

Unpaid Domestic Care Provided by Women Factory Workers: A Survey Study

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ABSTRACT

Aim of the study: This study investigates the unpaid domestic care work of women factory workers and its impacts on their economic value and emotional well-being in the urban stings of Gilgit. It seeks to highlight the often-overlooked contributions of women in the domestic sphere and the dual burdens of paid and unpaid labor they shoulder.

Methodology: adopting quantitative research approach, data were collected through a structured questionnaire administered to a random sample of women factory workers. The survey instrument, based on Tabassum et al. (2023), encompassed diverse domains of care dimension; including child care, elderly care, and special need care.

Findings: the results reveal significant time allocation of unpaid care work, which adversely affects the economic well-being of the participants. Women reported high levels of stress and emotional exhaustion, compounded by the lack of recognition and financial compensation for their domestic contributions.

Conclusion: The study underscores the urgent need of policy interventions to recognize and value unpaid care work, promoting gender equality and economic justice. It advocates for systemic changes to support women balancing paid and unpaid responsibilities. This research contributes to the literature by providing empirical evidence on the multifaceted impacts of unpaid domestic care work and offers actionable insights for policymakers, academics and activists. Future studies should explore intersectional experiences of women in varying socio-economic contexts inform more inclusive and effective policy frameworks.

Keywords: Unpaid Care Work, Gender Equality, Women Factory Workers, Economic Value, Dual Burden, Emotional Well-being.

1. INTRODUCTION

Unpaid domestic care is an indispensable yet undervalued component of societal and economic sustainability, primarily undertaken by women. This labor encompasses childcare, eldercare, and household chores, often sidelined in economic analyses due to its non-monetized nature (Rodriguez,

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2021). Women, particularly those employed in factory settings; bear a disproportionate share of these responsibilities, leading to a "dual burden" that significantly impacts their physical, emotional, and economic well-being. In developing regions like Gilgit, Pakistan, women factory workers juggle demanding work schedules with extensive unpaid care duties, reinforcing traditional gender norms. This dual role exacerbates gender disparities by limiting women's professional growth and perpetuating cycles of inequality (ILO, 2017). Despite their substantial contributions, societal recognition of women's unpaid domestic work remains minimal, with cultural and systemic barriers maintaining these inequities.

Global policy initiatives, such as the Sustainable Development Goals (SDG), specifically Target 5.4, advocate for the recognition and redistribution of unpaid care work to promote gender equality. However, practical implementation of these policies often lags behind, especially in low-income regions (UN Women, 2019). This study investigates the experiences of women factory workers in Gilgit, focusing on the time invested in unpaid care work, its perceived economic value, and its emotional impact. By quantifying these aspects, the research highlights the hidden contributions of women to households and economies, urging for policy interventions to support their dual roles effectively.

1.1 Problem Statement

The study addresses the under-recognized contribution of women factory workers in unpaid caregiving activities, which are frequently ignored and excluded from economic considerations due to their perceived unproductiveness and lack of financial value. Women factory workers, already burdened by the demands of paid labor, also shoulder significant unpaid care responsibilities, leading to what is commonly referred to as the "double burden" of work. Despite their crucial role in both economic productivity and caregiving, these women's contributions remain largely invisible and unacknowledged. This dual responsibility not only affects their physical and mental well-being but also hampers their economic empowerment and social mobility. Therefore, this research aims to measure the time spent, feeling state, and economic value of unpaid care work among women factory workers, in order to highlight the impact of their responsibilities and advocate for policies aimed at alleviating their disproportionate burden.

1.2 Significances of the study

The research study will highlight the complexities of a crucial but frequently disregarded aspect of our society that is the unpaid care work done by factory women. This study is crucial as it explains the unseen connections that assist our households and communities by cautiously reading the economic benefits made by care employment. This look explores the good sized but underappreciated role that factory girls play in society. It makes a specialty of the infinite hours and super work they placed fourth in activities like childcare, housekeeping, and nurturing without getting the right credit score. Despite occasionally being regarded as being ineffective, those sports are a very critical and essential aspect of our normal lives. Unpaid domestic care work among female factory workers is crucial as it uncovers the often-unrecognized contributions women make to our society. By measuring the economic value, and emotional status of their caregiving activities, Understanding the economic and emotional status of unpaid care work is essential for promoting gender equality and empowering women both in the workplace and at home. Ultimately, this study has the potential to reshape societal attitudes towards women's labor and promote a more equitable and inclusive society

1.3 Research Objectives

1. To measure the time spent on unpaid care activities by factory women within the household
2. To measure the perceived economic value assigned by factory women to these unpaid care activities
3. To measure the emotional status of factory women while engaging in these unpaid care activities

1.4 Research Questions

1. How much time do factory women spend in care activities within the household?
2. How do factory women perceive the economic value of these activities?
3. How do they feel while spending their time on these activities?

2. LITERATURE REVIEW

Unpaid domestic care work, encompassing activities such as childcare, eldercare, and household management, is a cornerstone of societal and economic functionality. Despite its critical role, this labor remains undervalued and disproportionately undertaken by women globally (ILO, 2017). The literature highlights that unpaid care work perpetuates gender inequalities, restricting women's access to paid employment, education, and personal development opportunities (Rodriguez, 2021). Historically, societal norms have confined women to caregiving roles within the domestic sphere, reinforcing their exclusion from formal labor markets (Duffy, 2017). This division of labor is deeply entrenched in patriarchal structures, which prioritize men's economic contributions over women's caregiving roles (England, 2017). In the context of factory workers, women often face a "double shift," balancing paid employment with unpaid care responsibilities, resulting in physical and emotional exhaustion (Hochschild & Machung, 2012). The economic contribution of unpaid care work remains largely invisible in national accounts, despite its substantial value. Studies estimate that if unpaid care work were compensated at market rates, it would constitute a significant portion of global GDP (Ferrant et al., 2014). Feminist economists argue for the integration of unpaid care work into economic metrics to reflect its true societal impact (Folbre, 2018). The dual burden of paid and unpaid labor adversely affects women's mental health, contributing to stress, anxiety, and burnout (Chopra & Zambelli, 2017). The stigma surrounding unpaid care work further compounds these challenges, as societal norms often devalue caregiving activities performed by women (Mehrotra & Sinha, 2017). Progressive policies in high-income countries, such as subsidized childcare and flexible working arrangements, have alleviated some of the burdens of unpaid care work (OECD, 2019). However, in developing regions like South Asia, structural barriers and inadequate policy frameworks exacerbate the challenges faced by women (Kabeer, 2015). Integrating unpaid care work into public policy remains critical for achieving gender equality and fostering sustainable economic development (UN Women, 2019).

2.1 Theoretical Framework

Unpaid home care work, particularly among women factory workers, is an essential yet often left out issue of our society. To truly understand the complex dynamics at play, I turn to socialist feminist Len. This idea enables us to see the deep connections among unpaid care work, gender norms, and economic systems, presenting a complete lens to discover these relationships. Socialist feminism is a part of a broader movement that emerged from the socialist paradigm. It blends Marxist ideas approximately class exploitation with feminist insights into gender oppression. Essentially, it argues that you cannot absolutely apprehend or assign capitalism or patriarchy without thinking about how they have interaction with every other (Eisenstein, 1979). This integrated angle is especially precious for examining the dual structures of oppression that form women's lives, specifically those operating in factories. A key element of socialist feminist theory is the concept of intersectionality. This idea, brought by means of Kimberlé Crenshaw (1989), highlights how special kinds of social stratification, like race, class, and gender, are interconnected and can't be tested one at a time.

This method is essential for understanding the multifaceted studies of women factory workers who often face marginalization due to both gender norms and socio-economic status. In this regard, socialist feminist ideas are mainly relevant for numerous reasons. First, it recognizes the vast but often invisible contribution of unpaid home care work to the economy. This work, mostly finished by women, is important for preserving and reproducing the hard work force, yet its miles are often undervalued and overlooked in capitalist economies (Fraser, 2016). By highlighting the significance of domestic labor,

socialist feminism challenges the traditional separation between productive (paid) and reproductive (unpaid) work. Second, this principle emphasizes the dual exploitation of women in both paid and unpaid labor. Women factory workers are regularly expected to excel in their professional roles alongside huge domestic duties. This dual burden, now and again known as the "second shift" (Hochschild & Machung, 2012), limits their economic opportunities and professional development, reinforcing their economic dependence and perpetuating gender inequality. Socialist feminist theory enables us examine how these twin roles impact women's lives and make a contribution to broader societal inequalities. Moreover, socialist feminism evaluations the systemic structures that perpetuate gender inequality. By inspecting how capitalist economies benefit from women unpaid labor, it exposes the frequently-unnoticed value of home paintings. This critique is essential for know-how the broader economic and social implications of unpaid care work and for advocating for policies that apprehend and value these efforts. For instance, feminist economists like Nancy Folbre (2006) have argued for the inclusion of unpaid care paintings in countrywide bills to better replicate its contribution to the economy. Using socialist feminist theory in this way also lets us to seriously take a look at gender norms and societal expectations. These norms dictate appropriate roles and behaviors for ladies and men and are deeply embedded in social establishments and cultural practices. They frequently function women as number one caregivers, justifying the unequal distribution of unpaid domestic hard work (Connell, 1987). By the usage of socialist feminist principle, this examine will explore how these gender norms intersect with economic systems to form the distribution of unpaid care work inside households.

Additionally, socialist feminist theory's center on inter-sectionality presents a valuable framework for understanding the diverse studies of women factory workers. Women are not a homogenous institution; their experiences of unpaid care work and formal employment are formed by multiple intersecting factors, including race, ethnicity, elegance, and immigration popularity (Collins, 2000). By taking an intersectional technique, this study aims to explore the complexity of women's experiences and highlights the different forms of oppression which intersect to produce unique challenges and opportunities. On my personal level, choosing this Len socialist feminist concept resonates with my own observations and stories. Growing up in a society wherein women often juggle more than one role, I actually have visible firsthand how unpaid care work can limit women's possibilities and reinforce gender norms. This framework addressing gender inequalities and advocating for a greater equitable distribution of labor. Socialist feminist principle offers a sturdy framework for inspecting the intersection of unpaid domestic care work and women roles within the formal labor marketplace. It offers a vital lens for expertise the systemic undervaluation of women hard work and the wider implications for gender equality. By drawing in this theory, this examines ambitions to explore the experiences of women factory people and make a contribution to the ongoing discourse on gender, labor, and financial justice. The use of socialist feminist principle lets in for a complete evaluation that no longer only highlights the economic and social contributions of unpaid care work but also requires structural modifications to address gender inequalities in each the domestic and public spheres.

3. RESEARCH METHODOLOGY

This study employs a quantitative research design to investigate the unpaid domestic care work performed by women factory workers in Gilgit, Pakistan. It focuses on the time allocation, economic valuation, and emotional impact of their caregiving activities, using a structured survey as the primary data collection instrument.

3.1 Research Design

A survey-based quantitative design was chosen to capture comprehensive and measurable data on caregiving responsibilities. This method facilitates the analysis of relationships between variables, such as the time spent on unpaid care work and its perceived economic and emotional costs.

3.2 Population

The study targets women factory workers in urban areas of Gilgit, where women actively participate in the labor force while simultaneously fulfilling unpaid caregiving roles. The population includes factory workers from diverse sectors such as textiles, food processing, and handicrafts. Participants were selected from urban centers in Gilgit, Baltistan, and Diamer divisions due to their higher concentration of factories.

3.3 Sample

A Purposive sampling technique was used to ensure representativeness. A list of eligible participants was prepared, and a random sample of 100 women factory workers aged 18–60 years was drawn. Purposive sampling was selected because the study focusses on a particular population factory workers who simultaneously do unpaid domestic care work. By using purposive sampling, the study ensures that only participants with relevant experiences and characteristics are included, enabling a detailed exploration of the research question

3.4 Data Collection

The primary instrument for data collection was a structured questionnaire based on the framework by Tabassum et al. (2023) The questionnaire covered four caregiving domains: childcare, eldercare, domestic care, and care for persons with special needs. Questions were designed to assess time allocation, perceived economic value, and emotional states associated with these activities. Data were collected through face-to-face interviews conducted by trained enumerators familiar with the local language and cultural context. Efforts were made to create a comfortable environment to encourage honest and accurate responses. Data collection took place at participants' homes and workplaces to ensure accessibility.

3.5 Data Analysis

Data were entered and analyzed using SPSS. Descriptive statistics, including means, frequencies, and percentages, were used to summarize the findings. Inferential statistics were applied to test hypotheses and explore relationships between variables. The economic value of unpaid care work was calculated using the minimum wage rate in Pakistan (32,000 PKR per month), as recommended by Suh (2021).

4. RESULTS

Table 1: *Descriptive statistics of quantitative aspects of participants*

Variables	Obs.	Mean	Stand. Dev.	Minimum	Maximum
Age (years)	100	34.01	10.098	19	58
Monthly household income (in Thousand rupees)	100	73150.00	1.695	100000	500000
Total number of children	100	1.7	1.7	0	7
Education of the Participants	100	8.71	4.437	0	16
Total time spent in 24 hours	100	5.14	2.446	1	13

The table shows detailed data about 100 women factory workers in the study. The average age of the women is 34 years, with ages ranging from 19 to 58 years. Their monthly household income is 73,150 rupees on average, but it varies greatly, from as low as 10,000 rupees to as high as 500,000 rupees. On average, each woman has about 2 children, with some having and other having up to 7. In term of education, most women have studied for about 9 years. However, some have no formal education, while other have completed up to 18 years of schooling.

Table 2: Frequency statistics of qualitative aspects of participants

Variables	Obs.	Category	Frequency	Percentage
Gender	100	Female	100	100
Marital Status	100	Never married	59	59.0
		Married	23	23.0
		Divorced	6	6.0
		Widowed	12	12.0
Employment Status	100	Employed	0	0
		Currently working	100	100.0
		Self employed	0	0
Family System	100	Nuclear	51	51.0
		Joint	49	49.0
Type of household earners	100	Dual earner	90	90.0
		Single male earner	0	0
		Single female earner	10	10.0
Feeling while doing these activities	100	Fresh	3	3.0
		Better	7	7.0
		Fine	21	21.0
		Fatigued	50	50.0
		Drained	19	19.0

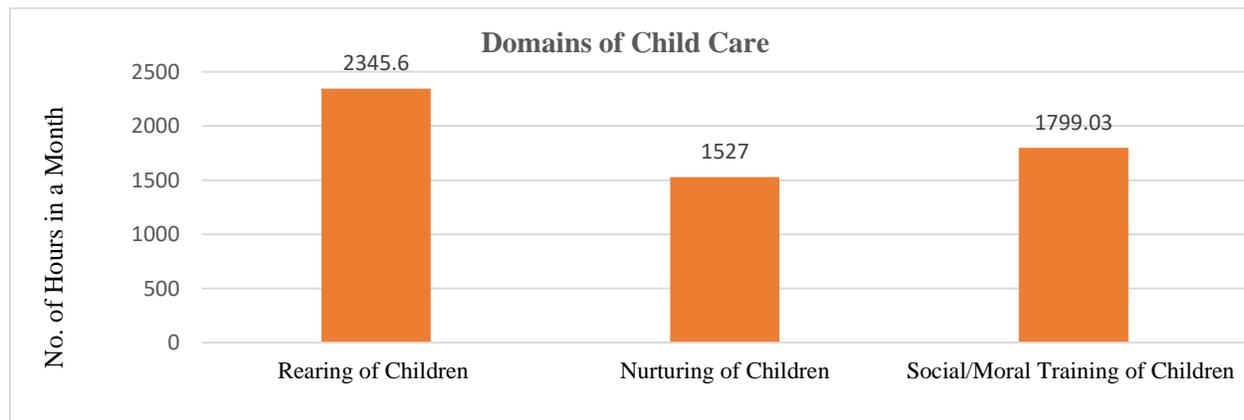
4.1 Child Care Dimension

The childcare activities consist of following domains comprising:

1. Rearing of Children.
2. Nurturing of the Children
3. Social/Moral Training of the Children

The subsection covers the time spent on these activities by women, economic values of activities under childcare and lastly the human value of these activities.

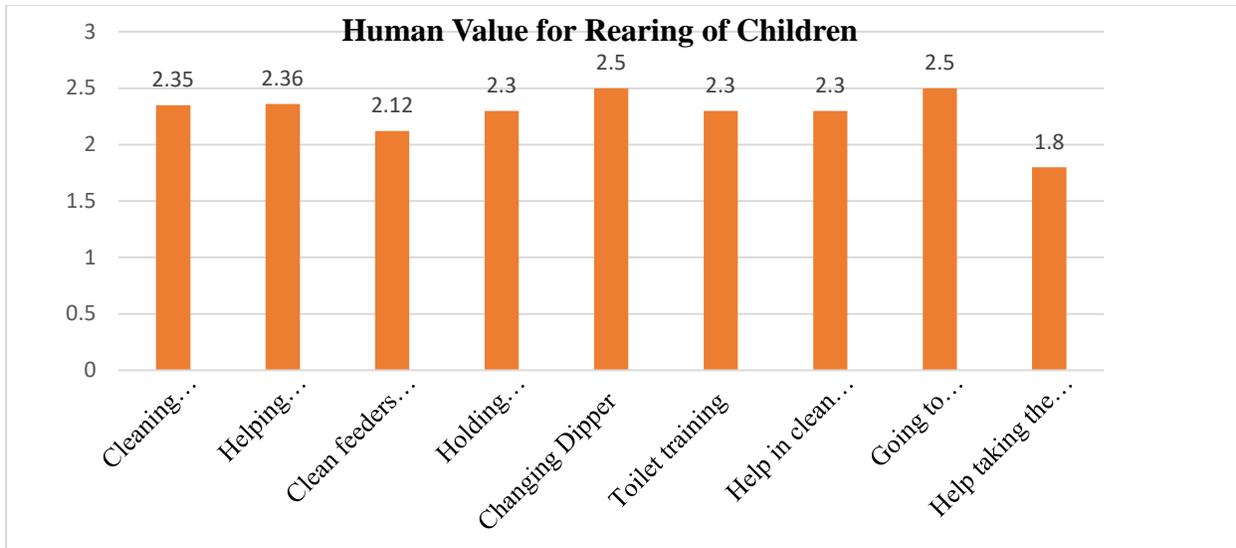
Figure 1: Total time spent on different dimension of child care



This figure "Domains of Child Care" shows the wide variety of hours spent in a month on 3 specific aspects of toddler care: rearing of children, nurturing of children, and social/moral training of kids. The graph indicates that rearing of Children is the most time-consuming domain, with 2345.6 hours allotted to this activity in a month. Social/ethical training of children comes next, with 1799.03 hours devoted to it

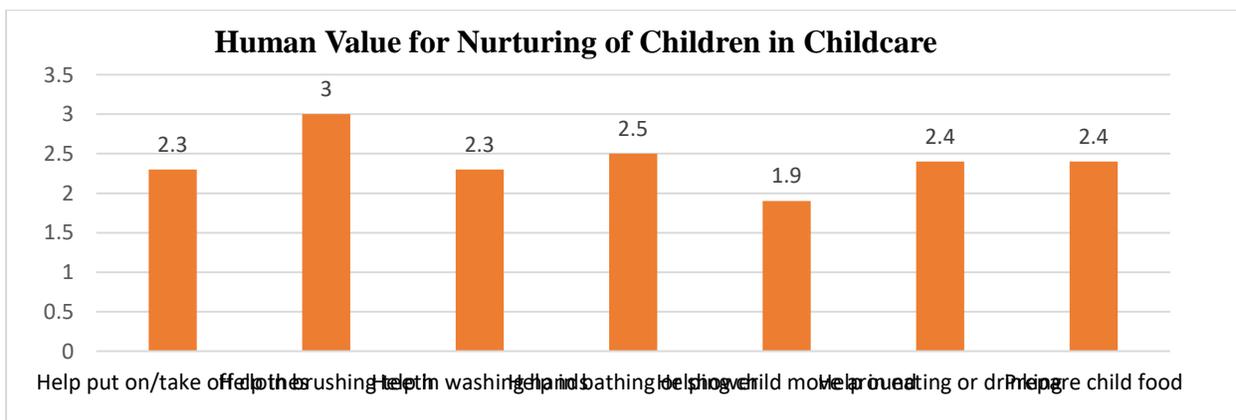
monthly. Nurturing of Children requires the least amount of time, with 1527 hours spent in keeping with month. This data indicates that rearing of kids consumes the maximum hours, accompanied by means of social/ethical training, and nurturing of kids takes up the least time.

Figure 2: Human Value for Rearing of Children in Childcare



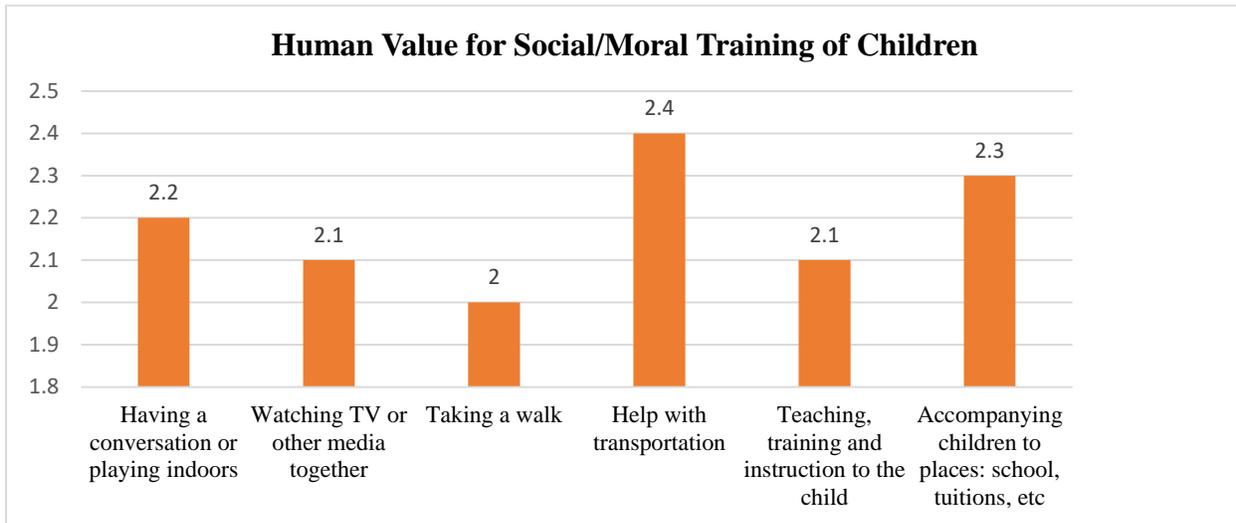
The feelings/human value associated with rearing children in domestic care are shown in the figure 2. The respondents experience a feeling of fine to fatigue while performing tasks such as cleaning laundry, organizing, and helping enter/exit the bathroom. When it comes to cleaning feeders and other utensils, the feeling is slightly better than fatigued. Holding children and changing diapers evoke feelings closer to fine, with changing diapers being slightly more demanding. Activities like toilet training, helping to clean and dress after a bath, and going to the hospital together all have a rating of 2.3, indicating that these tasks generally lead to feelings of fatigue. The task of helping with the right dosage of medicine results in a feeling of being fresher compared to other activities. This shows that most childcare tasks impose a considerable emotional burden on women, with some tasks being more draining than others.

Figure 3: Human Value for Nurturing of Children in Childcare



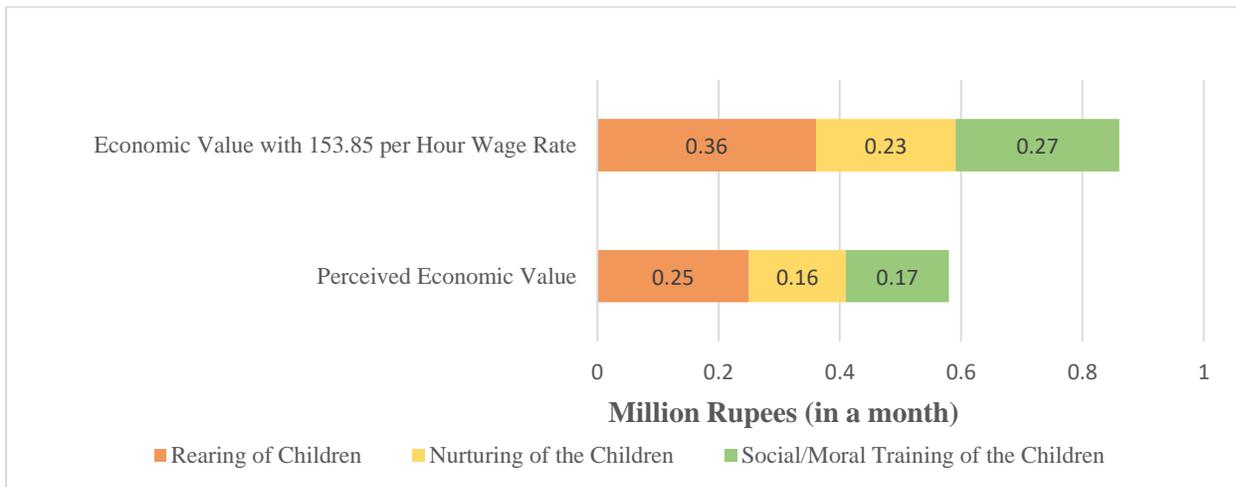
The feelings associated with various nurturing activities in childcare. Women feel fine while helping put on/take off clothes and washing hands. The task of brushing teeth evokes a feeling of being fatigued. Helping with bathing or showering results in feelings closer to fine, while helping a child move around makes them feel fresher. Tasks such as helping in eating or drinking and preparing child food both lead to feelings slightly better than fine.

Figure 4: Human Value for Social/Moral Training of Children



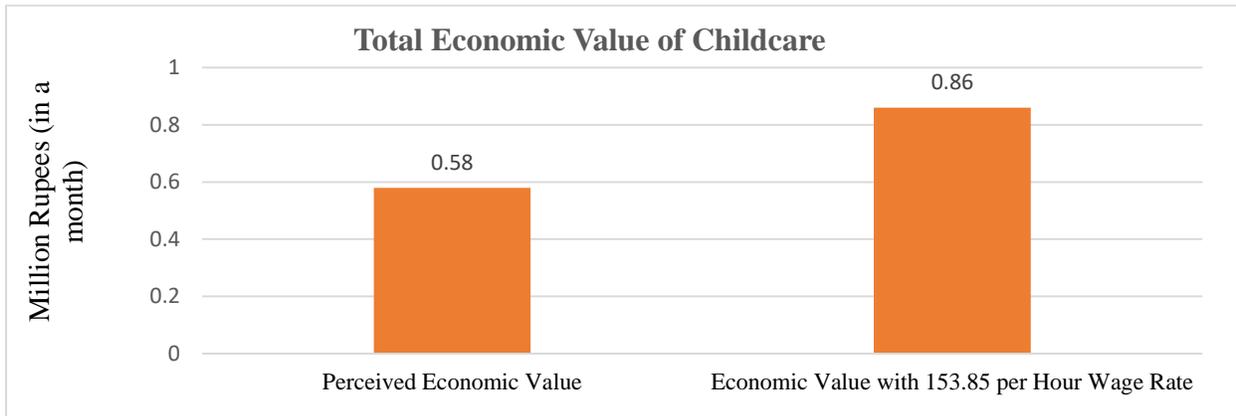
The graph presents the feelings related to the social and moral training of children. Engaging in activities like having a conversation or playing indoors and watching TV or other media together make women feel somewhat fine. Taking a walk is associated with feeling close to fresh. Helping with transportation and accompanying children to places like school or tuitions.

Figure 5: Market based economic value



The perceived and market-based economic values for different childcare domains are represented in the figure. For rearing children, the perceived economic value is 0.25 million rupees per month, whereas the market-based economic value, calculated from a 153.85 rupees hourly wage rate, is 0.36 million rupees per month. This indicates that the market-based economic value for rearing children is higher than the perceived value. In the domain of nurturing children, the perceived economic value is 0.16 million rupees per month, while the market-based economic value is 0.23 million rupees per month. This shows that the perceived value for nurturing children is also undervalued compared to the actual market value. For the social and moral training of children, the perceived economic value is 0.17 million rupees per month, and the market-based economic value is 0.27 million rupees per month. Again, this demonstrates that the perceived economic value is significantly lower than the market-based value.

Figure 6: *Total Economic Value of Childcare*



The total perceived and marketable economic value for children care is illustrated in the figure above. The total perceived economic value of children care is 0.58 million rupees for a month, while the total economic value based on a wage rate of 153.85 rupees per hour is 0.86 million rupees for a month. This indicates that the economic value based on the wage rate is significantly higher than the perceived economic value.

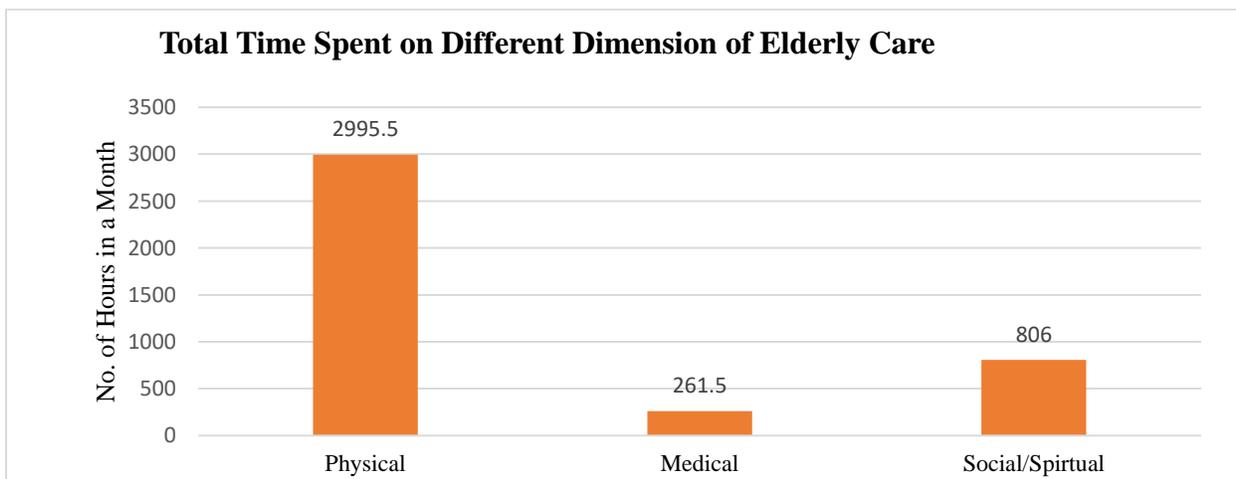
4.2 *Elderly Care Dimension*

The elderly care involves of following domains:

- Physical Care
- Mental Care
- Social/Spiritual Care

The following sections cover the total time spent on these activities by factory women and overall average of participants, the economic values of these activities and lastly the human value of elderly care activities.

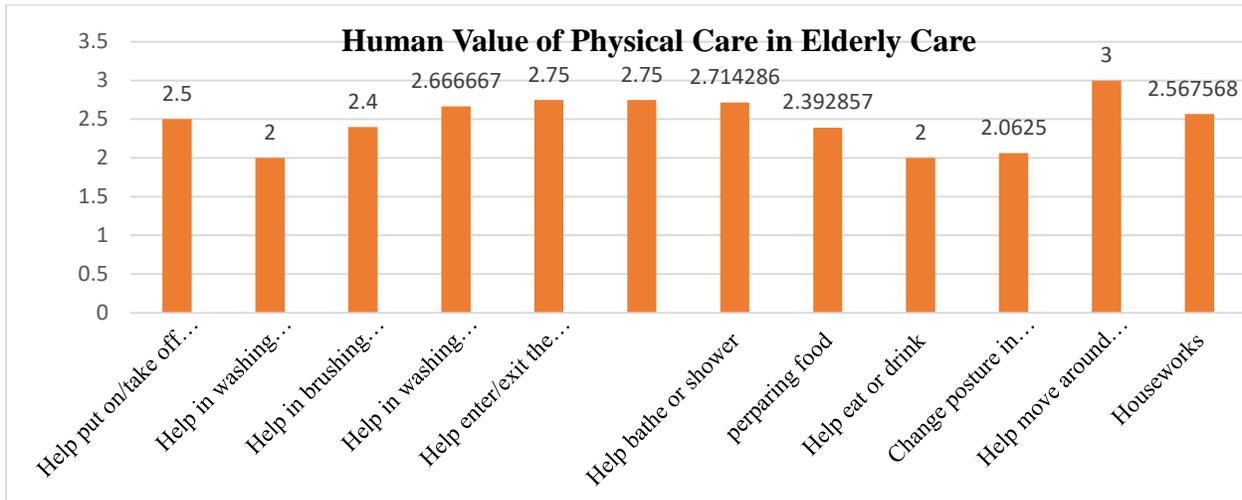
Figure 7: *Total Time Spent on Different Dimension of Elderly Care*



"Domains of Elderly Care" displays the number of hours spent per month on different aspects of elderly care, divided into three main domains: Physical, Medical, and Social/Spiritual. The most time-intensive domain is Physical care, with a substantial 2995.5 hours dedicated to it each month. This indicates that the physical needs of the elderly, such as assistance with mobility, daily activities, and personal care,

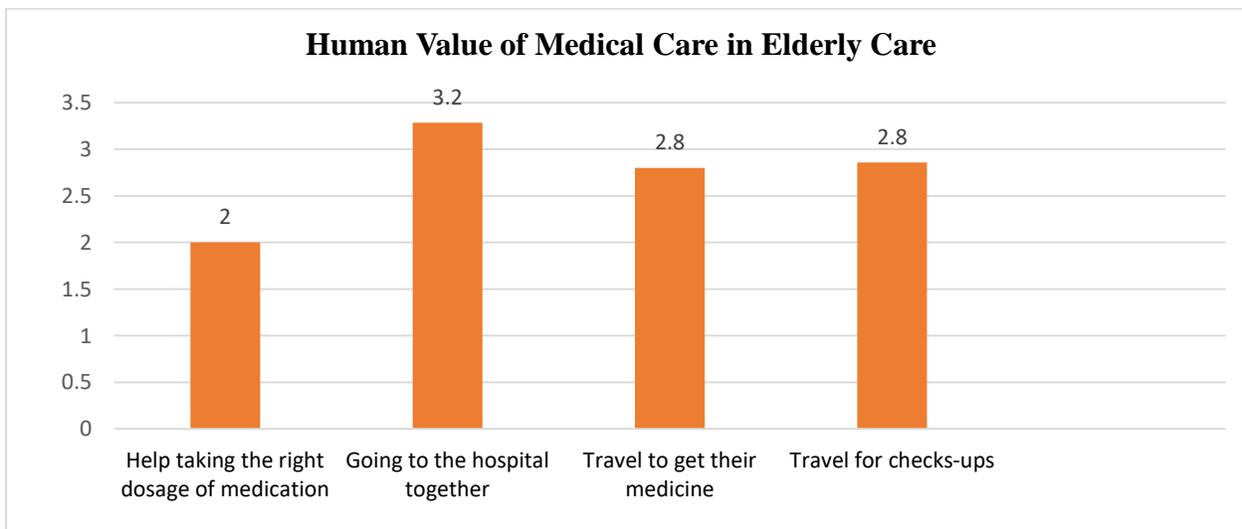
require the most attention and time. The Social/Spiritual domain is the next significant area, with 806 hours spent monthly. This includes activities that provide social interaction, emotional support, and spiritual engagement, highlighting the importance of maintaining social connections and emotional well-being for the elderly. The Medical domain, which encompasses medical care and health-related activities, accounts for 261.5 hours per month. This includes time spent on doctor visits, medication management, and other health-related tasks.

Figure 8: *Human Value of Physical Care in Elderly Care*



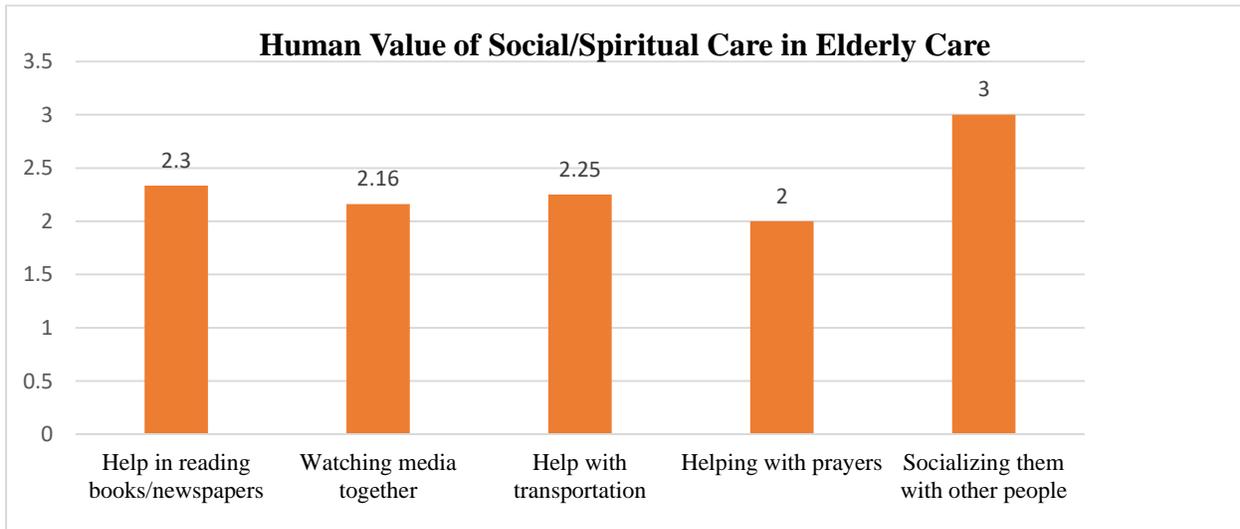
Graph focuses on personal care and household activities. Women feel fatigued when providing assistance for "Help move around indoors." This is followed by tasks like "Help bathe or shower," "Help in clean and dress after toilet use," and "Help enter/exit the bathroom," all of which evoke feelings between fine and fatigued. Activities like "Help in washing their face" and "Help eat or drink" make them feel better than fine but not quite fatigued.

Figure 9: *Human value of medical Care in elderly care*



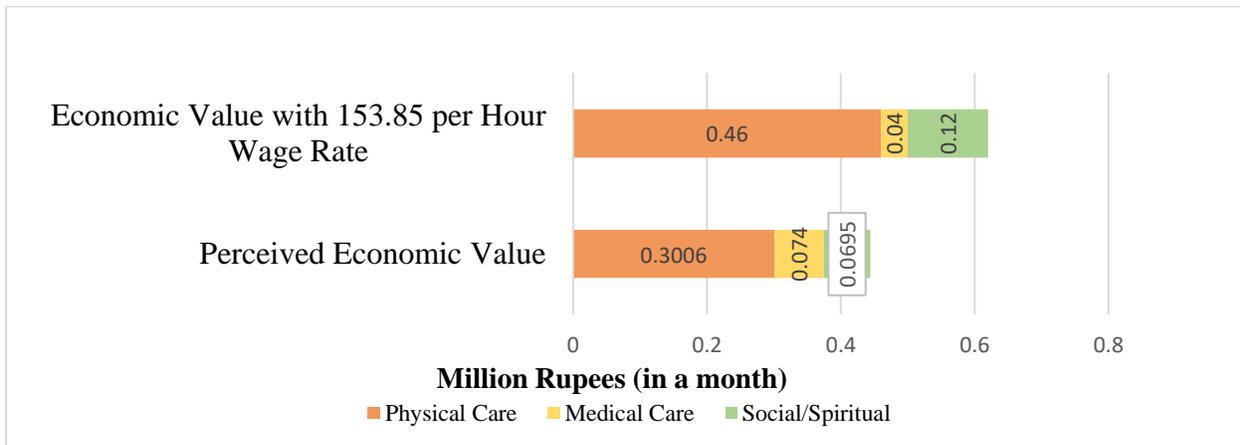
Women feel very fatigued when assisting with "Going to the hospital together." Other significant activities, such as "Travel to get their medicine" and "Travel for check-ups," make them feel almost very fatigued. "Help taking the right dosage of medication" results in a feeling between fine and better, indicating less emotional burden compared to other health-related activities.

Figure 10: *Human value of social/spiritual care in elderly care*



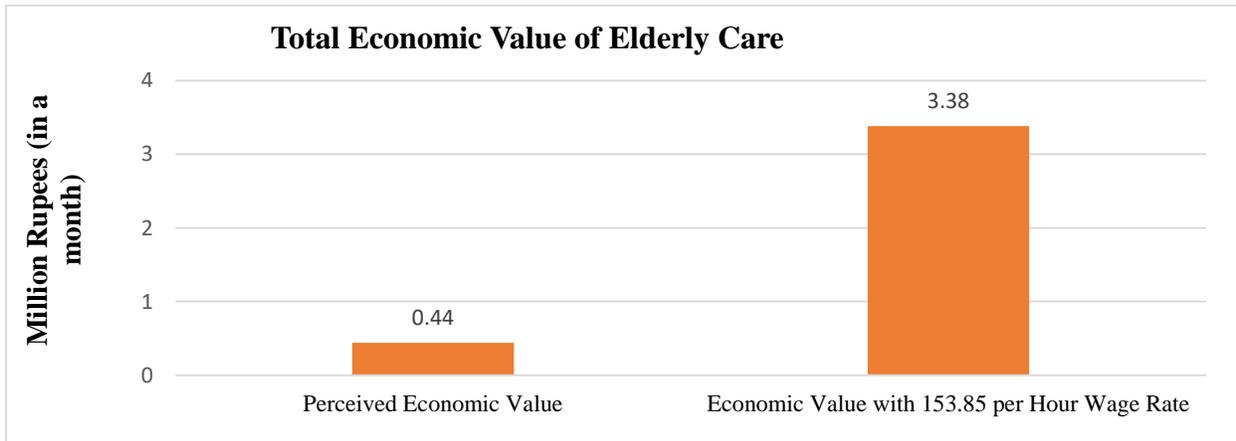
"Socializing them with other people" results in women feeling very fatigued, suggesting it is the most demanding activity. "Help in reading books/newspapers" and "Help with transportation" evoke feelings between fine and fatigued. Activities like "Watching media together" and "Helping with prayers" make them feel slightly better than fine, indicating the lowest emotional burden among the social and leisure activities.

Figure 11: *Economic value of different dimension in elderly care*



The figure shows the economic value of elderly care across different domains, comparing the perceived and market-based economic values. The market-based economic value for physical care is 0.46 million rupees per month, whereas the perceived economic value is 0.3006 million rupees per month. In the domain of medical care, the market-based value is 0.04 million rupees, compared to a significantly lower perceived value of 0.0074 million rupees. Similarly, social/spiritual care has a market-based value of 0.12 million rupees, while the perceived value is 0.0695 million rupees. This comparison highlights a significant undervaluation of elderly care in all domains, with perceived economic values falling notably short of the market-based economic values. The market-based values are higher across the board, emphasizing the need for greater recognition of the economic contributions made by caregivers.

Figure 12: Total economic value of elderly care



The figure shows total perceived and marketable economic value for elderly care is illustrated in the figure above. The total perceived economic value of elderly care is 0.44 million rupees for a month, while the total economic value based on a wage rate of 153.85 rupees per hour is 3.38 million rupees for a month. This indicates that the economic value based on the wage rate is significantly higher than the perceived economic value.

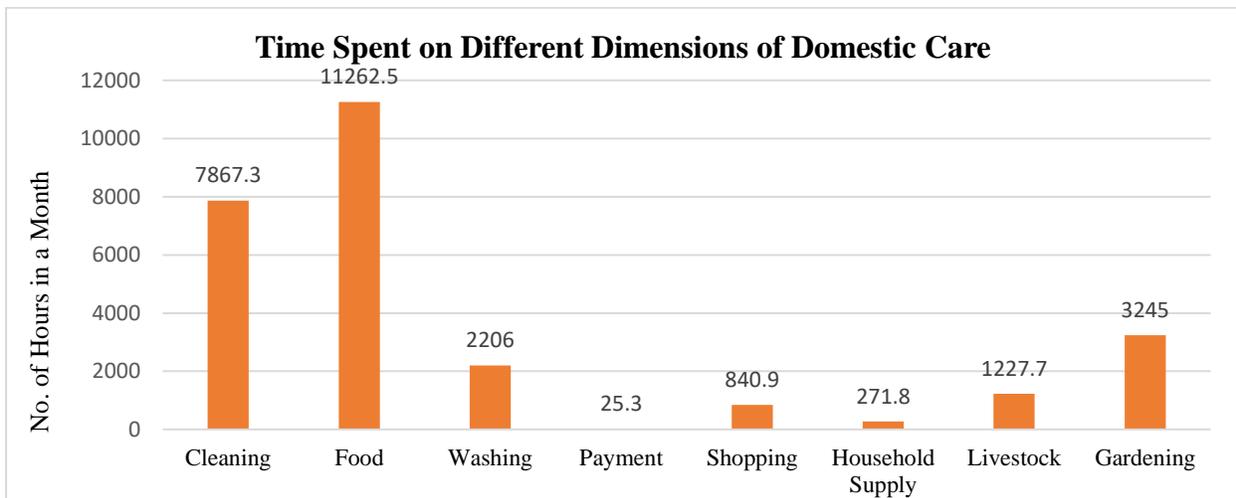
4.3 Domestic Care Dimension

The Domestic Care consist of following domains comprising

- Cleaning
- Preparing foods serving meals/guests
- Washing & Ironing clothes
- Payments of household bills
- Shopping
- Collection of Household supplies
- Livestock Care

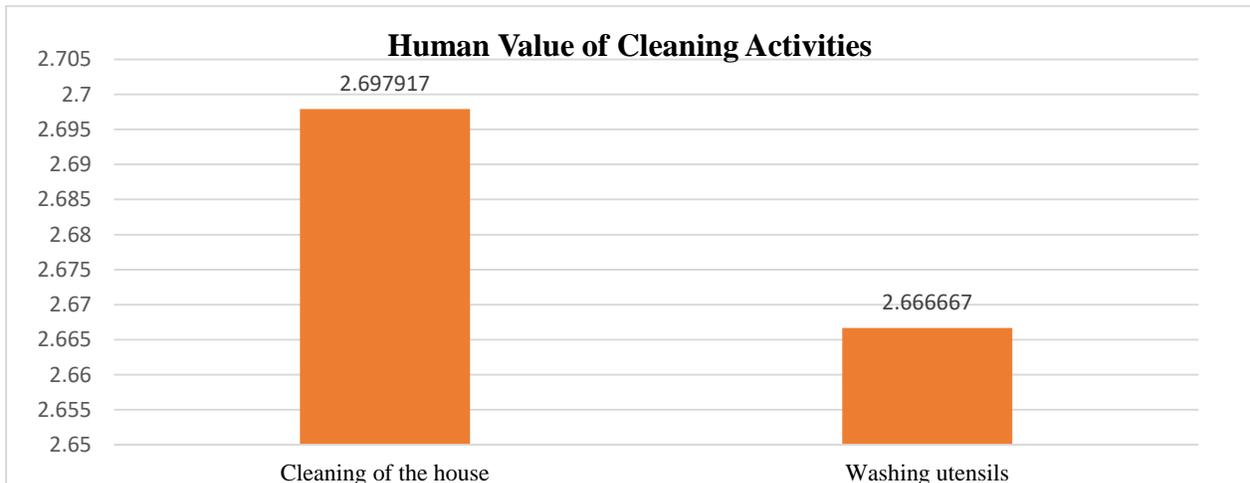
The following section cover the time spent on these activities by factory women and overall average of respondents, the economic values of these activities and lastly the human value of domestic care activities.

Figure 13: Time spent on different dimension of domestic care



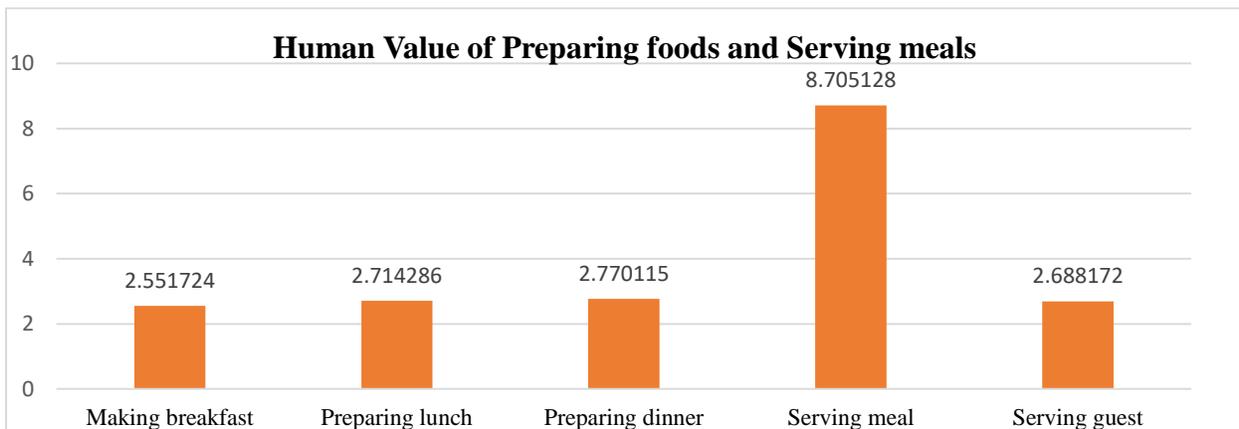
“Domains of Domestic Care” shows the number of hours spent on various domestic care activities in a month. Food-related tasks are the most time-consuming, taking up 11,262.5 hours. Cleaning follows with 7,867.3 hours, and gardening requires 3,245 hours. Washing activities account for 2,206 hours, while livestock care takes up 1,227.7 hours. Shopping and household supply activities are less time-intensive, requiring 840.9 and 271.8 hours, respectively. Payment activities demand the least amount of time, with only 25.3 hours spent in a month. This chart highlights the significant amount of time dedicated to food and cleaning tasks compared to other domestic care activities.

Figure 14: Human value of cleaning activities



The feeling/human value for cleaning activities in domestic care are represented in Figure. Cleaning the house has a slightly higher average feeling of fatigue. In comparison, washing utensils results in a slightly lower average feeling of fatigue.

Figure 15: Human value of preparing foods and serving meals



The participant is having feeling that making breakfast generally leaves participants feeling "Fine," with an average rating of approximately 2.55. Similarly, preparing lunch and preparing dinner also result in moderate levels of fatigue, with participants feeling between "Fine" and "Better," as indicated by ratings of around 2.71 and 2.77, respectively. Serving a meal, however, stands out as a particularly fatiguing activity. Participants reported feeling close to "Fatigued," with a notably higher average rating of about 8.70. On the other hand, serving a guest results in a similar fatigue level to the other activities, with participants feeling "Fine," reflected in a rating of approximately 2.69.

Figure 16: *Human value of washing, ironing and mending clothes*



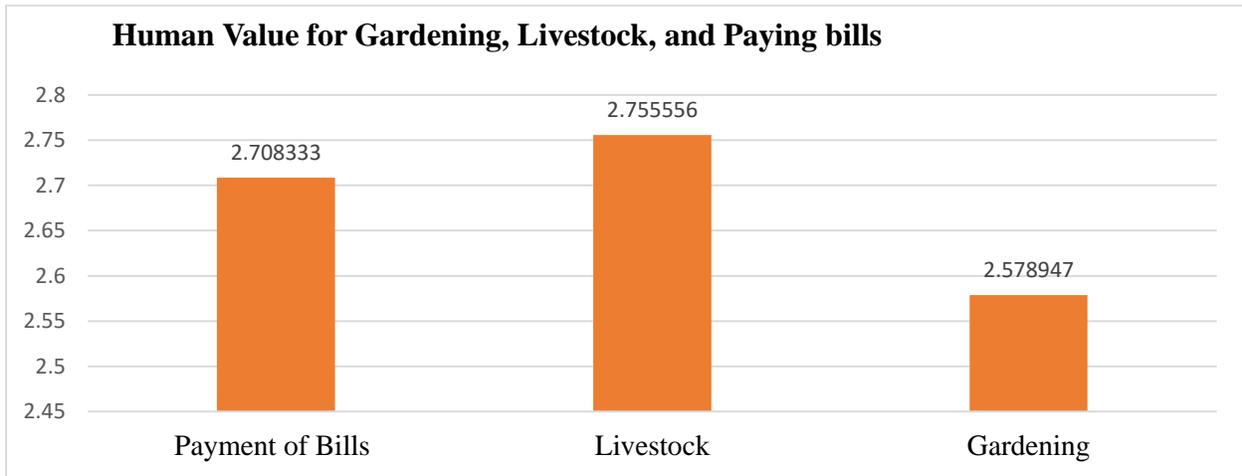
Washing and drying clothes result in a higher average feeling of fatigue, with participants generally rating their emotional state between "Fine" and "Fatigued." In comparison, ironing clothes results in a lower average feeling of fatigue, with participants feeling "Better" to "Fine." Mending clothes falls in between, indicating a moderate level of fatigue where participants feel "Better" to "Fine."

Figure 17: *Human value of shopping*



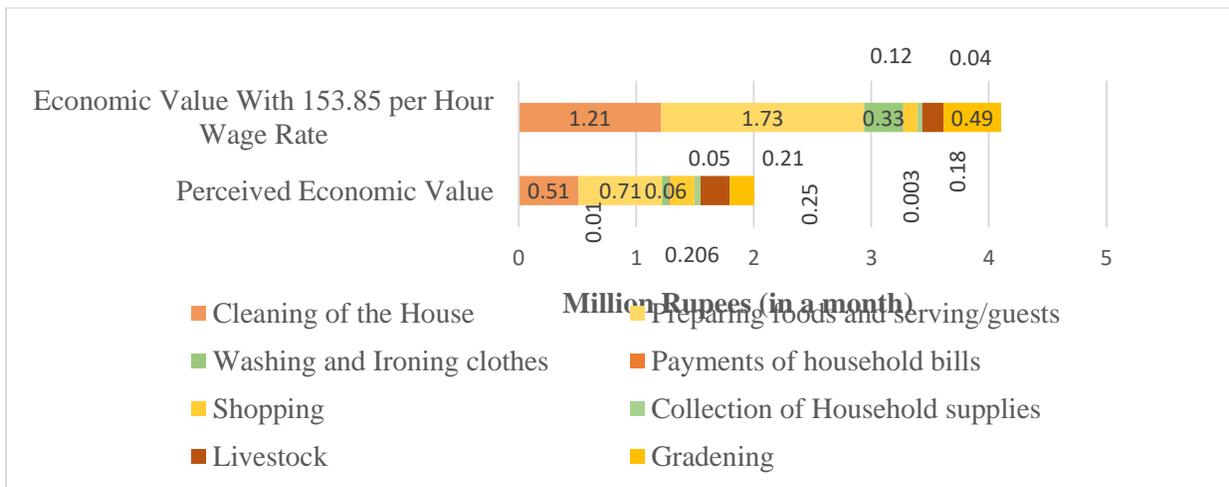
Buying groceries induces a moderate level of fatigue, with participants rating their feelings between "Better" and "Fine." Shopping for other items results in slightly less fatigue, with participants feeling "Better." General shopping shows a higher average feeling of fatigue, with participants generally feeling "Fine" to "Fatigued." Personal shopping and travel related to shopping both result in a high level of fatigue, with participants feeling between "Fine" and "Fatigued."

Figure 18: *Human value of gardening, livestock, and paying bills*



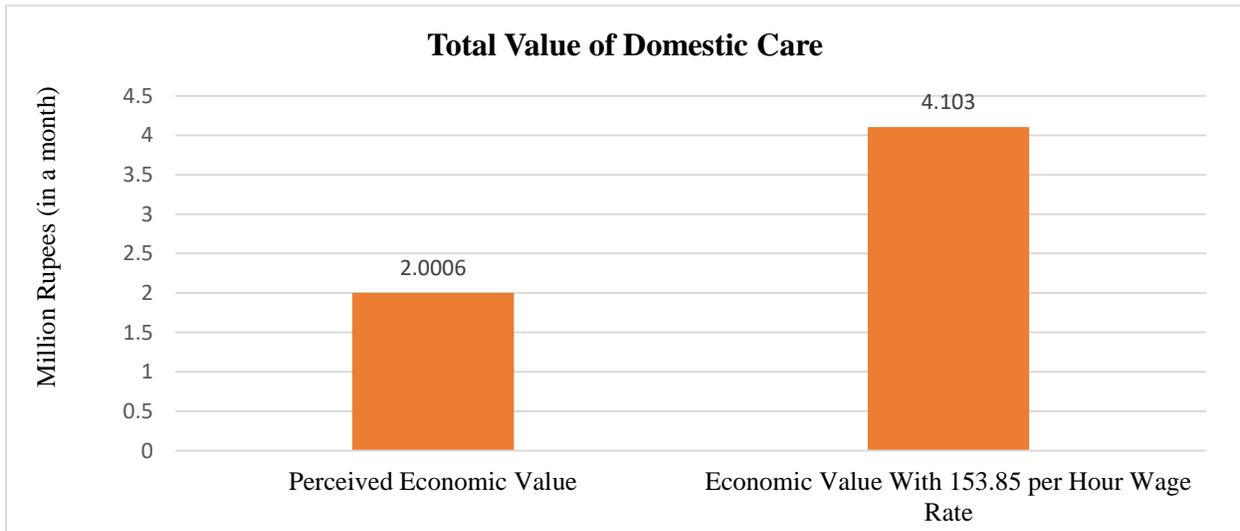
Payment of bills results in a moderate level of fatigue, with participants feeling "Better" to "Fine." Caring for livestock results in a slightly higher feeling of fatigue, with participants feeling "Better" to "Fine." Gardening has the lowest average feeling of fatigue among the miscellaneous activities, with participants generally feeling "Better" to "Fine," indicating that gardening, despite being physically demanding, is perceived as more enjoyable and less tiring.

Figure 19: *Economic value of different dimension in domestic*



The calculated economic value based on a wage rate of 153.85 per hour and the perceived economic value. For cleaning of the house, the economic value at the specified wage rate is 1.21 million rupees per month, while the perceived economic value is 0.51 million rupees. Washing and ironing clothes have an economic value of 0.73 million rupees based on the wage rate and a perceived economic value of 0.70 million rupees. Shopping has an economic value of 0.33 million rupees and a perceived economic value of 0.29 million rupees. For livestock care, the economic value is 0.08 million rupees, with a perceived economic value slightly higher at 0.10 million rupees. In terms of preparing foods and serving guests, the economic value is the highest among the activities, at 3.49 million rupees, whereas the perceived economic value is significantly lower at 0.92 million rupees. Payments of household bills have an economic value of 0.03 million rupees and a perceived economic value of 0.01 million rupees. The collection of household supplies shows an economic value of 0.06 million rupees and a perceived economic value of 0.03 million rupees. Lastly, gardening has an economic value of 1.73 million rupees with a perceived economic value of 0.91 million rupees.

Figure 10: Total value of domestic care



The total perceived economic value of domestic care is 2.0006 million rupees for a month, while the total economic value based on a wage rate of 153.85 rupees per hour is 4.103 million rupees for a month. This indicates that the economic value based on the wage rate is more than twice the perceived economic value.

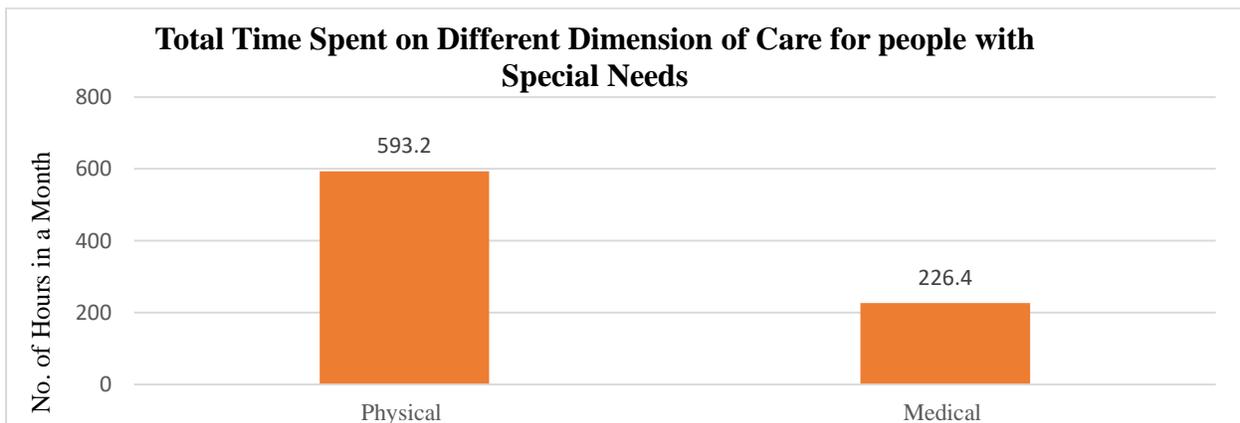
4.4 Care for the People with Special needs

The care for people with special needs includes following domains:

- Physical Care
- Mental Care

The following sections cover the time spent on these activities by factory women and overall average of respondents, the economic values of these activities and lastly the human value of care for special needs activities.

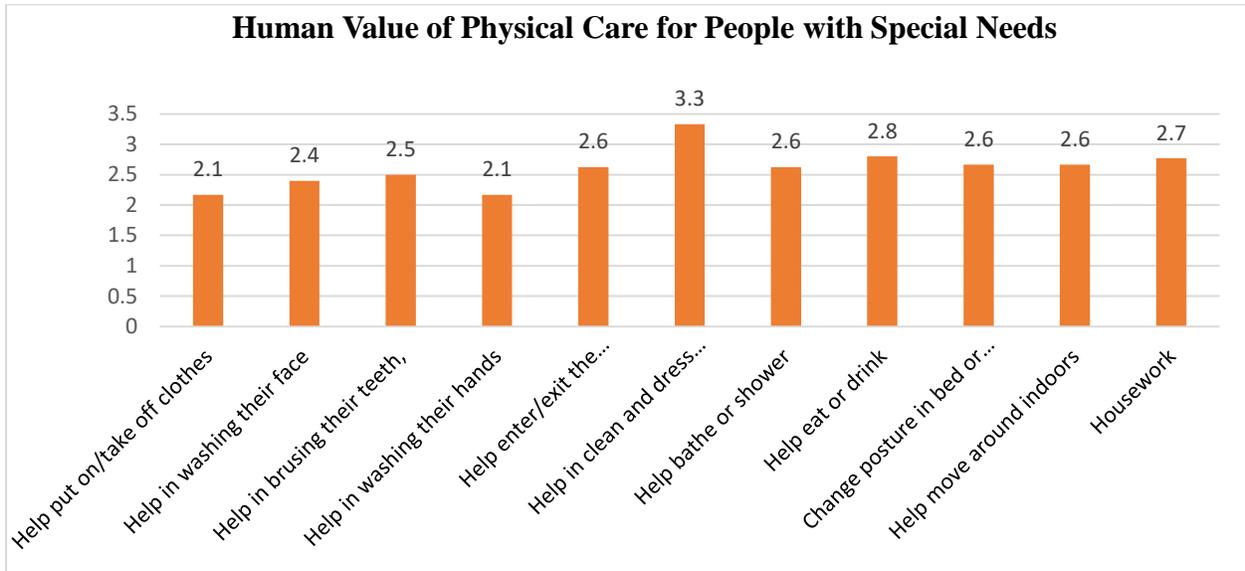
Figure 21: Total time spent on different dimension of care for people with special needs



"Domains of Special Need Care" shows the total number of hours spent in a month on two main domains of care for individuals with special needs: physical and medical care. The data indicates that 593.2 hours per month are dedicated to physical care, while 226.4 hours are spent on medical care. This shows that

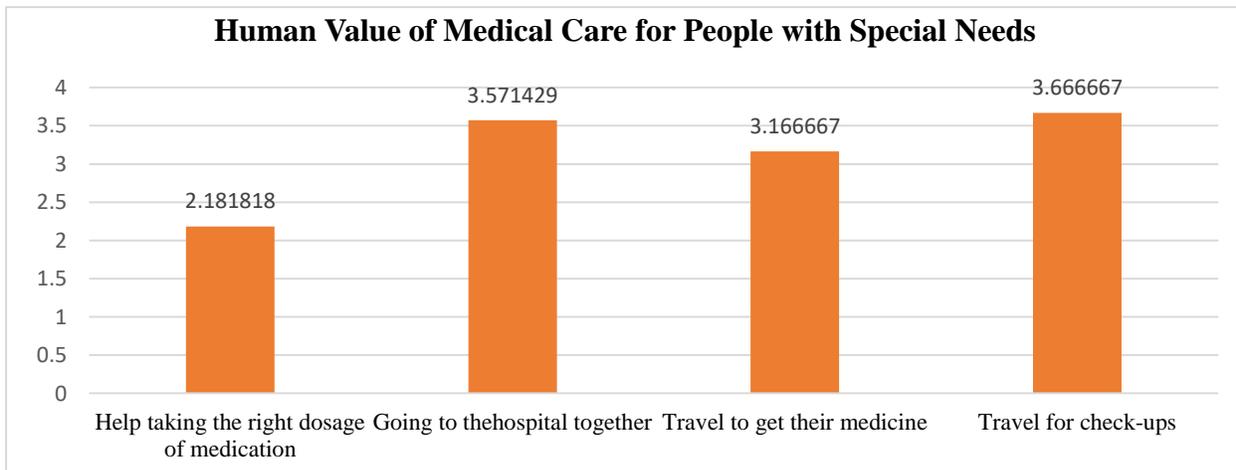
significantly more time is allocated to physical care compared to medical care in the context of special need care.

Figure 22: *Human value of physical care for people with special needs*



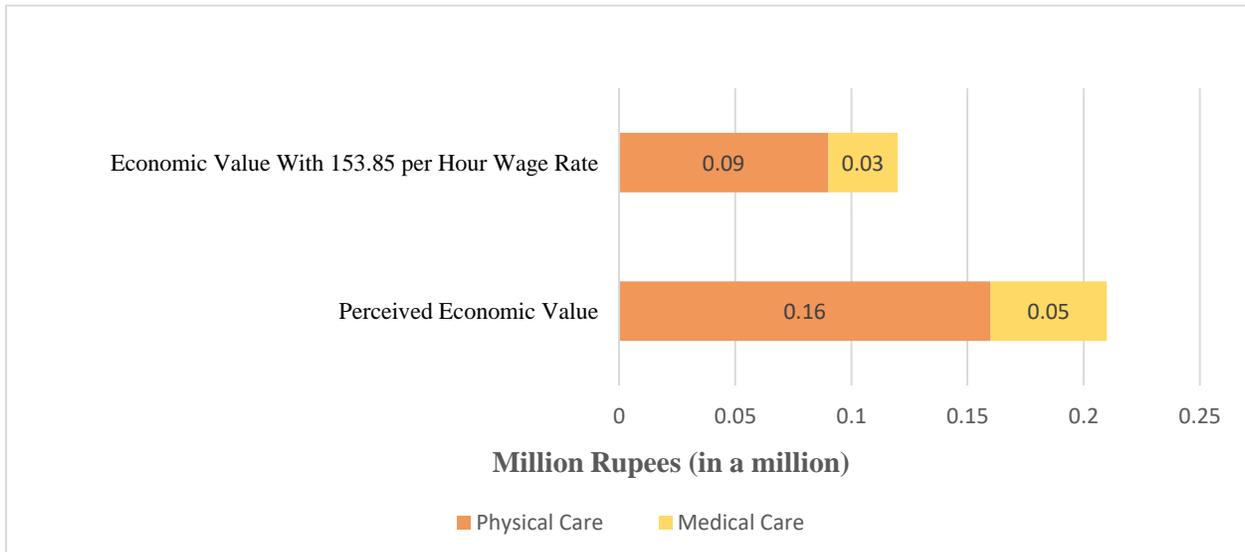
The activities such as putting on/taking off clothes, washing the face, brushing teeth, washing hands, entering/exiting areas, cleaning and dressing, bathing or showering, eating or drinking, changing posture in bed or other locations, moving around indoors, and performing housework. Each activity has a corresponding bar on the vertical axis representing the average feeling experienced while providing assistance, ranging from feeling fresh to feeling very fatigued. The most draining activity, making them feel very fatigued, is bathing or showering, while other activities such as washing the face, brushing teeth, and moving around indoors also evoke significant feelings of fatigue.

Figure 23: *Human value of medical care for people with special needs*



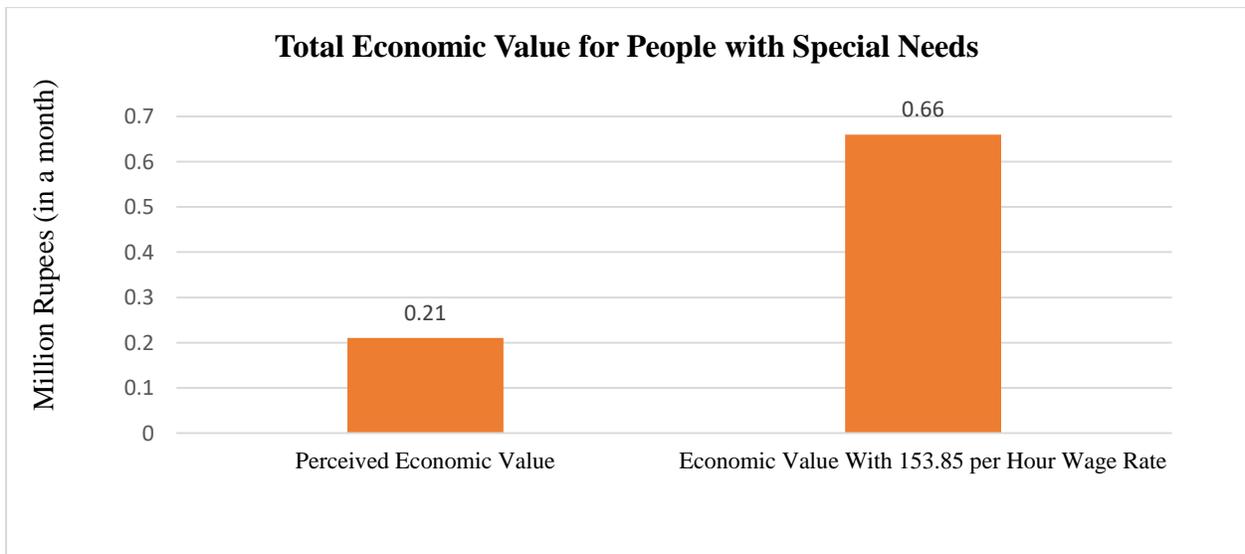
The activities include helping with the correct dosage of medication, going to the hospital together, traveling to get medicine, and traveling for check-ups. The chart uses the same vertical axis scale, ranging from feeling fresh to feeling very fatigued. The most draining activity, making caregivers feel very fatigued, is traveling for check-ups. This is followed closely by going to the hospital together and traveling to get medicine, which also evoke significant feelings of fatigue. The least draining activity, resulting in a feeling closer to fresh, is helping with the correct dosage of medication.

Figure 24: Economic value of different dimension for people with special needs



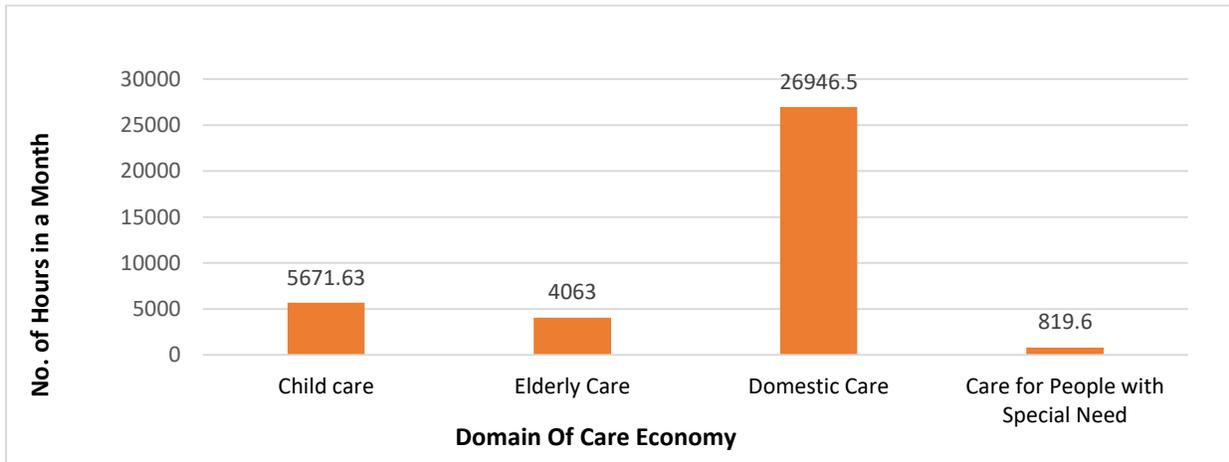
It compares the economic value based on a wage rate of 153.85 per hour with the perceived economic value. For physical care, the economic value at the specified wage rate is 0.09 million rupees, while the perceived economic value is higher at 0.16 million rupees. In the domain of medical care, the economic value based on the wage rate is 0.03 million rupees, whereas the perceived economic value is 0.05 million rupees.

Figure 25: Total economic value for people with special needs



The total perceived economic value of this care is 0.21 million rupees for a month, while the total economic value based on a wage rate of 153.85 rupees per hour is 0.66 million rupees for a month. This indicates that the economic value based on the wage rate is more than three times the perceived economic value.

Figure 26: *Total time spent on different dimensions*



The bar chart shows the number of hours allocated to different domains of the care economy in a month. The four categories include child care, elderly care, domestic care, and care for people with special needs. Among these, domestic care significantly dominates, with 26,946.5 hours, while child care and elderly care represent 5,671.63 and 4,063 hours, respectively. Care for people with special needs accounts for the fewest hours, at 819.6. This distribution highlights the considerable time invested in domestic care compared to the other care domains.

5. DISCUSSION

This research study indicates the complex interaction between unpaid domestic care work and its effect on the economic value and emotional status of women factory workers in Gilgit. The evaluation delves into various domain names of care, including childcare, elderly care, special needs care, and preferred domestic responsibilities. Through this in-depth exploration, we will better understand the socio-economic and cultural frameworks that form the studies of those women.

5.1 *Economic Value of Care Work*

The economic valuation of unpaid care work explains a stark assessment among perceived and marketable economic values. For childcare, the full perceived economic cost is 0.58 million rupees in keeping with month, while the economic value based on a wage rate of 153.85 rupees per hour is 0.86 million rupees in keeping with month. This difference shows how child care is undervalued when it comes to its economic importance. Similarly, for elderly care, the perceived economic value is 0.44 million rupees in line with month, as compared to 3.38 million rupees in keeping with month based on the wage price. For care for people with special needs, the perceived value is 0.21 million rupees consistent with month, even as the economic price primarily based on the wage value is 0.66 million rupees in step with month. Finally, for home care, the perceived economic value is 2.0006 million rupees in keeping with month, whereas the economic value based totally at the wage price is 4.103 million rupees according to month. These findings suggest that the economic value based on wage prices is significantly better than the perceived economic value throughout all domains of care work. This discrepancy underscores the invisibility and undervaluation of unpaid care work in economic metrics. It additionally calls for coverage interventions to apprehend and compensate care work adequately, reflecting its real contribution to the economic system.

5.2 *Child Care*

The time allocation for child care reveals that rearing children consumes the maximum significant quantity of time, with 2345.6 hours consistent with month devoted to this domain. This matches earlier research highlighting how raising children from infancy to early teens requires a lot of time and effort

(Tabassum et al., 2023). Activities including feeding, changing diapers, and general supervision are important for the child's development. The large time dedication to rearing activities highlights the primary responsibilities of caregivers. In evaluation, nurturing and social/moral training, even though important, receive fairly much less time. This indicates a prioritization of immediate and practical care over developmental and educational aspects. For example, converting diapers is the maximum time-consuming undertaking within the rearing area, with 1279 hours consistent with month, reflecting the recurring and common nature of this hobby. Other responsibilities which include cleansing, laundry, and Residence Company, although necessary, are secondary to direct caregiving activities. Despite the lesser time allotted to nurturing and social/ethical education, activities like preparing child meals 550.3 hours per month and attractive in conversations or playing indoors are still large. These activities are important for the kid's improvement, highlighting the importance of interactive caregiving (Smith et al., 2019). The time spent on social/ethical schooling, including coaching, schooling, and training, underscores the position of caregivers in fostering the child's social and cognitive boom.

5.3 *Elderly Care*

Elderly care demands huge time, in particular for physical care, which calls for 2995.5 hours in keeping with month. This finding highlights the sizable demands located on caregivers in helping the aged with every day sports, mobility, and personal care. The social/spiritual area, requires 806 hours in a month, emphasizes the importance of retaining emotional and social connections for the aged. This aligns with studies suggesting that social interaction and non-secular engagement are important for the properly-being of aged people (Johnson & Smith, 2022). Medical care, although less time-extensive 261.5 hours per month, is crucial for coping with fitness conditions and ensuring appropriate medical attention. Physical care activities exhibit that assisting with ingesting or consuming is the most eating or drinking, reflecting the big guide needed for fundamental functions. Other responsibilities like home tasks and helping with moving around indoors also require extensive time, indicating the broad range of physical assist necessary.

5.4 *Special Needs Care*

For people with special needs, physical care needs notably extra time than hospital treatment, with 593.2 hours allotted to physical care and 226.4 hours to hospital treatment. This highlights the good-sized physical guide required for people with unique wishes, which frequently surpasses the needs of medical management. Tasks such as help enter/exit the bathroom, help bath or shower, Help eat or drink this shows that high level of assistance is needed for personal hygiene and daily routine.

In the medical care area, sports like assisting with an appropriate dosage of medicine and accompanying people to scientific appointments are time intensive. This underscores the importance of medication control and normal scientific supervision in the care of individuals with special needs. The time spent on tasks like travelling to get remedy, at the same time as essential, is much less time-eating in comparison to direct hospital therapy.

5.5 *Domestic Care*

The domain results indicate that food related tasks, like cooking and serving meals, take the most time in household care, with 11,262.5 hours spent on them. This shows how important preparing and serving food is in daily family life. The good-sized time committed to serving visitors highlights the cultural expectations and social norms surrounding hospitality, which frequently require extra time and effort. Cleaning tasks observe, with 7,867. Three hours dedicated to keeping household hygiene. Cleaning takes a lot of time, demonstrating how crucial it is to keep your house tidy and orderly. Compared to cooking and cleaning, domestic chores like gardening and animal care requires less time. Washing utensils takes the longest among cleaning tasks because it is a more frequent and labor-intensive task. Because the majority of the participants are young women between 19 and 38, the results and representatives of their experiences balancing work and home obligation. The majority of participants are single, which could

have an impact on their social connections and domestic responsibilities. The majority of participants make more than 32,000 PKR a month, and many homes have two wage workers. Their experience providing family care may be impacted by their larger income level. The trend of both partners earning indicates a move towards shared financial responsibilities, which may have an effect on the division of family chores

5.6 *Impact of Household Income on Emotional Well-being*

The analysis of emotional responses associated with total time spent on diverse activities reveals distant patterns based on household income type. Participants in dual income families predominantly file feeling fatigued or burn out, indicating a higher emotional burden related to balancing paid and unpaid labor. This finding aligns with existing literature at the demanding situations of handling more than one role and responsibilities (Smith & Johnson, 2021). Among unmarried women who earn their own money, emotional difficulties such as figure and exhaustion are less common. This discrepancy may result from the resources and assistance offered to unmarried women, who may encounter particular difficulties balancing work and home responsibilities. The results imply that home income and whether both partners make financial contributions have an impact on the emotional impact that domestic care job takes. Families with two incomes tend to experience more emotional stress, highlighting the need for better support systems and interventions to reduce the pressure of managing so many responsibilities.

5.7 *Time Allocation and Work-Life Balance*

Total time spent on domestic and care work over 24 hours shows that dual income households have a wider variety of time use. This suggests they face more challenges in balancing paid work with home responsibilities, leading to a more demanding and complex daily schedule. Overall, this study highlights the significant time and effort women factory workers in Gilgit dedicate to unpaid care work. It emphasizes the economic and emotional impact of this work and calls for better recognition and value of unpaid care in economic policies. By addressing the lack of value given to care work and providing support for caregivers, we can improve the financial and emotional well-being of women and ensure a fairer sharing of household responsibilities

6. CONCLUSION

The study reveals the extensive unpaid care work performed by women factory workers in Gilgit and its multifaceted impact on their economic status and emotional well-being. Women invest significant time in childcare, eldercare, and household management, often at the expense of their personal and professional development. Despite their substantial contributions, this labor remains undervalued and largely invisible in economic and policy frameworks.

Findings underscore the dual burden borne by these women, with profound implications for their physical and mental health. The economic value of their unpaid labor, if integrated into national accounts, would represent a significant contribution to the economy. Recognizing and addressing these challenges is critical for advancing gender equality and fostering inclusive economic growth.

6.1 *Limitation*

1. **Sample Representation:** The study is limited to women factory workers in Gilgit, which may not be representative of women in different regions or occupations. This geographical and occupational attention may additionally limit the generalizability of the findings.
2. **Data Collection Constraints:** The reliance on self-pronounced statistics may additionally introduce biases, as members might underreport or over document their time spent on domestic obligations and emotional studies.

3. Economic Valuation Method: The look at uses a specific wage price for economic valuation, which may not absolutely seize local versions in wage quotes or the real market price of various care tasks.
4. Scope of Emotional Well-being: The study in general focuses on fatigue and exhaustion, potentially overlooking different emotional affects such as strain, anxiety, or ordinary process delight.
5. Cross-sectional Design: The research employs a go-sectional layout, which limits the ability to establish causality or look at changes over the years

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Conflict of Interest

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REFERENCES

- Melda Lubis. (2022). Analysis of Women’s Multiple Roles and Domestic Violence Female Factory Workers in Sunggal District, Deli Serdang Regency. *Journal of Sumatera Sociological Indicators*, 1(2), 10–20. <https://doi.org/10.32734/jssi.v1i2.9468>
- Ayaz, M., Ashraf, M. J., & Hopper, T. (2019). Precariousness, Gender, Resistance and Consent in the Face of Global Production Network’s “Reforms” of Pakistan’s Garment Manufacturing Industry. *Work, Employment and Society*, 33(6), 895–912. <https://doi.org/10.1177/0950017019870735>
- Bank, A. D. (2015). Women in the Workforce: An Unmet Potential in Asia and Pacific. In *www.adb.org*. Asian Development Bank. <https://www.adb.org/publications/women-workforce-unmet-potential-asia-and-pacific>
- Coffey, C., Espinoza Revollo, P., Harvey, R., Lawson, M., Parvez Butt, A., Piaget, K., Sarosi, D., & Thekkudan, J. (2020). Time to Care: Unpaid and underpaid care work and the global inequality crisis. *Oxfam*. <https://doi.org/10.21201/2020.5419>
- DEV. (2024). OECD. <https://www.oecd.org/dev/development-gender/unpaid-care-work>
- European Institute for Gender Equality. (2023, June 9). *Gender differences on household chores entrenched from childhood*. European Institute for Gender Equality.

https://eige.europa.eu/publications-resources/toolkits-guides/gender-equality-index-2021-report/gender-differences-household-chores?language_content_entity=en

- From Double Burden of Women to a “Double Boon”: Balancing Unpaid Care Work and Paid Work - Institute of Development Studies. (2019, October 29). *Institute of Development Studies*. <https://www.ids.ac.uk/publications/from-double-burden-of-women-to-a-double-boon-balancing-unpaid-care-work-and-paid-work>
- Ghosh, A., Singh, A., & Shraddha Chigater. (2023). A Trapeze Act : Women Balancing Paid Work and Unpaid Care Work in Nepal - National Report for Women’s Economic Empowerment Policy and Programming. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4660197>
- Google Books. (2019). *Framed by gender*. https://www.google.com.pk/books/edition/Framed_by_Gender/n0nTPVX85CQC?hl=en&gbpv=1&printsec=frontcover
- Harris, E. A., Gormezano, A. M., & van Anders, S. M. (2022). Gender Inequities in Household Labor Predict Lower Sexual Desire in Women Partnered with Men. *Archives of Sexual Behavior*, 51, 3847-3870. <https://doi.org/10.1007/s10508-022-02397-2>
- Introduction -Women, gender and work 345 INTRODUCTION: WOMEN, GENDER AND WORK (Part II)*. (n.d.). <https://webapps.ilo.org/public/english/revue/download/pdf/intro994.pdf>
- Khalid, J., Hureem, U., Sardar, M. S., Masood, S., & Majid, H. (2022). *Situational Analysis of Women Factory Workers: Empirical Evidence of Equity From the Manufacturing Industries in Lahore, Pakistan*. *Www.igi-Global.com*; IGI Global. <https://www.igi-global.com/chapter/situational-analysis-of-women-factory-workers/311079>
- Killewald, A., & Gough, M. (2010). Money isn’t everything: Wives’ earnings and housework time. *Social Science Research*, 39(6), 987–1003. <https://doi.org/10.1016/j.ssresearch.2010.08.005>
- None Melda Lubis. (2022). Analysis of Women’s Multiple Roles and Domestic Violence Female Factory Workers in Sunggal District, Deli Serdang Regency. *Deleted Journal*, 1(2), 10–20. <https://doi.org/10.32734/jssi.v1i2.9468>
- Marphatia, A. A., & Moussié, R. (2013). A question of gender justice: Exploring the linkages between women’s unpaid care work, education, and gender equality. *International Journal of Educational Development*, 33(6), 585–594. <https://doi.org/10.1016/j.ijedudev.2013.05.005>
- Miao, X., Han, J., Wang, S., & Han, B. (2023). Impacts of family care for children and the elderly on women’s employment: evidence from rural China. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1208749>
- Mussida, C., & Patimo, R. (2020). Women’s family care responsibilities, employment and health: A tale of two countries. *Journal of Family and Economic Issues*, 42(3), 489–507. <https://doi.org/10.1007/s10834-020-09742-4>
- Nasreen, S., Shah, N. A., & Ali, A. (2020). Ascertaining Impact Of Economic Conditions Of Pakistan On Women Working In Industrial Sector Of Karachi. *Pakistan Journal of Gender Studies*, 6(1). <https://doi.org/10.46568/pjgs.v6i1.409>
- Office for National Statistics. (2016, November 10). *Women shoulder the responsibility of “unpaid work.”* *Ons.gov.uk*; Office for National Statistics. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/articles/womenshouldertheresponsibilityofunpaidwork/2016-11-10>

- Pepin, J. R., Sayer, L. C., & Casper, L. M. (2018). Marital Status and Mothers' Time Use: Childcare, Housework, Leisure, and Sleep. *Demography*, 55(1), 107–133. <https://doi.org/10.1007/s13524-018-0647-x>
- Rodriguez, L. (2021, September 13). *Unpaid Care Work: Everything You Need to Know*. Global Citizen. <https://www.globalcitizen.org/en/content/womens-unpaid-care-work-everything-to-know/>
- Ruwanpura, K. N., & Hughes, A. (2016). Empowered spaces? Management articulations of gendered spaces in apparel factories in Karachi, Pakistan. *Gender, Place & Culture*, 23(9), 1270–1285. <https://doi.org/10.1080/0966369x.2015.1136815>
- Sarfraz, M., Kamran, M., Khan, N. U., Khalique, M., & Andlib, Z. (2022). Targeting Women's vulnerable employment through social protection: A quasi-experimental regression discontinuity design. *Heliyon*, 8(2), e08964. <https://doi.org/10.1016/j.heliyon.2022.e08964>
- Souza, A. (2010). *Moving towards Decent work for Domestic workers: An Overview of the ILO's work*. https://www.ilo.org/wcmsp5/groups/public/---deports/gender/documents/publication/wcms_142905.pdf
- Tabassum, S., Khan, Y., Zarrin, U., & Zahra, M. (2023). Measuring Women's Contribution in Care Economy: Constructing Survey Based Indexed Questionnaire. *Human Nature Journal of Social Sciences*, 4(2), 701–715. <https://doi.org/10.71016/hnjss/wk3mc156>
- THE CARE ECONOMY IN EGYPT: *THE ROAD TOWARDS RECOGNIZING, REDUCING AND REDISTRIBUTING UNPAID CARE WORK*. (n.d.). https://arabstates.unwomen.org/sites/default/files/Field%20Office%20Arab%20States/Attachments/Publications/2020/12/UNW_ERF_PolicyBriefs_Egypt_final_Dec4_2020.pdf
- The Hidden Assembly Line. (2024). *Google Books*. https://books.google.com.pk/books?hl=en&lr=&id=1WL1u5h6WCgC&oi=fnd&pg=PA35&dq=Subcontracted+Work+and+Gender+Relations:+The+Case+of+Pakistan&ots=40YjJewh_q&sig=YN6nJ1TqfPZnguMC63JYVvkqf4&redir_esc=y#v=onepage&q=Subcontracted%20Work%20and%20Gender%20Relations%3A