and can negatively impact women's careers by lowering their participation in the workforce, earnings, and productivity. Although care work has been widely explored, studies on mental load are still limited—despite its important role in everyday life. Mental load refers to the often unseen mental and emotional effort of organizing and managing household tasks. The COVID-19 pandemic made these inequalities even more visible, especially with the shift to remote work. Overall, these findings show that care duties and mental strain are not just private issues but also important obstacles to achieving gender equality in working life.

The results of this research supports that there are consistent differences between men and women in both how they see household responsibilities and how these tasks are actually shared. These inequalities get worse for women, especially after they get married and have children, when they take on much more housework and mental planning. While men's actual workload doesn't increase much after marriage, they do feel more mental burden after becoming fathers, suggesting there's a gap between what they think they contribute and what they actually do. Another finding of this paper is the role of awareness: women generally exhibit greater awareness of their own domestic burdens. Men tend to overestimate their care and especially their mental burdens. Therefore, increasing men's awareness may help

them recognize and reduce the imbalance in domestic responsibilities. Cognitive empathy is found to be an significant determinant of both awareness and within-household equality among men. Making these disparities more visible and supporting the development of empathy-related skills could contribute to a more equitable division of unpaid labor. For instance, trainings targeted in improving cognitive empathy could help with increased equality in care work and mental load distribution within household. Moreover, the unequal distribution of these burdens affects the private lives but, it also affects professional life, especially for women. Household responsibilities are linked to higher probabilities of refusing promotions or leaving jobs. This outcome is more common among married women with children.

Since this study focuses on white-collar employees, the findings are particularly relevant for organizations aiming to retain and support skilled professionals. The results suggest that employers should recognize the hidden pressures of unpaid care and mental load borne by their employees, especially women. Increasing flexibility, promoting gender-equality, and supporting awareness-raising initiatives within the workplace can be meaningful steps toward fostering more equitable conditions.

APPENDIX A

LIST OF CARE WORK AND MENTAL LOAD TASKS

A.1 Care work tasks

1. Meeting the needs of elderly family members (e.g., calling, shopping, taking to doctor, getting medication)
2. Car maintenance (e.g., refueling, washing, inspection, repairs)
3. Performing basic repairs and maintenance
4. Washing the dishes
5. Doing the laundry (washing, hanging, ironing, placing)
6. Preparing children for school (e.g., making breakfast, packing bags, meeting school needs)
7. Taking children to school/courses/activities (e.g., providing transportation)
8. Helping with children's homework (e.g., assisting, checking homework)
9. Taking out the trash
10. Buying gifts for special occasions (e.g., birthdays, Mother's Day, Father's Day)
11. House cleaning (e.g., sweeping, wiping, dusting)
12. Caring for pets (e.g., feeding, washing, walking)
13. Grocery shopping (e.g., preparing a list, carrying, placing items)
14. Daily tidying (e.g., making beds, organizing items)
15. Paying bills and taxes
16. Caring for a sick household member (e.g., monitoring health, scheduling appointments, tracking medications)

17. Preparing for holidays (e.g., packing, shopping for missing items, separating perishable foods)
18. Cooking
19. Setting and clearing the dining table

A.2 Mental load tasks

1. Monitoring the health and needs of elderly family members (e.g., identifying needs, making doctor appointments)
2. Planning family/friend visits
3. Deciding which brands/products to buy for the car and when (e.g., tires, fuel station choice); tracking insurance and inspection
4. Monitoring dish soap supply
5. Scheduling laundry days
6. Tracking children's school performance
7. Planning children's leisure activities (e.g., selecting courses based on interests, sports activities)
8. Monitoring when the trash is full and when it should be taken out
9. Remembering important dates and planning special occasions (e.g., birthdays)
10. Scheduling general house cleaning days
11. Tracking pet food and vet visits (e.g., vaccination schedule)
12. Monitoring fridge contents and expiration dates of household items (e.g., groceries)
13. Tracking supplies needed for house cleaning

14. Monitoring bill and tax payments
15. Planning holidays (e.g., purchasing tickets, making reservations)
16. Deciding what to cook for dinner



APPENDIX B
COUPLES DATA - T-TEST RESULTS

Variable	Obs	Mean	Std. Error	t-statistic	p-value
Care Work Diff (Female)	101	0.605	1.381	0.438	0.662
Care Work Diff (Male)	101	1.608	1.374	1.170	0.245
Mental Load Diff (Female)	101	3.638	1.379	2.639	0.010**
Mental Load Diff (Male)	101	4.021	1.341	2.998	0.003***

Note: * p<0.10, ** p<0.05, *** p<0.01

H0: mean = 0. Two-tailed test results reported.

REFERENCES

- Abigail, A.-P., & Berg, J. (2017). When home affects pay: An analysis of the gender pay gap among crowdworkers. *SSRN Electronic Journal*.
- Addati, L., Cattaneo, U., Esquivel, V., & Valarino, I. (2018). *Care work and care jobs for the future of decent work*. International Labour Office.
- Auspurg, K., Iacovou, M., & Nicoletti, C. (2017). Housework share between partners: Experimental evidence on gender-specific preferences. *Social Science Research*, 66, 118–139.
- Badawy, P. J., & Schiemann, S. (2019). When family calls: How gender, money, and care shape the relationship between family contact and family-to-work conflict. *Journal of Family Issues*, 41(8), 1188–1213.
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The “reading the mind in the eyes” test revised version: A study with normal adults, and adults with asperger syndrome or high-functioning autism. *Journal of Child Psychology and Psychiatry*, 42(2), 241–251.
- Boring, A., & Moroni, G. (2023). Turning back the clock:beliefs about gender roles during lockdown. *Labour Economics*, 84, 102363.
- Campolo, M. G., Di Pino, A., & Rizzi, E. L. (2016). Parenthood and labour division in italian two-earner couples. *International Journal of Social Economics*, 43(12), 1315–1333.
- Communities, E. (2008). *Statistical classification of economic activities in the european community*.
- Cortés, P., & Pan, J. (2017). When time binds: Substitutes for household production, returns to working long hours, and the skilled gender wage gap. *Journal of Labor Economics*, 37(2), 351–398.
- Daminger. (2019). The cognitive dimension of household labor. *American Sociological Review*, 84(4), 609–633.
- Daminger. (2020). De-gendered processes, gendered outcomes: How egalitarian couples make sense of non-egalitarian household practices. *American Sociological Review*, 85(5), 806–829.
- Del Boca, D., Oggero, N., Profeta, P., & Rossi, M. (2020). Women’s and men’s work, housework and childcare, before and during covid-19. *Review of Economics of the Household*, 18, 1001–1017.
- Hundley, G. (2000). Male/female earnings differences in self-employment: The effects of marriage, children, and the household division of labor. *Industrial and Labor Relations Review*, 54(1), 95–114.
- Kincaid, R. (2021). Maternal decision-making and family-to-work spillover: Does gender ideology matter? *Sociological Focus*, 54(3), 223–238.

OECD. (2019). *Enabling women's economic empowerment: New approaches to unpaid care work in developing countries*.

Reich-Stiebert, N., Froehlich, L., & Voltmer, J.-B. (2023). Gendered mental labor: A systematic literature review on the cognitive dimension of unpaid work within the household and childcare. *Sex Roles*, 88, 475–494.

