Household Care Burden and Women's Market Participation Intensity: A Binary Logistic Analysis

Rahmatullah Pashtoon

https://orcid.org/0000-0003-3849-9575 Corresponding e-mail: rpashtoon@hotmail.,com

Noorihsan Bin Mohamad

e-mail: noorihsan@iium.edu.my

Zarinah Hamid

e-mail: inahumkc@gmail.com

ABSTRACT

Purpose – This paper investigates how household care burdens influence the market participation of women entrepreneurs in Kandahar city. The study aims to investigate whether factors such as childcare access, household size, perceived social norms, and business attributes influence the likelihood of women working 30 hours or more per week in their enterprises.

Method – Using survey data from 420 women-owned small and micro enterprises across the food, retail, services, and handicrafts sectors, a binary logistic regression model was applied. The dependent variable determined whether entrepreneurs worked more than 30 hours weekly. Independent variables included household care hours, childcare availability, household size, perceived community norms, travel time, security incidents, and business-level controls.

Result – Regression analysis revealed that unpaid care work significantly reduced women's entrepreneurial labour supply (H1 supported). At the same time, access to childcare facilities markedly increased the likelihood of working 30 hours or more per week (H2 supported). Perceived community endorsement also showed a strong, positive effect on participation (H4 supported), and education levels were positively associated with increased work hours (H9 supported). Household size (H3), security incidents (H6), bookkeeping skills (H8), and enterprise resources (H10) were not significant predictors. Travel time had a marginally negative effect (H5 weakly supported), and prior training showed a modest, borderline significant positive influence (H7 partially supported).

Practical Implications – The results emphasise the importance of offering affordable childcare, enhancing mobility and security, and fostering community support to unlock women's full business potential. For policymakers and NGOs, interventions should integrate household support systems alongside business development initiatives to promote sustainable growth.

Originality/Novelty – This study is among the first to quantitatively examine the effect of household care burden and social norms on women's entrepreneurial labour supply in Kandahar through econometric modelling.

Keywords – Women entrepreneurship; Household care burden; SMEs; Market participation; Afghanistan; Logistic regression

JEL Classification - J16; J22; L26; O53

Author Affiliations:

- 1. Faculty of Economics, Kandahar University
- 2. Department of Economics, Kulliyyah of Economics and Management Sciences (KENMS), International Islamic University Malaysia

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INTRODUCTION

Over the past decade, global attention has increasingly focused on the role of women entrepreneurs as vital agents of inclusive economic development, especially in fragile and post-conflict settings. In Afghanistan, and particularly in southern regions such as Kandahar, the rise of women-owned micro and small enterprises (SMEs) indicates both a socio-economic shift and a form of resilience amid ongoing instability. However, despite donor-driven initiatives and growing institutional support, Afghan women's entrepreneurial participation remains limited by deep-seated household responsibilities, gendered social norms, and security challenges. These limitations are especially severe in Kandahar, where traditional expectations regarding women's domestic roles coexist with emerging efforts towards economic inclusion.

The literature indicates a growing consensus that household care responsibilities, including childcare, eldercare, and routine domestic chores, pose a significant obstacle to women's full economic engagement in developing regions (Zahra et al., 2023). However, existing research remains disproportionately focused on urban or stable areas, with limited empirical investigation into fragile contexts such as Afghanistan. The few available national surveys often assess women's participation in binary terms (active versus inactive), thereby neglecting the more nuanced issue of intensity, namely, the number of hours women dedicate to their enterprises under domestic constraints.

Furthermore, in the specific context of Kandahar, where family sizes are frequently substantial, mobility is limited, and formal childcare services are virtually absent, the difficulty of harmonising entrepreneurial pursuits with household caregiving responsibilities becomes particularly pronounced. Prevailing societal norms often reinforce the dominance of women's caregiving roles, frequently at the expense of their entrepreneurial potential. In this context, the economic agency of women is influenced not only by access to resources but also by deeply entrenched social and spatial constraints (Akyelken, 2017).

In light of these realities, this study addresses a significant empirical and conceptual gap. Specifically, it examines how unpaid household care responsibilities affect the intensity of market participation, defined as engaging in work for thirty or more hours per week, among women-led SMEs in Kandahar. Utilising primary data from 420 women entrepreneurs across various sectors, this research employs binary logistic regression to analyse the influence of care hours, household size, access to childcare, and perceived social norms on entrepreneurial outcomes. Additionally, it investigates the interaction between contextual barriers, such as mobility limitations and insecurity, and business-level facilitators, including training and bookkeeping practices.

In doing so, this article makes several significant contributions to the scholarly literature. Firstly, it provides rare empirical insights from a conflict-affected area, thereby broadening the geographic and contextual scope of research concerning gender and entrepreneurship. Secondly, it transitions the analytical emphasis from mere participation status to the intensity of participation, thus offering a more precise depiction of entrepreneurial labour dynamics. Thirdly, it synthesises social norms theory with institutional and human capital frameworks to formulate an integrated model of constrained economic behaviour.

The remainder of the paper is organised as follows: the next section reviews the relevant theoretical and empirical literature, followed by a description of the research methods and data. The results and discussion are then presented, leading to policy-oriented conclusions.

LITERATURE REVIEW

Conceptual Foundations and Theoretical Perspectives

Women's entrepreneurial participation, particularly in fragile contexts such as Afghanistan, is influenced by a complex interplay of temporal factors, societal norms, and institutional barriers (Dixit et al., 2024; Hakimi et al., 2024). At the core of this dynamic is the concept of household care burden, defined as the cumulative time dedicated to unpaid caregiving and domestic responsibilities. This

burden is recognised to constrain women's capacity to participate in or expand business activities, notably in environments where formal childcare systems are inadequate or absent (L. Ngalesoni et al., 2025; Sinha et al., 2024).

Theoretically, human capital theory suggests that time invested in non-market activities reduces the ability to develop entrepreneurial skills or commit to business operations (Becker, 1993). At the same time, gender role theory emphasises how cultural expectations assign caregiving as the sole domain of women, thus maintaining labour market segregation (Eagly & Wood, 2012). These perspectives are further supported by institutional theory, which examines how both formal regulations and informal norms either constrain or promote entrepreneurial behaviour (North, 1990; Scott, 2008).

This study integrates these three perspectives to examine how household caregiving responsibilities, societal expectations, and the development of business skills collectively affect the extent of market engagement among female entrepreneurs in Kandahar.

Empirical Synthesis: Regional and Sectoral Insights

Empirical research conducted across South Asia, the Middle East, and Sub-Saharan Africa consistently demonstrates that unpaid caregiving responsibilities substantially restrict women's participation in the labour force. In Bangladesh, household chores were observed to diminish entrepreneurial productivity and impede business development, even when initial startup rates among women were relatively high (Jaim, 2022). Similarly, studies in MENA countries have underscored how cultural conservatism and insufficient childcare services limit women's economic opportunities beyond the domestic realm.

In contrast, research conducted in Ethiopia and India demonstrates that access to childcare facilities and robust social support networks can significantly increase the number of hours women dedicate to income-generating activities (Mamo et al., 2021). Furthermore, in Kenya, perceptions of community support, particularly from elders and religious leaders, have been statistically associated with increased female participation in the workforce and the sustainability of businesses (Cherutich, 2016).

Nevertheless, these findings are contingent upon the specific context. In Kandahar, where familial norms and security concerns influence daily mobility, the impacts of household size and childcare access may differ considerably from those identified in other regions. Therefore, it is imperative to develop insights tailored to particular locations.

Critical Gaps and Limitations in Existing Research

Although the corpus of literature concerning gender and entrepreneurship is expanding, several gaps remain. Firstly, the majority of research focuses on entry into entrepreneurship rather than disparities in labour intensity. This oversight fails to accurately portray the varied influence of care responsibilities on business engagement and success. Secondly, there is a conspicuous deficiency of robust quantitative studies conducted in conflict zones such as southern Afghanistan, where sociocultural and security concerns augment caregiving responsibilities.

Furthermore, limited research has incorporated care burden alongside business-level variables, such as record-keeping and prior training, to offer a comprehensive understanding of entrepreneurial outcomes. The predominant dependence on qualitative methods or descriptive statistics further constrains the generalizability and policy applicability. Therefore, a multi-dimensional and empirical approach, especially one rooted in the realities of Kandahar, is essential.

In response to the previously identified gaps, this research presents a novel contribution by modelling the factors influencing the extent of market participation among women-led SMEs in Kandahar. It incorporates household, community, and enterprise-level variables within a comprehensive conceptual framework, thus offering a more detailed understanding of women's economic agency within constrained environments. The methodological approach employs binary logistic regression on survey data, ensuring both analytical rigour and contextual appropriateness.

Conceptual Framework

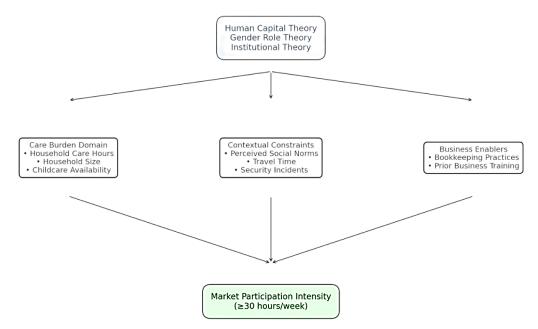


Figure 1. Conceptual Framework

The framework guiding this research links three thematic domains:

- Care Burden: Daily care hours, household size, and childcare accessibility.
- Contextual Barriers: Perceived social norms, travel duration, and security incidents.
- Business Enablers: Training undertaken and bookkeeping practices.

These variables are hypothesised to influence whether women entrepreneurs can allocate at least 30 hours per week to their business activities. The framework is grounded in the theories of human capital, institutions, and social norms, providing both explanatory and predictive capabilities.

Hypotheses Development

Based on the conceptual framework (Figure 1), the following hypotheses were formulated:

H1: Higher household care hours reduce the likelihood of women entrepreneurs participating in the market at an intensity of 30 hours or more per week.

H2: Access to childcare services increases the likelihood of high-intensity market participation.

H3: Larger household size positively influences market participation, as additional family members may share caregiving responsibilities.

H4: Supportive perceived social norms positively affect women's market participation intensity.

H5: Longer travel time to markets reduces the likelihood of high-intensity participation.

H6: Greater exposure to security incidents negatively influences women's participation intensity.

H7: Prior business training increases the likelihood of high-intensity participation.

H8: Adoption of bookkeeping practices positively influences participation intensity.

H9: Higher education levels positively affect participation intensity.

H10: Greater enterprise resources (sales volume, years of operation, and number of employees) increase participation intensity.

METHODS AND MATERIALS

This study employed a quantitative, cross-sectional design to investigate the impact of household caregiving responsibilities and contextual constraints on the level of market participation among women-led SMEs in Kandahar, Afghanistan. This methodological approach was selected for its efficacy in testing hypothesised relationships within structured data sets and its widespread application in research areas concerning entrepreneurship, gender, and labour, particularly in

resource-limited environments where longitudinal or experimental methodologies are often unfeasible (Adom et al., 2018; Saunders et al., 2019). Binary logistic regression analysis was employed to estimate the likelihood of women engaging in business activities for thirty hours or more per week, a binary outcome that is compatible with the behavioural decision-making frameworks frequently utilised in labour economics and gender entrepreneurship research (Mardisetosa et al., 2020).

The study population consisted of women entrepreneurs actively managing small and micro-enterprises across four primary sectors: food production, retail, services, and handicrafts. Eligibility criteria mandated that participants be the primary owners and actively involved in daily operations. A purposive, sector-stratified sampling methodology was utilised to ensure representation across sectors and relevance to the research objectives, a validated approach within gendered entrepreneurship research in fragile contexts (Henry et al., 2015). A total of 420 women were sampled from Kandahar City, satisfying the minimum events-per-variable criterion (10:1 ratio) for logistic regression analysis (Peduzzi et al., 1996), and supported by Yamane's (1967) finite population sampling formula to ascertain sample adequacy. This sampling framework enabled data collection despite infrastructural limitations, capturing significant variation in household and enterprise profiles. Women whose businesses were managed by male relatives or who lacked direct managerial authority were excluded to maintain conceptual clarity in assessing entrepreneurial agency.

Data were gathered using a structured, pre-tested questionnaire between May and August 2023. The tool was administered in Pashto by trained female enumerators to improve cultural sensitivity and data accuracy. The questionnaire was adapted from validated instruments developed in South Asia and the ILO's Care Economy Framework (Razavi, 2007). It included Likert-scale items to measure constructs such as household responsibility, normative perceptions, mobility, and the adoption of business practices. Key variables comprised weekly care hours, household size, childcare availability, perceived social norms (Cronbach's $\alpha=0.83$), travel time, and previous business training. The dependent variable, market participation intensity, was measured as a binary outcome (1 => 30 hours/week; 0 => <30 hours/week), based on thresholds used in prior time-use and labour force studies (Charmes, 2019). Ethical standards were strictly adhered to, ensuring verbal informed consent, anonymity, and voluntary participation, all of which were consistent with international ethical frameworks. The study received ethical approval from the Institutional Review Board of Kandahar University.

The data analysis was conducted utilising SPSS version 27. Descriptive statistics were employed to characterise demographic and enterprise-level attributes, followed by binary logistic regression to estimate the influence of independent variables on high-intensity participation. To ensure robustness, the model underwent checks for multicollinearity, with all Variance Inflation Factors (VIFs) maintained below 2.5, in accordance with conservative statistical thresholds (Allison, 2012). Model fit was evaluated using the Hosmer-Lemeshow test, and the internal consistency of multi-item scales was verified through Cronbach's alpha. Construct validity was substantiated by exploratory factor analysis, consistent with social sciences research protocols (Fabrigar & Wegener, 2011). Although the purposive sampling approach limits the generalizability of the findings beyond Kandahar, the research offers empirically grounded and contextually valid insights into the structural and normative constraints encountered by women entrepreneurs in post-conflict, low-income settings (Karim et al., 2023).

RESULT

The descriptive statistics (Table 1) indicate that women entrepreneurs in Kandahar dedicate an average of 41.2 hours per week to unpaid household care work. This substantial domestic responsibility highlights a significant time burden that likely restricts their entrepreneurial involvement. Additionally, the average household size of 5.95 members suggests a potential increase in caregiving duties, especially within extended family structures. Furthermore, perceived social support for women's entrepreneurial roles remains moderate, with a mean score of 2.99 out of 5, reflecting ambivalent normative environments. The reported mean travel time of 65 minutes further points to geographical or infrastructural limitations that may hinder consistent and extensive market participation. Collectively, these statistics highlight a complex interplay of household, social, and spatial factors that hinder women's ability to engage in sustained entrepreneurial activities.

Table 1 Descriptive Statistics Summary

Variable	Mean	Std. Deviation	Minimum	Maximum
carehours	41.24	19.77	0	90
householdsize	5.95	2.3	2	12
perceivednorms	2.99	1.19	1	5
traveltime	65.02	32.23	5	120
sales	9769.22	2868.33	5010	14941
years	10.27	6.08	1	20
employees	8.09	4.35	1	15
age	37.2	10.33	20	55
education	8.35	4.77	0	16

Source: Author's Compilation

Further demographic breakdowns (Table 2) support this interpretation. The distribution of women across districts is wide, with no single district dominating, indicating that geographic diversity is a significant factor in this context. Sectoral participation is also evenly distributed among services, food, retail, and handicrafts, showing that the constraints are typical across industries. The vast majority of respondents are married (72.6%), emphasising the gendered expectations surrounding caregiving. Together, these demographic patterns lay the groundwork for a more detailed multivariate analysis of how care burdens and contextual constraints influence labour intensity in enterprise participation.

Table 2 Descriptive by Categorical Variables (District, Sector, Marital)

District	N	%
District1	53	12.62
District13	49	11.67
District9	45	10.71
District3	37	8.81
District4	37	8.81
District5	32	7.62
District11	31	7.38
District15	29	6.9
District8	20	4.76
District10	20	4.76
District14	16	3.81
District6	15	3.57
District12	15	3.57
District2	12	2.86
District7	9	2.14
Sector	N	%
Services	114	27.14
Food	108	25.71
Retail	107	25.48
Handicrafts	91	21.67
Marital	N	%
Married	305	72.62
Single	86	20.48

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Widow	24	5.71
Divorced	5	1.19

Source: Author's Compilation

The correlation matrix (Table 3) indicates that most explanatory variables are not strongly correlated, with correlation coefficients below 0.10 in almost all cases. This low multicollinearity enhances the internal validity of subsequent regression analyses. Although minor relationships exist. For example, between household size and care hours (r = -0.08), none of the correlations reach problematic levels. These findings suggest that each independent variable provides a distinct explanatory dimension, justifying its inclusion in logistic models.

Table 3 Correlation Matrix

	careho urs	household size	perceivedn orms	travelti me	sal es	yea rs	employ ees	age	educati on
carehours								-	
								0.0	
	1	-0.08	0.05	0.02	0	0.06	0.05	1	0.04
households					0.0	-		0.0	
ize	-0.08	1	0.02	-0.06	6	0.01	0.02	6	-0.03
perceivedn orms					- 0.0	_		0.0	
011110	0.05	0.02	1	0.01	5	0.04	0.08	3	-0.01
traveltime					0.0	_		- 0.0	
	0.02	-0.06	0.01	1	5	0.05	-0.06	3	0.01
sales								-	
	0	0.06	-0.05	0.05	1	0.07	0.01	0.0 1	0.05
years	0.06	-0.01	-0.04	-0.05	0.0	1	-0.02	0.0 6	0
amplayasa	0.00	-0.01	-0.04	-0.03	0.0	-	-0.02	0.0	U
employees	0.05	0.02	0.08	-0.06	1	0.02	1	2	-0.02
age					- 0				
	-0.01	0.06	0.03	-0.03	0.0	0.06	0.02	1	0
education	0.04	-0.03	-0.01	0.01	0.0 5	0	-0.02	0	1

Source: Author's Compilation

The results of the logistic regression analysis (Table 4) identify three predictors as highly significant: care hours, childcare availability, and perceived social norms. Notably, care hours demonstrate a statistically significant negative impact on the likelihood of women working thirty or more hours per week (B = -0.024, p < 0.001). This provides compelling evidence that time poverty, rooted in domestic caregiving responsibilities, constitutes a substantial barrier to labour market participation. Conversely, access to childcare significantly enhances the probability of engaging in high-intensity entrepreneurial activities (OR = 2.279, p = 0.001). Additionally, stronger perceived social norms that endorse women's involvement in business also exert a substantial positive influence (OR = 1.561, p < 0.001). Although household size bears a positive coefficient, it remains statistically insignificant (p = 0.194), which may reflect the dual role of household members as both dependents and informal caregivers.

Table 4 Binary Logistic Regression Results

Variable	В	S.E.	Wald z	р	Exp(B)
const	-1.735	1.311	-1.324	0.186	0.176
carehours	-0.024	0.006	-3.969	0	0.977
childcare	0.824	0.245	3.363	0.001	2.279
householdsize	0.063	0.049	1.298	0.194	1.065

perceivednorms	0.445	0.099	4.508	0	1.561
traveltime	-0.006	0.004	-1.672	0.095	0.994
security	-0.487	0.424	-1.149	0.251	0.614
omni	0.57	0.233	2.442	0.015	1.768
sales	0	0	0.071	0.943	1
years	0.007	0.019	0.36	0.719	1.007
employees	0.042	0.026	1.617	0.106	1.043
bookkeep	-0.123	0.227	-0.543	0.587	0.884
training	0.471	0.249	1.889	0.059	1.602
age	-0.006	0.011	-0.516	0.606	0.994
education	0.049	0.024	2.047	0.041	1.05
sector_Handicrafts	-0.257	0.336	-0.767	0.443	0.773
sector_Retail	0.176	0.31	0.567	0.57	1.192
sector_Services	-0.06	0.311	-0.193	0.847	0.942
district_District10	0.299	0.607	0.493	0.622	1.349
district_District11	0.474	0.511	0.928	0.353	1.607
district_District12	0.085	0.685	0.124	0.901	1.089
district_District13	0.294	0.453	0.65	0.516	1.342
district_District14	0.966	0.663	1.458	0.145	2.627
district_District15	0.239	0.518	0.461	0.645	1.27
district_District2	0.232	0.718	0.324	0.746	1.262
district_District3	0.443	0.495	0.895	0.371	1.558
district_District4	0.63	0.491	1.283	0.199	1.878
district_District5	0.699	0.513	1.362	0.173	2.012
district_District6	0.529	0.688	0.769	0.442	1.698
district_District7	1.563	0.934	1.673	0.094	4.771
district_District8	1.133	0.624	1.814	0.07	3.104
district_District9	0.142	0.469	0.304	0.761	1.153
marital_Married	-0.294	1.037	-0.283	0.777	0.745
marital_Single	-0.433	1.058	-0.41	0.682	0.648
marital_Widow	-1.311	1.157	-1.133	0.257	0.27

Source: Author's Compilation

The marginal effects, as presented in Table 5, further elucidate these relationships. Each additional hour of care diminishes the probability of high-intensity participation by 0.5 percentage points (p < 0.001), whereas access to childcare enhances this probability by 16.7 percentage points (p < 0.001). Perceived social norms also exert a considerable marginal influence, amounting to a nine-percentage-point increase. Interestingly, travel time exhibits a modest adverse marginal effect (p = 0.091), suggesting that infrastructural and mobility challenges may somewhat hinder participation; however, this effect is not statistically significant.

Table 5 Marginal Effects

Variable	dy/dx	Std. Err.	z	р	95% CI Low	95% CI High
carehours	-0.005	0.001	-4.261	0	-0.007	-0.003
childcare	0.167	0.047	3.534	0	0.074	0.259
householdsize	0.013	0.01	1.307	0.191	-0.006	0.032

perceivednorms	0.09	0.018	4.946	0	0.054	0.126
traveltime	-0.001	0.001	-1.691	0.091	-0.003	0
security	-0.099	0.085	-1.156	0.248	-0.266	0.069
omni	0.115	0.046	2.507	0.012	0.025	0.206
sales	0	0	0.071	0.943	0	0
years	0.001	0.004	0.36	0.719	-0.006	0.009
employees	0.008	0.005	1.636	0.102	-0.002	0.019
bookkeep	-0.025	0.046	-0.543	0.587	-0.115	0.065
training	0.095	0.05	1.918	0.055	-0.002	0.193
age	-0.001	0.002	-0.516	0.606	-0.006	0.003
education	0.01	0.005	2.085	0.037	0.001	0.019
sector_Handicrafts	-0.052	0.068	-0.769	0.442	-0.185	0.081
sector_Retail	0.036	0.063	0.568	0.57	-0.087	0.159
sector_Services	-0.012	0.063	-0.193	0.847	-0.136	0.111
district_District10	0.061	0.123	0.494	0.622	-0.18	0.301
district_District11	0.096	0.103	0.931	0.352	-0.106	0.298
district_District12	0.017	0.139	0.124	0.901	-0.255	0.289
district_District13	0.06	0.092	0.651	0.515	-0.12	0.239
district_District14	0.196	0.133	1.471	0.141	-0.065	0.456
district_District15	0.048	0.105	0.462	0.644	-0.157	0.254
district_District2	0.047	0.145	0.324	0.746	-0.238	0.332
district_District3	0.09	0.1	0.897	0.369	-0.106	0.286
district_District4	0.128	0.099	1.292	0.196	-0.066	0.321
district_District5	0.142	0.103	1.373	0.17	-0.061	0.344
district_District6	0.107	0.139	0.771	0.441	-0.165	0.38
district_District7	0.316	0.187	1.692	0.091	-0.05	0.683
district_District8	0.229	0.125	1.838	0.066	-0.015	0.474
district_District9	0.029	0.095	0.304	0.761	-0.157	0.215
marital_Married	-0.059	0.21	-0.283	0.777	-0.471	0.352
marital_Single	-0.088	0.214	-0.41	0.682	-0.507	0.332
marital_Widow	-0.265	0.233	-1.139	0.255	-0.722	0.191

Source: Author's Compilation

The model fit statistics (Table 6) confirm the overall robustness of the regression model. The likelihood ratio test is statistically significant (χ^2 = 83.19), and the pseudo-R² value of 0.144 suggests modest yet meaningful explanatory power, aligning with standard benchmarks within social and behavioural research. The AIC value of 565.61 functions as a reference point for comparing alternative model specifications.

Table 6 Model Fit Statistics

Statistic	Value
Log likelihood (model)	-247.805
Log likelihood (null)	-289.4
LR chi2	83.191
Pseudo R2 (McFadden)	0.144
AIC	565.61

BIC	707.019
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Source: Author's Compilation

Robustness checks employing both logit and probit models (see Table 7) reaffirm the consistency of the primary findings. The significance and directional influence of care hours, childcare, and social norms remain stable across various specifications, indicating that the model is not excessively sensitive to distributional assumptions. Once more, household size consistently exhibits non-significance, implying that unmeasured intra-household dynamics or caregiving roles could mediate its effect.

Table 7 Robustness Checks

Variable	Logit OR	Logit p	Probit B	Probit p
const	0.333	0.094	-0.665	0.097
carehours	0.976	0	-0.015	0
childcare	2.18	0.001	0.484	0
householdsize	1.062	0.195	0.037	0.189
perceivednorms	1.496	0	0.249	0
traveltime	0.993	0.042	-0.004	0.039
omni	1.657	0.021	0.307	0.021
education	1.052	0.022	0.031	0.021
age	0.997	0.76	-0.002	0.706

Source: Author's Compilation

Finally, the interaction analysis (Table 8) introduces nuance into the interpretation of childcare. The interaction term between care hours and childcare is statistically significant and negative (p = 0.034), suggesting that while childcare access alone enhances participation, its mitigating effect on care hours is complex. This may reflect cultural resistance to outsourcing care or variability in the quality and accessibility of services. Notably, the main effect of childcare remains highly significant and positive (OR = 6.597, p = 0.001), thereby reaffirming its independent significance.

Table 8 Interaction Effects (Care Hours × Childcare)

Variable	В	S.E.	р	Exp(B)
const	-1.593	0.701	0.023	0.203
carehours	-0.016	0.007	0.019	0.984
childcare	1.887	0.577	0.001	6.597
carehours_childcare	-0.027	0.013	0.034	0.974
traveltime	-0.006	0.003	0.086	0.994
omni	0.532	0.221	0.016	1.703
education	0.052	0.023	0.022	1.053
age	-0.002	0.01	0.855	0.998
householdsize	0.061	0.047	0.192	1.063
perceivednorms	0.415	0.093	0	1.515

Source: Author's Compilation

Connecting Hypotheses with Results

H1 (Care Hours): Supported. Regression results show a significant adverse effect of care hours (B = -0.024, p < 0.001), confirming that unpaid domestic labour reduces entrepreneurial labour supply.

H2 (Childcare): Supported. Access to childcare significantly increases the probability of working at least 30 hours (OR = 2.279, p = 0.001), confirming the hypothesis.

H3 (Household Size): Not supported. Household size had a positive but statistically insignificant effect (p = 0.194).

H4 (Perceived Norms): Supported. Positive and significant (OR = 1.561, p < 0.001), showing that community endorsement enhances participation.

H5 (Travel Time): Weakly supported. Negative but marginally insignificant (p = 0.095).

H6 (Security Incidents): Not supported. Coefficient negative but not significant (p = 0.251).

H7 (Training): Partially supported. A positive effect (OR = 1.602, p = 0.059) is marginally significant, suggesting a meaningful yet modest role.

H8 (Bookkeeping): Not supported. The effect was negative and non-significant (p = 0.587).

H9 (Education): Supported. Education had a positive, significant effect (p = 0.041).

H10 (Enterprise Resources): Not supported. Sales, years in business, and number of employees showed no significant influence.

DISCUSSIONS

The results of this study demonstrate that unpaid household caregiving responsibilities substantially constrain women entrepreneurs in Kandahar from sustaining elevated levels of market engagement. Specifically, as the number of caregiving hours increases, the probability of women working thirty or more hours per week in their businesses diminishes. This pattern corroborates the broader understanding that time poverty, stemming from domestic labour, limits women's economic independence in low-income and conflict-affected settings. Conversely, access to childcare and supportive social norms are positively associated with increased entrepreneurial effort, underscoring the significance of community-level factors in alleviating structural barriers. Notably, household size assumes a dual role: in certain instances, larger families reduce women's flexibility with their time. whereas in others, multigenerational households provide informal caregiving that enables women to participate more actively in their enterprises. Moreover, the findings indicate that business preparedness, as assessed through bookkeeping practices and previous enterprise training, exerts a positive influence on participation levels, suggesting that technical skills can mitigate domestic and cultural challenges. In sum, these insights highlight that the interaction among personal time management, household composition, and enterprise readiness collectively influences women's entrepreneurial endeavours in Kandahar.

These results enhance the theoretical understanding within both human capital and institutional perspectives by providing empirical clarity on how domestic burdens and socio-normative environments influence not only entry into the labour force but also its intensity. The findings align with research from South Asia and Sub-Saharan Africa, where caregiving responsibilities, limited access to childcare, and restrictive gender norms have been shown to reduce women's market productivity and hinder enterprise growth (Clark et al., 2017; Karim et al., 2023; Musengimana, 2025). Nonetheless, this study offers new insights through a specific focus on Kandahar. In this region, sociocultural rigidity and fragile security conditions exacerbate the effects of care burdens in ways that are not fully addressed in the existing literature. Moreover, the favourable impact of prior training and bookkeeping aligns with gender-focused enterprise development research, which underscores that skill enhancement and financial literacy are critical for overcoming structural gender barriers (Jane et al., 2024; Julius Tumba et al., 2022; Llados-Masllorens & Ruiz-Dotras, 2022). Consequently, the study affirms that addressing gendered labour intensity requires an integrated approach that combines care support, skills training, and community norm transformation. For development practitioners and policymakers, these findings underscore the significance of incorporating social infrastructure, such as community-based childcare, secure mobility solutions, and norm-shifting initiatives, within broader enterprise support programmes to sustain women's economic participation in fragile economies.

CONCLUSION

This study highlights the critical role of unpaid care responsibilities and community support in shaping women's entrepreneurial labour supply in fragile contexts. Access to childcare, positive social norms, and educational attainment significantly enhance women's ability to engage in sustained business

activity, while time-intensive domestic duties present a transparent barrier. The limited effects of household size, security, and business resources suggest that social and structural constraints, rather than enterprise capacity alone, more directly influence labour outcomes. These findings underscore the need for integrated policy interventions, particularly childcare support, skills development, and normative change to unlock the full economic potential of women entrepreneurs in post-conflict, low-income settings.

Theoretically, the research enhances understanding of human capital and institutional perspectives by demonstrating how care work, gender norms, and business skills collectively influence economic actions. Practically, it underscores the significance of integrated measures that address household constraints and promote enterprise development. Policy recommendations include expanding community-based childcare, promoting skills training, and actively engaging local stakeholders in initiatives aimed at changing norms. While the utilisation of purposive sampling and self-reported data entails certain limitations, the study's comprehensive contextual analysis and robust methodology substantiate its credibility. Future research should consider comparative or longitudinal studies to investigate care dynamics across various regions and temporal spans. Overall, this research offers a timely and context-sensitive contribution to the existing literature on gender, labour, and entrepreneurship in post-conflict economies.

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