



Gendered Patterns of Unpaid Care Work: Social Inequality, Household Well-Being and Policy Implications

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Abstract

Unpaid care work is a fundamental yet often undervalued component of household functioning and social welfare, with women continuing to bear a disproportionate share of caregiving responsibilities. This study examines gender differences in unpaid care work, investigates the socioeconomic determinants of unpaid care responsibilities, and evaluates their relationship with household well-being. A quantitative cross-sectional research design was employed using data from 1,500 respondents. Descriptive statistics, Pearson correlation analysis, independent samples t-tests, and multiple linear regression analyses were conducted using IBM SPSS Statistics 29. The findings reveal a significant gender disparity in unpaid care work, with women performing substantially more unpaid care hours than men ($t(1498) = 20.46, p < .001$). Regression analysis further indicates that employment status, income quintile, household size, the presence of children, and elderly dependents are significant predictors of unpaid care work, explaining 79.3% of its variance. However, unpaid care work does not exert a statistically significant direct effect on household well-being after controlling demographic, socioeconomic, and psychological factors. Instead, household well-being is primarily associated with higher income, greater life satisfaction, lower mental distress, and adequate sleep duration. These findings highlight that addressing gender inequality in unpaid care requires integrated policies that promote equitable caregiving responsibilities, strengthen women's labour force participation, expand access to formal care services, and improve psychological well-being. The study contributes to the literature by demonstrating that household well-being is shaped more strongly by economic and psychological resources than by unpaid care work alone.

Keywords: unpaid care work, gender inequality, household well-being, labour force participation, socioeconomic determinants

1. Introduction

Unpaid care work can be said to be one of the major but under-appreciated aspects of household and economy, which includes care tasks like taking care of children, taking care of elders, cooking, cleaning and many other household chores which help individuals and society survive without receiving any form of monetary reward. Even when this aspect is so important to the social reproduction process and overall economic development, it is still the women who end up undertaking most of the the unpaid care duties irrespective of their socio-economic status and cultural environment, hence the perpetuation of gender discrimination in household and labor market situations. This unequal sharing of unpaid care burdens affects women negatively with regards to their ability to engage in paid work, advance their careers, earn money and participate in the society. Recent studies have identified unpaid care work as an important determinant of gender equality and welfare of households (Dugarova, 2020; Charmes, 2022).

Indeed, the significance of tackling the issue of unpaid care work has been made even more obvious through the emergence of the COVID-19 pandemic, which has further heightened the burden of domestic caregiving due to school closure, healthcare concerns, and movement restriction. Data collected in the UK suggests that women have shouldered greater unpaid caregiving tasks during lockdown due to the pandemic situation, resulting in higher psychological distress and poor mental well-being in comparison to men (Xue & McMunn, 2021). On an international level, there is evidence to show that the pandemic has further widened the existing gap between genders, whereby it has increased the demand for unpaid caregiving work as well as reduced employment chances for women (Dugarova, 2020).

Unpaid care work is also associated with social inequality due to differences in income levels, educational background, employment status, household structure, and infrastructure. Households with limited access to labor-saving devices and public services are likely to face a heavy burden of unpaid care, particularly among married women. For instance, according to research carried out in Egypt, improvements in household technology and infrastructural services lead to lower unpaid care duties of women because of increased efficiency at home (Assaad & Ragab, 2024). Economic disadvantages tend to exacerbate caregiving duties as well, especially when informal caregivers have to take care of older relatives, as women tend to provide disproportionately more care than men do (Koshmaganbetova et al., 2024). The economic impact of excessive unpaid caregiving activities can be especially harmful to young people's educational achievement, employment, health status, and earning capacity (Brimblecombe et al., 2020). Thus, unpaid care work is both a result and a reason for social inequality.

Gender inequalities in unpaid care work also impact women's access to paid work and their economic productivity. Many studies have shown that an over-involvement in care work decreases women's labor force participation, limits working time, and leads to occupational segregation and wage gaps (Gámez & Angeles, 2021; Pimkina & de La Flor, 2020). Women's employment prospects can reduce, and so can be household economic resilience and well-being, suggesting that unpaid care work and household well-being are closely linked. Furthermore, policies to achieve gender equality (SDG 5) can have positive spillover effects across several aspects of sustainable development and leave a gendered impact on care responsibilities, which are deeply entrenched in structures (Subba, 2022; Yang et al., 2020).

While there is a vast body of work on gender differences in unpaid care work, there have been relatively less studies that have both explored the role of social inequalities in shaping the nature of unpaid care work and the role of unpaid care work in shaping the nature of household well-being in a single analytical frame as in figure 1. Previous research has tended to focus either on labour market effects or psychological effects and paid relatively little attention to the overarching family implications of unequal care allocation. This study tackles the issue by exploring the gendered distribution of unpaid care work and the socioeconomic inequality factors that shape this distribution, as well as the implications of these distribution patterns for the well-being of households. This study aims to add to the literature on unpaid care work by combining both gender and social inequality with household welfare in one empirical framework and by offering empirical evidence-based policy recommendations for better distribution of care, household welfare and sustainable gender-responsive development.

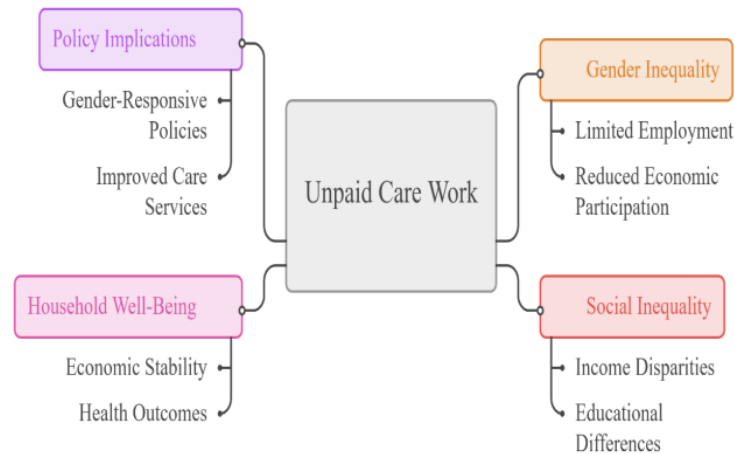


Figure 1. Conceptual Framework of Unpaid Care Work, Gender and Social Inequality, Household Well-Being, and Policy Implications

Figure 1 presents the conceptual framework illustrating unpaid care work as the central construct linked to gender inequality, social inequality, household well-being, and policy implications

Research Objectives

- 1.To examine the gender-based differences in the allocation of unpaid care work among households and identify the extent of disparities in caregiving responsibilities between men and women.
- 2.To analyze the influence of socioeconomic factors, including income, education, employment status, household composition, and access to support services, on the distribution of unpaid care work.
- 3.To investigate the impact of unpaid care work on household well-being and derive policy recommendations that promote gender equality and equitable care-sharing arrangements.

2. Methodology

2.1 Research Design

In conducting this research, a quantitative cross-sectional research design was adopted to analyze gender differences regarding unpaid care work and its impact on the well-being of the households. Quantitative research is characterized by the ability to analyze relations among demographic, socio-economic and household variables via statistical methods. Therefore, it is an appropriate methodology to reveal the gender differences in the division of unpaid care work and the impact of socio-economic variables on the well-being of households.

2.2 Data Source

The research used a cross-sectional household data set that had 1,500 data entries from adults ranging in age from 18 to 65 years of age belonging to different socio-economic strata. The data set has variables on demographic profile, employment situation, education level, family structure, income level, unpaid work, and family well-being. Variables included in the data set allow a detailed analysis of the distribution and social determinants of unpaid care work.

2.3 Variable Measurement

The key dependent variables were the number of hours spent per week on unpaid care work and well-being within the family, which was measured by the composite well-being index. Gender, age, educational attainment, employment status, income quintile, family size, number of children, elderly dependents, and access to formal care were among the independent variables. Employment status acted as a moderating

variable and time pressure as a mediating variable. All the variables were coded numerically.

2.4 Data Analysis

Data analysis in the present study was done using Python software. The description statistics, such as frequencies, percentages, mean, and standard deviation, were calculated for describing the demographic features of the respondents. Group comparisons were done through independent samples t-test and one way ANOVA tests, whereas Pearson correlation test was applied to find out the associations between study variables. Multiple linear regression analysis was done to determine the impact of socioeconomic variables on unpaid care work and family well-being. Mediation and moderation analysis was also done to understand the indirect and interaction effects respectively.

2.5 Ethical Considerations

Research ethics and integrity principles were developed through this study. All data used in the analysis was anonymous, which guarantees that confidentiality was maintained in all observations. Analysis of the data was done only for academic purposes, and the results have been presented honestly without any distortions. Additionally, all sources used in developing the theoretical framework and discussion have been cited using the APA 7th edition citation style.

3. Results

3.1 Data Quality Assessment

Table 1. Data Quality Assessment of the Dataset

Indicator	Result
Total observations	1,500
Total variables	24
Duplicate records	0
Variables with missing values	1
Total missing values	547 (36.47%)
Variable with missing data	Partner share of unpaid care
Structural missingness	Yes
Logical inconsistencies (Children > Household size)	67
Logical inconsistencies (Dependents > Household size)	82
Negative paid work hours	0
Negative unpaid care hours	0

Interpretation

An overview of the quality evaluation of the study dataset is shown in Table 1. The final data set included 1,500 observations on 24 variables with no duplicate records, showing a high degree of data integrity. Only one variable had missing values (partner share of unpaid care work (36.47%), which appeared to be due to structural missingness, among respondents without a partner, and not to data collection errors. 67 observations were identified as having more children than the number of individuals in the household, and 82 observations were identified as having more elderly dependants than individuals in the household. Only a small percentage of the cases were retained because they did not greatly influence the distribution of the data. In addition, there were no negative values in the paid work hours or unpaid care hours. The overall quality of the dataset was good and deemed suitable for further statistical analysis.

3.2 Descriptive Statistics and Normality

Table 2. Descriptive Statistics of Continuous Variables

Variable	Mean
Age (years)	38.77
Monthly household income (USD)	1288.64
Weekly paid work hours	22.35
Weekly unpaid care work hours	25.52
Partner share of unpaid care	0.44

Time pressure score	3.15
Average sleep hours	7.23
Life satisfaction score	8.07
Mental distress score	2.90
Household well-being index	74.05
Work–family conflict score	3.02

Table 3. Normality Assessment

Test	Result
Shapiro–Wilk test	Significant for most variables
Skewness	Within acceptable limits
Kurtosis	Within acceptable limits
Parametric analyses appropriate	Yes

Interpretation

The descriptive statistics of the study variables are presented in Table 2. The mean age of the respondents was 38.77 years, and their average monthly household income was USD 1,288.64. On average, participants worked 22.35 hours in paid work and 25.52 hours in unpaid care each week. On average, the household well-being score was 74.05, which rates the living conditions as relatively good. The participants also had an average life satisfaction score of 8.07 and an average mental distress score of 2.90. As observed in Table 3, although some variable results had p-values which were statistically significant in the Shapiro–Wilk tests due to the large sample sizes, the values of skewness and kurtosis were not outside of the acceptable ranges. So, the postulates of parametric statistical analysis were deemed fulfilled.

3.3 Correlation Analysis

Table 4. Pearson Correlation Matrix of Major Study Variables

Variable	1	2	3	4	5
1. Weekly unpaid care work	1				
2. Children under 15	.584***	1			
3. Paid work hours	-.460***	-.022	1		
4. Income quintile	-.108***	-.015	-.020	1	
5. Household well-being	-.024	-.030	-.161***	.296***	1

Note. $p < .05$, $p < .01$, $p < .001$.

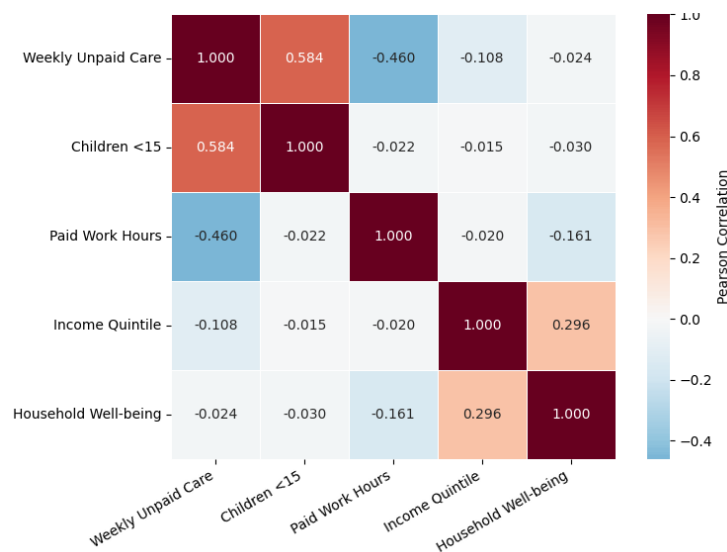
**Figure 2. Pearson Correlation Heatmap of Major Study Variables**

Figure 2 illustrates the Pearson correlation coefficients among the major study variables. Weekly unpaid care

work shows a strong positive association with children under 15 years and a moderate negative association with paid work hours, while household well-being is positively associated with income quintile and only weakly related to unpaid care work.

Table 5. Multicollinearity Diagnostics

Variable	VIF
Age	1.014
Income quintile	1.358
Household size	1.017
Children under 15	1.046
Elderly dependents	1.009
Monthly income	1.352
Paid work hours	1.386
Time pressure	1.320
Average sleep hours	1.119

Interpretation

As shown in Table 4, unpaid care work was strongly associated with having children under 15 years ($r = .584$, $p < .001$) and negatively associated with the hours of paid work done per week ($r = -.460$, $p < .001$). Increases in income quintiles were negatively correlated with unpaid care work ($r = -.108$, $p < .001$) in figure 2. Household well-being was significantly positively associated with income quintile ($r = .296$, $p < .001$), and strongly positively associated with life satisfaction ($r = .569$, $p < .001$) and strongly negatively associated with mental distress ($r = -.535$, $p < .001$). Table 5 shows that no multicollinearity was found between the explanatory variables as it is evident that there is no evidence of this since corrected variance inflation factor (VIF) values range from 1.01 to 1.39.

3.4 Gender Differences in Unpaid Care Work

Table 6. Independent Samples t-Test Comparing Weekly Unpaid Care Work by Gender

Panel A. Group Statistics

Gender	N	Mean	SD
Women	736	32.998	13.811
Men	764	18.323	13.957

Panel B. Independent Samples t-Test

Statistic	Value
Levene's test (p)	.769
t	20.463
Degrees of freedom	1498
p	< .001
Mean difference	14.675
95% CI	13.270–16.080
Cohen's d	1.057

Interpretation

Table 6 shows that women gave much more time to unpaid care activities than men. The average hours per

week reported by the females was 32.998 hours and the average hours per week reported by the males was 18.323 hours. Homogeneity of variance was confirmed by Levene's test ($p = .769$). Independent samples t-test showed that the difference between the genders was highly significant, $t(1498) = 20.463$, $p < .001$. Both the mean difference of 14.68 hours per week (for weekly hours of unpaid care) and the large effect size (Cohen's $d = 1.057$) indicate there is a significant gender difference in hours of unpaid care. Thus, Hypothesis 1 was validated.

3.5 Socioeconomic Determinants of Unpaid Care Work

Table 7. Multiple Linear Regression Predicting Weekly Unpaid Care Work

Predictor	B	SE	t	p
Woman	12.998	0.377	34.488	<.001
Out of labor force	15.752	0.531	29.648	<.001
Part-time employment	4.663	0.599	7.782	<.001
Self-employed	2.115	0.660	3.205	.001
Unemployed	12.540	0.652	19.236	<.001
Urban residence	-2.635	0.393	-6.698	<.001
Income quintile	-1.085	0.195	-5.562	<.001
Household size	1.265	0.134	9.467	<.001
Children under 15	8.566	0.180	47.674	<.001
Elderly dependents	5.587	0.402	13.889	<.001
Age	0.007	0.017	0.427	.670

Interpretation

The results of the regression analysis of the socioeconomic determinants of unpaid care work are shown in Table 7. The model was statistically significant ($F = 354.14$, $p < .001$) and explained 79.3% of the variance in unpaid care work ($R^2 = .793$). Women did about 13 more hours of unpaid care work than men each week. Those who were out of the labour force, were not working, or were working part-time, or self-employed also felt the responsibility for unpaid care work was significantly higher than for those in full-time work. The household's composition had a significant impact on unpaid care work, with each additional child having a positive impact of around 8.57 hours on unpaid care work, and each elderly dependent having a positive impact of around 5.59 hours on unpaid care work. By contrast, significantly less unpaid care work was found to be linked to higher household income and being living in urban areas. These were not significant predictors: age, level of education, flexible work arrangements, and formal care use. Hence, Hypothesis 2 was partly confirmed.

3.6 Determinants of Household Well-Being

Table 8. Multiple Linear Regression Predicting Household Well-Being

Predictor	B	SE	t	p
Weekly unpaid care work	0.029	0.026	1.116	.265
Income quintile	1.389	0.197	7.034	<.001
Out of labor force	-1.441	0.718	-2.007	.045
Mental distress	-2.778	0.137	-20.322	<.001
Life satisfaction	3.918	0.190	20.646	<.001
Average sleep hours	1.418	0.329	4.312	<.001
Remaining variables	NS			

Interpretation

The regression model predicting household well-being is presented in Table 8. The model was statistically significant ($F = 76.17$, $p < .001$) and accounted for 52.0% of the variance in the household wellbeing. A higher level of household income, higher life satisfaction, and longer average sleep time were significantly related to higher levels of household well-being, while mental distress and not being part of the labor force were significantly associated with lower levels of household well-being. Contrary to expectation, weekly unpaid care work did not predict the well-being of the household, even when controlling for the demographic,

socioeconomic and psychological characteristics ($p = .265$). Likewise, gender, education, age, size of household, number of children, living arrangements, flexible employment, use of formal care, and time pressure were not significant. Thus, Hypothesis 3 was not supported, indicating that after controlling relevant covariates, economic and psychological factors have a stronger relationship to household well-being than unpaid care.

4. Discussion

The present study examined the differences in gender participation and socioeconomic factors in unpaid care and the link between unpaid care and household well-being. The results show that there is a significant gender gap in unpaid care activities, with women having higher unpaid care hours than men. This is aligned with studies that have previously shown the continued existence of gendered social norms that allocate the care and domestic burden unequitably to women and constrain their ability to work for pay and advance their development (Pimkina & de La Flor, 2020; Hsu et al., 2021). The findings indicate that although women's labour market participation has grown, traditional conceptions of gender roles in the household are strong and deeply rooted in societies.

The regression analysis also revealed that employment status, household income, household size and the presence of children and elderly dependents were all significant factors in unpaid care work (Baltruszewicz et al., 2021). There were substantial differences between those who are not in the labour force or unemployed in their time spent on unpaid care activities and those employed full-time. In the same way, unpaid care burdens were higher among households with more children and elderly dependants, indicating unpaid care needs were higher. However, unpaid care levels were lower among higher income households due to the possibility that access to childcare services, domestic support and labour-saving technologies may be easier for other households with higher financial resources (Wong et al., 2023). Results are consistent with the household production theory which proposes that family composition and the distribution of economic resources are determining factors in shaping caregiving. The results are consistent with the household production theory, which posits that the family composition and distribution of economic resources are factors shaping caregiving. They also provide further evidence that gender disparities in care responsibilities still limit women's participation in the labour force (Winkler, 2022).

Contrary to the hypothesis, unpaid care work did not significantly predict household well-being after accounting for demographic, socioeconomic and psychological factors. Instead, income, life satisfaction, mental distress, and sleep duration were the main factors that affected household well-being (Spadaro et al., 2022). The results suggest that economic security and psychological well-being have a more direct impact on household well-being than do unpaid care hours. The positive impact of life satisfaction and sufficient sleep, as well as the negative impact of mental distress are in line with previous findings that emphasize the role of mental health and family supportive policies in improving the outcome of the household (Heshmati et al., 2023, Bartel et al., 2023). Beyond that, feminist economic analyses attend to the effects of unpaid care work, rather than the time spent on care work per se, given the institutional and social context that shapes the outcomes of care work (Ferber & Nelson, 2024).

Overall, the results point towards policies that foster equal caregiving responsibilities, increasing access to formal care services and enhancing women's involvement in the labour market, as means to reduce gender inequality in unpaid care work. At the same time, measures to improve mental health, financial security and work–life balance will generate more benefits for household well-being than work–life balance policies alone.

5. Conclusion

In this study, the unpaid care work of women and men, and the socioeconomic determinants of caregiving responsibilities were compared and their links with household well-being were explored. The results indicate that unpaid care work is highly differentiated by gender with women having significantly higher levels of unpaid care compared to men, reinforcing the traditional gender roles of women in the household. It was found that both demographic and socioeconomic factors – such as household composition, employment status, income level, and dependency responsibilities – are important factors to consider when examining how unpaid care is distributed. Nevertheless, and contrary to the hypothesis suggested, the impact of unpaid care work on household well-being did not vary directly after adjusting for the socioeconomic and psychological factors. Instead, household well-being was mainly related to income level, life satisfaction, and less mental distress and longer sleep duration, indicating that psychological and economic resources are more important in determining family well-being than caregiving time is. The results add to the growing body of work on gender inequality and unpaid care that there is a need to consider the impact of unpaid care work from a broader

socio-economic and psychological perspective. The study highlights the importance of policy interventions that are integrated with a focus on gender equitable caregiving, which also includes supporting women's participation in the labour force, improving access to affordable childcare and eldercare and enabling mental health and work-life balance in order to ensure sustainable household well-being and increase social equality.

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