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Assessing the Ramifications of Unpaid Work on Emotional Distress and Physical Health Deterioration among women in North Chennai

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Abstract

Despite greater employment for women, a substantial section of the population continues to do a disproportionate amount of unpaid housework, forcing them to juggle multiple obligations at once. Women struggle to reconcile work and family responsibilities, and this dual burden, combined with the demands of paid job, produces severe emotional discomfort and physical health degradation. This imbalance affects not just women's well-being, but also their productivity and quality of life. The disparate allocation of family responsibilities reinforces the gender disparity by putting more pressure on women to satisfy cultural standards. To build healthier and more balanced lifestyles for women, policy makers must take certain measures to alleviate their distress. The study took both qualitative and quantitative data to attain the objective. Initially, a focus group was organized involving 15 women from North Chennai engaged in the unorganized sector to explore their experiences with unpaid house work and paid employment. Following this, a survey was administered to 250 women from North Chennai engaged in the unorganized sector using a structured questionnaire developed from the discussion, employing a convenience sampling technique. The quantitative data were analyzed to identify link between unpaid work(UPW), emotional distress(ED)and physical health deterioration(P), while the qualitative insights provided a profound understanding of the living conditions of these women. The quantitative analysis was carried out with statistical tools such as SPSS and Smart PLS. The Mann-Whitney and Kruskal-Wallis tests were used to evaluate group differences, offering a robust and non-parametric analysis. Furthermore, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to look into the linkages between unpaid work, mental discomfort, and physical health deterioration. This method disclosed facts about how unpaid work adds to psychological difficulties and affects overall health. The outcome explained that female who engage in both unpaid housework and paid employment faces momentous cognitive health challenges and decreased physical wellbeing.

Keywords: Unpaid work, Emotional distress, Physical health deterioration, Women, Unorganized sector.

Introduction

Unpaid work of women has a substantial blow on daily living and health, particularly mental health, and is primarily carried out by women globally. A perceived imbalance contributes to family conflicts, which may impede job performance and affect wellbeing (Fettró and Nomaguchi, 2018). The work burden is high among female who are self-employed, young children & elderly people care taker, and other employed individuals. A lot of women have to balance both paid and unpaid labor, which can cause stress, role overload, and time poverty (Ervin et al., 2023, McGinnity and Russell (2007). Employment can provide women with revenue, social engagement, and self-identity benefits as well as challenges (Lu et al., 2023). Women around the world devote an average of four hours and twenty-five minutes a day to this essential but underappreciated labor, while men only devote one hour and twenty-three minutes. This gender disparity in unpaid care work is a notable gauge of inequality. Unpaid care work's vital role in family well-being and economic steadiness is highlighted by the International Labour Organization's (ILO) classification of unpaid care work into three categories: household service, care giving, and community services. But frequently, this unpaid work goes unrewarding, which perpetuates gender inequality and affects general well being of women. Despite being a crucial but little-studied topic, women are more severely impacted by unpaid labor, particularly that impacts mental health and general well being. The community of North Chennai chiefly composed of working-class families, facing significant socioeconomic challenges, including lower incomes. Many residents are employed in low-wage jobs within the manufacturing, service, and informal sectors, struggling to meet basic needs. This economic backdrop exacerbates the prey on women, who are often accountable for a disproportionate amount of unpaid labor, including household chores and care giving, alongside their formal employment.

Research gap

Despite increasing evidence linking unpaid work to emotional distress and physical health deterioration, considerable research gaps exist, particularly concerning causal relationships. Most existing studies are based on

cross-sectional designs, which fail to ascertain causal links between unpaid work, emotional distress and physical health deterioration. Numerous research studies on unpaid work focuses on formal sectors but few research studies examine the effect of unpaid work on emotional distress and physical health deterioration. There is also an understanding vacuum on the unique difficulties faced by women in the unorganized sector in North Chennai. This study attempts to close this gap by investigating the causal relationship between unpaid work and both emotional distress and physical health deterioration using a 'mixed-methods approach' taking into account 'gendered experiences' and 'socio-demographic factors' impacting women working in the unorganized sector in North Chennai.

Research questions:

- What challenges and adversities do women experience as a result of unpaid labor?
- Do differences in unpaid labor depend on the occupation of women?
- Does deteriorating physical health and mental anguish relate to women's occupation?
- What variations exist in unpaid labor among women according to their marital status?
- Does the pecuniary assistance of spouse impacts unpaid work of women?
- Are women's physical health deterioration and emotional distress influenced by the financial support of their marriages?
- What impact does family size have on the disparities in women's declining physical health?
- Does educational qualification have a major impact on emotional anguish levels?
- How does unpaid work create a burden on women's emotional distress?
- What is the liaison between women's voluntary effort and their physical health?

Objectives of the study:

General objectives:

- To comprehend the challenges along with hardships women experience as a consequence of unpaid labor.
- To examine the socio-demographic factors that influence unpaid work, emotional distress, and physical health deterioration in women, such as occupation type, marital status, spousal financial support, family size and the level of education.
- To investigate how unpaid labor of women affects physical and mental health.

Specific objectives

- To observe the differences in the unpaid work, emotional distress and physical health deterioration on the basis of the type of occupation of women.
- To examine the differences in the unpaid work on the basis of women's marital status.
- To scrutinize whether the unpaid work, emotional distress and physical health deterioration of women differs when financial support has been provided by the spouse.
- To study the differences in the physical health deterioration on the basis of family size.
- To learn the relationship between educational attainment and emotional distress levels.
- To examine the affiliation between women's unpaid work and emotional distress
- To probe the connection linking women's unpaid work and physical health deterioration

Literature Review

Unpaid work for women often branches out from societal and patriarchal norms. It limits their entry in the labor market and forces them to depend on others. This situation constrains women's choice concerning paid work, particularly in low-paying and insecure jobs. Unpaid work among women is a central issue but it is often not recognized element of the economy. Women spend longer hours on both paid and unpaid labor compared to men and there is a need of data that encompasses their contribution. Women also decide on how they allocate their time when they make up their mind to participate in the labor market. This includes weighing the trade-offs between leisure and work, as well as accounting for home-based production and care giving responsibilities (Becker, 1965). The debates of capitalism's crises tend to concentrate on monetary and ecological problems, ignoring social reproduction, which encompasses unpaid care labor. Unpaid care work is externalized onto families by capitalism, which increases poverty by disproportionately hurting women in underdeveloped nations who frequently relocate to sell their labor (Tasnim, 2020). The dual role of women as working both in the labor market and at home is instrumental in enhancing a country's productivity. The tendency for women to be more involved in household chores is evident even when both genders work and earn comparable incomes (Chauhan, 2021). The volume of unpaid work carried out by women at home often restricts their ability to pursue career advancement opportunities, thereby affecting their current and future earnings. They receive fewer chances for promotions, salary increases, and skill advancement, leading to a decrease in potential income. This also impacts their retirement, resulting in reduced retirement savings and benefits. Ultimately, women face financial insecurity in older age due to unpaid labor (Iusardi, 2007). Many female cares for family members with disease,

experience stress which may concern their physical health as well (Vitaliano et al., 2003). Despite providing a certain amount of independence and fulfillment, domestic work lacks social status and institutional acknowledgment, which may make it more likely to cause sadness, particularly in environments with minimal resources. Especially for moms and wives, juggling numerous responsibilities, like childcare and labor, causes role conflict, elevated stress, and anxiety (Owoo and Lambon-Quayefio (2021). According to Butterworth et al. (2011), emotional wellness is greatly impacted by the psychosocial quality of one's job. Even while having a work generally improves mental health, people in low-quality jobs had worse mental health than those without jobs. Piovani and Aydiner-Avsar (2021) discovered that emotional distress is consistently correlated with total work time, which includes both paid and unpaid labor, for women, but not for men. According to their data, the amount of time spent on voluntary labor rather than paid job has a greater influence on women's cognitive health. This implies that women's emotional health is affected greatly by the accumulated load of unpaid labor. According to the study, assessing both productive (paid) and reproductive (unpaid) labor is crucial for creating public policies that support social justice and gender parity. Women in India spend roughly twice as much time on amateur care work and three times as long on domestic chores when judge against to men, unfortunately this saddle of responsibility is expected to increase due to a growing elderly population (Sinha et al., 2024). Women who undergo household tasks and childcare get highly stressful and has increased cortisol levels in their bodies (Sjörs et al., 2014). Sex-based cultural and social customs position female as caregivers and bringers, which may be linked with worse mental health outcomes for them. Time allocation is distinctly gendered as women often more satisfied working part-time due to their dual role in both paid employment and unpaid domestic tasks. This double shift directs to differing life satisfaction levels between partners. Men's time use brings into line with usual gender roles, while women tend to assume more egalitarian attitudes (De Rock & Périlleux, 2023). Several studies show a correlation between mind wellbeing and low income status, signifying that individuals with lower social and economical status experience a higher prevalence of mental health issues compared to those with higher socioeconomic status (Muntaner et al., 2004). High demands and low control in domestic roles considerably impair women's mental health. This imbalance, rooted in conventional gender expectations, places a grave burden on women, leading to augmented stress and psychological distress. To improve mental well-being, it is indispensable to promote a more equitable distribution of domestic responsibilities (Maeda et al., 2019).

Methods

This study employed a mixed methods approach. One focus group was organized under the study as a qualitative data collection method, which is effective for understanding the social norms of a community or subgroup. The focus group was held with fifteen women, using open-ended questions to gather insights. Participants included women engaged in domestic work, street hawking, food preparation and vending, auto driving, and construction work in North Chennai, exploring their knowledge and perceptions of unpaid labor. Through a qualitative interpretive methodology, the study aimed to understand the significance these women attribute to their unpaid work and the societal expectations placed upon them.

Participants

The study comprised of women with diverse occupations, including domestic work, street hawking, food preparation and vending, auto driving, and construction work, as well as varying levels of education and age. All individuals who voiced interest and were available to take part in the group were regarded. The names of all participants are pseudonyms to maintain confidentiality.

The Research Process

To comprehend the magnitude of challenges undergo by women as a corollary of voluntary labor, A focus group was conducted initially with women in North Chennai. Following the session, a structured questionnaire was prepared in both English and Tamil. Interviews with 250 women workers were conducted, they were from various parts of North Chennai. Some participants were met in person, while others were contacted by phone. On the basis of the women workers' responses, a quantitative analysis was performed to investigate the negative consequence of unpaid labor on their mental health and general well-being. Convenience sampling technique was taken for the study to gather responses for this study. After completion of all interviews, SPSS and Smart PLS software were harnessed as a tool to explore the underlying dynamics of amateur work of women.

Research Model

The proposed conceptual model investigates the causal relationship between “Physical health deterioration”, “Emotional distress” as dependent factors and “Unpaid Work” as independent variable. According to the proposed model of Unpaid Work (UPW), Emotional Distress(ED) and Physical Health Deterioration (P), more unpaid work of women could result in physical strain, tiredness, and poor sleep, which could impair immune systems. Regarding mental health, the strain of working for no pay can result in increased anxiety, stress,

depression and burnout, mostly because of the extreme workload and insufficient time to care for them. The model emphasizes that women may suffer from poor physical and mental health due to unpaid work. The conceptual structure was built on a self-created questionnaire that measured physical health deterioration (P), emotional distress (ED), and unpaid work (UPW). To guarantee content validity, the questionnaire's customized items for each construct were created after a thorough literature review and expert input. Five variables (U1 to U5) were used to measure unpaid work (UPW) in order to determine the nature and extent of such activities. Four variables (M1 to M4) that represent different facets of psychological strain and mental wellness problems were used to measure emotional distress (ED). Three indicators (P1 to P3) that focused on negative physical health outcomes associated with unpaid labor used as a representation of physical health degradation (P). Prior to data collection, the questionnaire was pilot tested to improve clarity and reliability. This allowed for the testing of hypothesized links in the model and the validation of constructs. Certain items measuring the constructs were removed because their factor loadings were below 0.7.

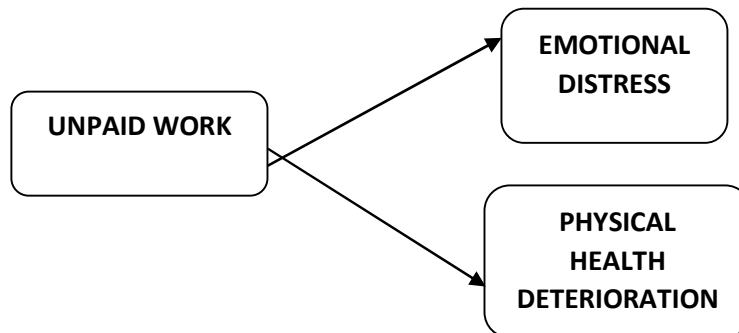


Figure 1: Proposed Model of Unpaid Work (UPW), Emotional Distress(ED) and Physical Health Deterioration (P)

- H1a: Spousal financial support has an effect on UPW, ED and P
- H2a: The burden of UPW, ED and P differs based on the category of employment
- H3a: Differences exist in UPW based on marital status.
- H4a: Emotional distress differs on the basis of family size
- H5a: Emotional distress differs on the basis of the level of educational qualification
- H6a: Unpaid work creates a burden on women's emotional distress
- H7a: Unpaid work affects women's physical health

DATA ANALYSIS

The findings from the qualitative analysis on the impact of unrewarded work on women's lives in North Chennai are as follows:

In exploring the realities of unpaid labor among women in North Chennai, the following narratives reveal the deep struggles and resilience they embody in their everyday lives. Each woman's story demonstrates the intersection of socio-economic pressures, familial expectations, and the persistent demands of their respective roles. Certain painful stories of the women respondents group are highlighted below.

Gowri's (58 years old, domestic worker) highlights the harsh reality faced by her in domestic labor, where both physical endurance and resilience are time and again taken for granted

"One day, I became ill with a painful swelling in my thumb. I knew that if I took a day off, my wages for that day would likely be cut. Despite my condition, I couldn't take a break from my household chores. I also support my married daughter, who works in domestic services as well. So, I completed my household tasks, including sweeping and cooking. Bearing the pain, I then went to work, washing dishes at the houses where I'm employed. Unfortunately, the wound on my thumb worsened, and I eventually had to be hospitalized. During my week of recovery, three of the households I worked for dismissed me because of my absence. Losing those jobs caused me significant financial hardship, and I struggled greatly afterward to make ends meet".

Meenatchi (36 years old, domestic worker) illustrates the struggles she faces in her daily life. Her narrative mirrors the harsh realities of managing multiple responsibilities while enduring physical and emotional abuse.

"Every day, I work in ten houses doing domestic services. When I come home, my irresponsible husband either beats me or abuses me because I cook late at night. He also works as a laborer and expects dinner by 8 PM. I can't afford to buy food from outside, so I have to cook myself. My work at home is challenging because I have to take care of my two children, who are 5 and 8 years old. My mother-in-law, who has high blood pressure, never takes responsibility. I have to work constantly and only get to rest when I visit my mother's house, but that is rare."

Devi (29 years old, an auto driver) provides a glimpse into her challenging daily routine that balances work and family responsibilities and how her family fails to recognize her contribution.

"I take school trips for kids. Every day, I have to wake up early, around 3 AM, to do household chores and cooking at home. After that, I drop my own children along with other kids to school. I earn very little from this work. I take two college girls to their college every day at 10 AM. Then, I pick up the school children and drop them off at their homes. In the evening, I have to help my children with their studies and do the cooking. I don't rest until 11 PM, and I only sleep for four hours. Only on Sundays I get some extra sleep, and even then, my mother-in-law gives me a stern look. I sometimes hate my life because my family fails to appreciate my hardwork and points out my mistakes".

Radha (35 years, a food vendor) offers an emotional insight into her challenging life as a single breadwinner.

"I've started to hate my kitchen because I'm constantly cooking. My husband is an alcoholic and never contributes any money. I'm responsible for paying the school fees of our two children. I started this small business only to support my kids. I can't take a single day off. Standing on the road selling fritters every evening leaves me frustrated and exhausted. My husband, who's often suspicious of me because I work on the street, beats me when he's fully drunk. I hide my sadness from my children. I fail to take care of myself for fear that my husband may misunderstand me. I have dark patches under my eyes, and I haven't gone for any treatment."

Lakshmi (30 years old, a dedicated construction worker) embodies resilience in the face of persistent demands, yet the weight of her responsibilities leaves her in a constant state of sleep deprivation, as she struggles to take rest amidst her exhausting routine.

"I endure a relentless routine every day as a construction worker. I wake up early to prepare food and manage household chores before heading out to the construction site. My job is physically grueling; I lift heavy loads, mix cement, and labor for long hours under the harsh sun. By the evening, my body aches, and my hands are rough and sore, yet my earnings are modest, barely enough to cover my family's basic needs. At home, my responsibilities continue with little support from my husband. Sometimes he refuses to help and blames me for any shortcomings. It feels overwhelming at times, and I wish I received more recognition for the hard work I put in both at the site and at home. I also have trouble falling asleep because my thoughts are focused on unpaid activities and the constant worry of how to manage everything."

Desamma (56 years, a fish vendor) shares a heart-wrenching account of her struggles as a caregiver and a fish vendor, elucidating the challenges of loss and responsibility.

"I lost my son in an accident, and my daughter's life is troubled because her husband is an alcoholic. I am raising her children, and my husband is also a sick patient. My elder daughter sells fish as well. Both my daughter and I walk many streets to sell fish. I have to go to the Kasimedu fish market early in the morning. We wake up at 2:30 AM to cook for the kids. My daughter takes them to school. Every day, we sell fish until 1 PM and then return home to continue with household chores after a lunch break. In the evening, I go back to the fish market to sell fish and usually reach home around 8 PM or 9 PM. One day, my daughter developed a high fever. I was unable to take her to the hospital due to my work commitments. She was on the brink of death but somehow managed herself to get recovered. Our life is a troubled life and we always do dual work, which leaves us lacking physical energy. I just live for my daughter and grandsons".

From the one group focus session, the following points were taken for formulating the questionnaire.

- Most of the unpaid domestic work is usually done by women.
- The contributions made by the women respondents are often not recognized or given credit.
- Personal interests are frequently subordinated to unpaid labor.
- The women respondents become frustrated when their work and related contributions are not acknowledged.
- Emotional weariness and rage can upshot from unappreciated work.
- Low self-esteem, stress, and depressive disorders are widespread problems.
- They are unable to find time for self-care because of their responsibilities.
- Social relationships may decrease as a consequence of unpaid labor obligations.

The quantitative analysis of unpaid labor impact is presented in the following sections. The age of the women respondents indicates that 2 percent were less than 20 years old, 22 percent fall within the age group of 21-30 years, 31 percent are in the 31-40 years age group, 30 percent fall into the 41-50 years category, and the remaining 15 percent are above 50 years. Regarding marital status, 45 percent of the respondents are single, while 55 percent are married. The educational levels of the female respondents show that 34 percent do not have formal education, 35 percent completed primary education, 12 percent completed secondary education, 13

percent completed higher secondary education, and the remaining 7percent fall into other categories. With regard to household size, 35 percent of the female respondents have fewer than 5 members, while 65percent report having more than 5 members. Regarding the type of work, 5percent of the female respondents work as auto drivers, 15percent is employed as construction workers, 20 percent engage in food preparation and vending, 25 percent are Domestic workers, and 35percent are street hawkers. The income distribution reveals that 30percent earn below ₹5,000, 60 percent bring in between ₹5,000 and ₹10,000, 8percent get between ₹10,000 and ₹15,000, and only 2percent take home above ₹15,000. Finally, the health status of the women respondents shows that 5percent have chronic health conditions, while 95percent do not experience any chronic health issues.

To determine whether women who benefit from monetary assistance from their spouses vary from the ones who do not in terms of unpaid work, emotional distress, and physical health decline, the 'Mann-Whitney U test' is employed.

H1a: Spousal financial support has an effect on UPW, ED and P

Table 1: Differences In Upw, Ed And P on The Basis of Spouse Financial Support

Comparison group	Items	U value	P value
Women receive spouse financial support Vs	UNP	7730.500	0.913
	ED	7511.500	0.591
Women without spouse financial support	P	7523.000	0.606

Table 1 findings disclose that the two groups' variations regarding these variables are not statistically relevant. The p-value for 'Unpaid work' (UPW) is 0.913, and the 'Mann-Whitney U' value is 7730.500. This value designates that there is an insignificant connection between spousal financial support and unpaid work contributions, displaying that the volume of unpaid work is unchanged for women independent of spouse financial support. The p-value for emotional distress (ED) is 0.591, and the 'Mann-Whitney U' value is 7511.500. This points out whether or not women benefit from monetary aid from their spouses, the impact on their mental suffering is the same. Both groups seem to have analogous degrees of emotional anguish. The p-value for physical health decline (P) is 0.606, and the 'Mann-Whitney U' value is 7523.000. Adding to the point, this suggests that there is no discernible difference in the two groups' decline in physical health.

To find out if the type of paid labor has substantial consequences on 'Unpaid work' (UPW), 'Emotional distress' (ED), and 'Physical health deterioration' (P), the 'Kruskal-Wallis test' was selected.

Table 2: Differences In Upw, Ed And P On The Basis Of Categories Of Paid Employment

Comparison group	Items	X ²	df	P value
CATEGORIES OF PAID EMPLOYMENT	UNP	5.595	4	0.232
	ED	5.285	4	0.259
	P	4.515	4	0.341

H2a: The burden of UPW, ED and P differs based on the category of employment.

With four degrees of freedom and a value for p of 0.232 in Table 2, the chi-square value for unpaid labor was 5.595. The p-value designates that the differences in UPW between different forms of paid labor are insignificant because it is higher than the significance level of 0.05. The test additionally produced a chi-square value of 5.285 with 4 degrees of freedom and a p-value of 0.259 for ED, hinting that the participants' degree of emotional discomfort is neutral to the type of paid labor. Also, the results disclose that respondents' degree of P is neutral to the kind of paid employment (p value=0.341>0.05, $\chi^2 = 4.515$).

To figure out if marital status (M_S) has a significant impact on 'Unpaid work' (UPW), the 'Mann-Whitney U' test was engaged.

H3a: Differences exist in UPW based on marital status.

Table 3: Differences in Upw on the Basis of Marital Status

Comparison group	Items	U value	Z Value	P value
SINGLE VS MARRIED	UPW	0.000	-14.760	0.000

Table 3 signifies that the amount of unpaid labor performed by women differs as per their marital statuses (Z value = -14.760; Mann-Whitney U value = 0.000) and it is statistically significantly. The negative Z value (-14.760) designates that married women are engaged in a lot more UPW than single people. Thereby, H3a is accepted (p-value =0.000<0.05) and it is to be pointed out that UPW differs with marital status of women.

The study deployed the ‘Mann-Whitney U’ test to determine if the family size greatly influences ‘Emotional Distress’(ED).

H4a: Emotional distress differs on the basis of family size

Table 4: Differences in Ed the Basis of Family Size

Comparison group	Items	U value	Z value	P value
SMALL VS LARGE FAMILY	ED	0.000	-14.439	0.000

Table 4 (Mann-Whitney U test = 0.000, Z = -14.439, p = 0.000<0.05) confirms that people with varying family sizes have statistically significant variations in the decline of their emotional wellness. The lower test scores and the negative Z value (-14.439) imply that those with smaller families often report higher degrees of ED. Thereby, H4a is accepted (p value =0.000<0.05) and signifies that family size does affect the emotional wellness.

To examine the link between educational qualification and emotional distress (ED), the study utilized ‘Kruskal wallis test’.

H5a: H5a: Emotional distress differs on the basis of the level of educational qualification

Table 5: Differences in Ed on the Basis of Educational Qualification

Comparison group	Items	X ²	df	P value
LEVEL OF EDUCATIONAL QUALIFICATION	ED	191.771	4	0.000

Table 5 indicates that the dependent component, emotional distress is considerably influenced by the grouping parameter, educational qualification (p-value of 0.000<0.05; Chi-Square value of 191.771; df=4), According to this statistically significant finding, various educational qualification levels' and degrees of emotional distress differ substantially. That is, emotional discomfort is significantly influenced by educational attainment, Hence, H5a is accepted

Measurement Model

Together with the corresponding indicators, the measurement model enumerated by the figure 2 details the linkages between three latent variables: “Unpaid Work (UPW)”, “Physical Health Deterioration (P)”, and “Emotional Distress (ED)”. The external loadings for each metric exceed the suggested benchmark of 0.7, indicating substantial reliability and a strong connection flanked by the latent variables and their observed measures.

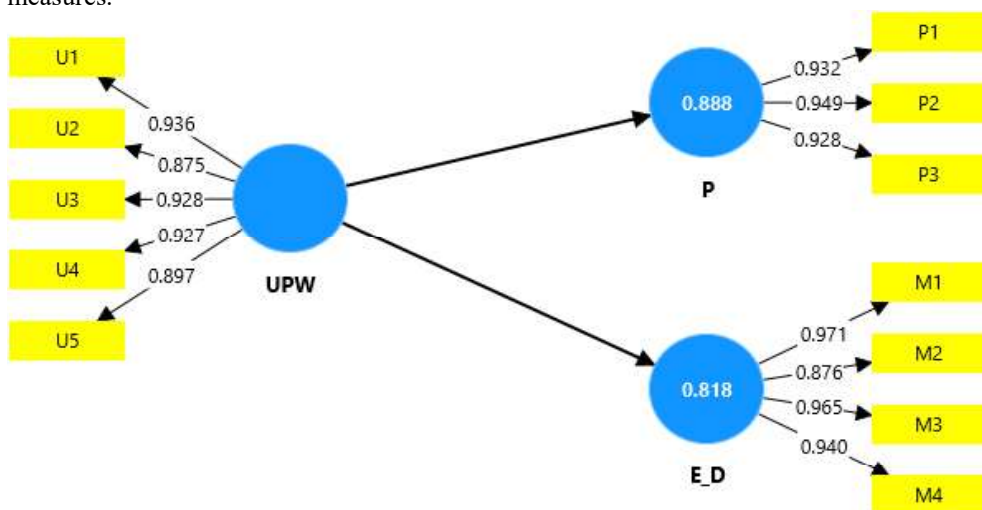


Figure 2: Measurement Model of ‘Unpaid Work induced Emotional and Physical Health’

‘Composite reliability’ (CR), ‘Average Variance Extracted’ (AVE) and ‘Cronbach’s Alpha’(CA) that test the reliability of are in Table 6. The test value benchmark for CR is that the values must be greater than 0.80 (Henseler and Fassolt (2010). The CR for the latent variables is above the benchmark (UPW=0.961; ED=0.967; P=0.955), The CA values are above the benchmark value of 0.70 (UPW=0.950; ED=0.955; P=0.930) in accordance with the guidelines of Hair et al (2011). In like manner, the AVE benchmark (UPW=0.833; ED=0.881; P=0.877) are greater than 0.50 as guided by Bagozzi and Yi (1988).

Table 1: Composite Reliability, Cronbach’s Alpha and AVE

	COMPOSITE RELIABILITY	CRONBACH’S ALPHA	AVERAGE VARIANCE EXPLAINED
ED	0.967	0.955	0.881
P	0.955	0.930	0.877
UPW	0.961	0.950	0.833

Table 7 renders the ‘factor loadings’ for the construct items. It is noticeable from the Table 7, that all the values of the constructs’ factor loadings surpassed the benchmark value of 0.7. Therefore, Convergent validity has been established.

Table 2: Factor Loadings of the constructs

	ED	P	UPW
M1	0.971		
M2	0.876		
M3	0.965		
M4	0.940		
P1		0.932	
P2		0.949	
P3		0.928	
U1			0.936
U2			0.875
U3			0.928
U4			0.927
U5			0.897

Table 8 details the Fornell-Larcker criterion, where in, the constructs fulfill the **Fornell-Larcker criterion** for discriminant validity and it reflects that the **square root of AVE for every construct** surpasses the **correlations** between the constructs.

Table 3: Fornell-Larcker criterion for the constructs

	ED	P	UPW
ED	0.939		
P	0.896	0.936	
UPW	0.904	0.942	0.913

Each construct outlines a significant amount of variance in its indicators, all of which surpass the 0.50 threshold, confirming adequate convergent validity. The crossways values, ED (0.939), P (0.936), and UPW (0.913), symbolize the square root of the AVE for each construct. The correlations amid the constructs are designated by the off-diagonal values, which point towards strong to exceptionally strong relationships: ED and P (0.896), ED and UPW (0.904), and P and UPW (0.942). A construct is deemed to be unique as per the rule of Fornell-Larcker, when the AVE’s square root for every construct is larger than its correlations with any other construct. The constructs in the table 8 demonstrates that all of them accounts for a considerable portion of the variation in their separate indices and are fairly unique from one another.

Structured Model

The ‘Standardized Root Mean Square Residuals’ (SRMR) value, if less than 0.10, is considered acceptable, and if the values are less than 0.08, it denotes an excellent model fit. The study's SRMR value was very close to the conservative benchmark of 0.08, illustrating a strong fit in the model. The SmartPLS output's R² values show how well the model explains the variables that are endogenous. The R² value for P (0.888) featured in fig.3,

signaling an excellent match as the predictive model accounts for 88.8percent of the variation in this construct. The R^2 value for ED (0.818) contained in the figure 3, meaning that the model accounts for 81.8percent of the variation in ED. illustrating an excellent model fit and robust predictive power, these high R^2 values show that the model explains a significant portion of the variation in both P and ED.

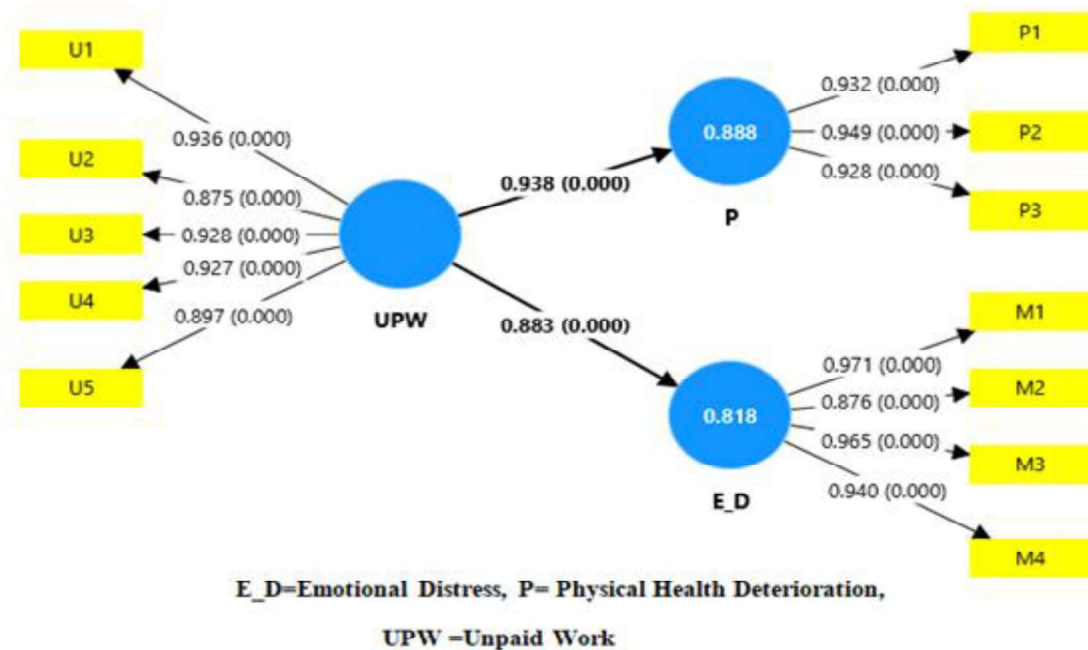


Figure 3: Structured Model of 'Unpaid Work induced Emotional and Physical Health'

In continuation, hypotheses relationships and the outcome were tested, table 9 and figure 3 compiles the tested values, it was confirmed that 'Unpaid Work' had a positive and statistically significant impact on 'Emotional Distress' ($b=0.883$, $t=42.235$, $p=0.000<0.05$), following which, H6a was accepted. More to the point it was unveiled that 'Unpaid Work' had a positive and statistically significant effect on 'Physical Health Deterioration' ($b=0.938$, $t=64.438$, $p=0.000<0.05$), consequently H7a was also accepted.

Table 4: Path Coefficients of UPW, ED and P

Hypotheses	LINK	B	t	p
H6a	Unpaid work → Emotional Distress	0.883	42.235	0.000
H7a	Unpaid work → Physical Health Deterioration	0.938	64.438	0.000

Building on these findings, it is to state that there is pragmatic significance in the links between "Unpaid Work" and the outcomes "Physical Health Deterioration" and "Emotional Distress." The statistically noteworthy p-values and high t-values clarify the strength of these correlations, which means that unpaid labor has a considerable and meaningful effect on people's cognitive and corporal health.

Discussion

The study investigates the connection of unpaid work with emotional distress and physical health deterioration of women working for unorganized sector in North Chennai. This study places the interest that the demands of unpaid work noticeably affect cognitive and general wellbeing. The review accentuates the pressure of unpaid work on emotional distress and physical health deterioration of women. Women typically lumber with unpaid work, which may worsen mental health due to time constraints and multiple responsibilities. Lightening the psychological health risks which was linked with unpaid work should be a main concern. The results highlight that no considerable differences in 'unpaid work', 'emotional distresses, or 'physical health deterioration' between women receiving spousal monetary support and those who do not. This suggests that financial aid alone is insufficient to lessen the burden of unpaid work, emotional distress and physical mental deterioration. Unpaid work, emotional distress and physical mental deterioration are similar irrespective of occupational roles and the challenges related with unpaid labor remain omnipresent and even across employment categories. A significant difference in unpaid work based on marital status and physical health deterioration based on family size was observed, the results uncovered the fact that unpaid work differs as per the marital status of women. Married women are taxed with more unpaid work than single women. Family size also explains the emotional distress of

women, there is a difference observed that there is an increase in the emotional distress as women commits to do unpaid work to her family. These findings emphasize the inevitability for policies that address not only the economic aspects but also the social determinants that aggravate gender disparities in connection with unpaid work. The structural model confirms the deep repercussion of unpaid work on emotional distress and physical health deterioration, with statistically significant beta values. These results corroborate the hypothesis that unpaid labor contributes notably to adverse mental and physical health outcomes. Together, these findings accentuate the urgent need for systemic interventions, such as equitable distribution of domestic errands and better social support mechanisms, to alleviate the multifaceted consequences of unpaid labor on women's well-being.

In accordance with the study's findings, it could be recommended that effective social security programs should guarantee basic healthcare, pecuniary stability, and support throughout the life cycle. By reducing unpaid labor, public services like convincingly priced daycare and enhanced electricity and water infrastructure can let women to participate more fully in the workforce and in public activities. The government must make sure that public are endowed with communal daycare programs, or parents may be required to co-pay. Every family, regardless of financial situation, might have right of entry to these public childcare centers. Affordable elderly care and rationally charged household services can considerably shrink the saddle of unpaid care work. As there is an unequal sharing of household tasks between the genders, it encumbers women's participation in the workforce. It is important to provide generous parental leave for fathers in order to promote a more equitable sharing of domestic responsibilities. These types of policies have medium term effect but can bring positive impacts on the distribution of domestic work among men and women (Kabeer & Waddington, 2021). Financial literacy is crucial, as it bring into line with the bargaining framework according to Kim et al (2017), which put forward that individuals who are more financial informed enjoy greater bargaining power in family decisions and are less likely to involve in unpaid work. It is noteworthy to state that North Chennai women who work for unorganized sector face unique challenges as they live with a blend of urban living and conventional cultural norms. While they live an urban lifestyle, their customs and culture remain conventional. These women are dedicated to both unpaid family work and the work they do for pecuniary support. When devising policies, the government should think about the unique lives of women in North Chennai and widen inclusive policies that concentrate on their specific needs and circumstances. Policies must be customized to address these challenges, providing social support and prospects that allow North Chennai women to thrive both at work and within their families. Women would be assured equal chances and acknowledgement for their economic contributions if unpaid labor were incorporated into national macroeconomic policies and laws. Incorporating inquiries regarding unpaid labor into national surveys, like the Census, is essential. This would guide policy decisions and give a better knowledge of how unpaid labor affects women's mental and physical health..

The study has certain limitations. First, female participants were lacking self-assurance to discuss the issue of unpaid work. Second, many women respondents felt guilty about addressing their responsibilities related to child care. Third, it was challenging to explain the concept of unpaid work to participants. Lastly, the findings may not be generalized, as the study incorporated participants who work in the unorganized sector in North Chennai. Future research could spotlight on longitudinal studies to better comprehend the link connecting unpaid work and women's cognitive and general well-being. A comparative study could also look into the force of unpaid work on women in both the organized and unorganized sectors, exploring its alliance with other related variables. Further research could direct consideration to better understand these relations and the mechanisms that drive them.

Conclusion

Unpaid work significantly has repercussions on women's emotional distress and physical health deterioration, often culminating in stress and limited personal time. This study highlights a clear link between unpaid work of North Chennai Women working under unorganized sector, their emotional distress and physical health deterioration. The results can guide future initiatives aimed at improving these women's status in the community. Elevating societal consciousness and educating the society about the pivotal role of women in the community is essential.. Therefore, it's essential to provide women with societal support frameworks that allow them to apply their expertise and talent in their workforce without jeopardizing family obligations or personal well-being.

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