

# Family Context And Women Entrepreneurial Participation In North West Nigeria

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## ABSTRACT

The study is a sectorial assessment of the influence of family context on women entrepreneurial participation in Sokoto and Kebbi state. From the five sectors wholesale & retail, agriculture, education, manufacturing & processing and hospitality sector, a sample of 500 women entrepreneur were purposively selected and the multinomial logistic regression was utilized to test the study hypothesis. Findings indicate varying degrees of influence of family context in predicting women entrepreneurial participation in the five sectors. Interestingly family context variables: family member support, care for children and dedicating time to household work have significant influence on women entrepreneurial participation in wholesale and retail sector. Family responsibility has positive significant influence on women entrepreneurial participation in education sector. Care for children was found to have negative influence in the wholesale and retail and hospitality sectors. Family influence on business decision do not have influence in all the sectors examined and none of the family context variables have influence on women entrepreneurial participation in the manufacturing and processing sector. Therefore, to promote entrepreneurial participation among women, women entrepreneurs should utilize their family members for the benefit of their enterprise.

**Keywords:** women entrepreneurial participation, family context, Sokoto and Kebbi state

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## 1.0 INTRODUCTION

There are various studies on the influence of socio-cultural factors on women entrepreneurial participation. However, studies already conducted have attempted to justify how these factors shape and direct the behaviour of the relationship. Although some studies have established the relationship between women entrepreneurship participation and socio-cultural factors, very few have shown in particular how these socio-cultural factors affect women entrepreneurship participation in various industrial sectors. For example, in a study by Rosa and Dawson (2006) and William (2004) on the influence of family context and entrepreneurship participation, it was evident that the time and energy women spent on raising children reduced the duration of the entrepreneurial venture. However, while the researches focused on the developed countries, they were unable to establish the linkage between family context and entrepreneurship participation in developing countries. Therefore, the findings cannot be generalized to the developing countries. According to (GEM 2012; World Bank 2011), Although women account for 48% of all entrepreneurial

activity globally, there are huge entrepreneurial gender gaps and inherent socio-cultural barriers among different sectors, countries and regions which have not been addressed, particularly at the local level. The realities in Nigeria and Northern Nigeria in particular have not been captured to reflect specific dimensions of socio-cultural barriers and sectoral peculiarities inherent to women entrepreneurs. According to the National Bureau of Statistics (2016), women entrepreneurs in Nigeria are mostly engaged in micro enterprises, and accounted for 43.32% in the ownership structure of micro enterprises compare to 22.75% in small and medium enterprises.

In fact, in the report of a collaborative survey conducted by SMEDAN and NBS (2016), it was reported that in the entire northwestern geopolitical zone, North-western Nigeria had the lowest numbers of micro-enterprises, with Kano State having the highest number in the zone. Of a total of 36,994,587 micro-enterprises in Nigeria, Kebbi State had the lowest number of micro-enterprises of 692,104 in the northwest geopolitical zone, which accounted for nearly 1.87% of Nigeria's total. This was followed by Sokoto State with 700,106, representing 1.89%. Kano State however had the highest number of micro-enterprises in the northwest geopolitical zone (1,794,358), representing 4.85% of Nigeria's total. Kaduna State had 1,635,453 (4.42%) and Zamfara State had 722,360 (1.95%). Other States in the northwest geopolitical zone are Katsina State with 1,216,604 (3.29%) and Jigawa State with 820,001 (2.22%). Similarly, North-western Nigeria were reported to have the least numbers of females employed by the micro small and medium enterprises (MSME) sector. In Sokoto State, the number of females employed by the MSME was 0.14% of Nigeria's total while in Kebbi State it was 0.27% of Nigeria's total. This study attempts to determine which socio-cultural factors account for these insignificant numbers for North-western Nigeria in the northwest geopolitical zone.

To achieve this, this article is structured into five sections. Section one is the brief introduction, followed by the literature review and hypotheses development in section two, in section three the methodology utilized is presented. Section four discusses the results and in section five the recommendations and conclusions are drawn.

## **ii. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

Although family has been recognized as an important factor for entrepreneurship, this study observes that there is not so much quantitative literature on the relationship between family context and women entrepreneurship. In a society where the primary and most fundamental duty of the woman is strongly tied to family responsibilities, it becomes difficult for women to venture into entrepreneurial activity especially considering the fact that most entrepreneurs get to work hard day and night and also travel extensively. Most entrepreneurs have families that highly influence their business activities, however, limited attention has been paid to how the family, as a specific social institution, impacts entrepreneurial outcomes (Jennings, Breitkreuz, & James, 2014; Aldrich & Cliff, 2003). The family constitutes one of the most common entrepreneurial teams (Ruef, 2010) and scholars have argued that significant entrepreneurial potential can be found within the family (Nordqvist & Melin, 2010). Brush et al. (2009) and Brush & Manolova (2004) explicitly examined the family context as a foundation for resources and social support for new ventures created by women.

With respect to the family context, Noguera's (2012) results indicate that dedicating one's time to housework decreases the probability of being an entrepreneur, an effect that is especially important in the case of women. The odds ratios in her empirical analysis demonstrate that being a woman and having family responsibilities reduces the probability of being an entrepreneur by 33.1%, while in the case of men the reduction is only 2.4%, comparatively.

Bird (2014) however found in her empirical studies that some family constellations, such as siblings' involvement, have a negative impact on firm growth, whereas spousal couple involvement has a positive impact. However, ownership dispersal moderates the relationship between the different types of family involvement and firm growth. What is noteworthy is that this does not mean that the growth rate is negative but rather that businesses with these family constellations grow at slower rates than other forms of family businesses Bird's (2014). She also found that entrepreneurial growth is affected by different types of relationships and ties within the family firm, implying different levels of cohesion. Bird's (2014) methodology employed the fixed effects panel models to estimate different family relationships on firm growth (i.e., the dependent variable) and the multinomial logit model as well as the count data analysis of the negative binomial type. It is observed, however, that the study does not reflect gender peculiarities.

Rosa and Dawson (2006) and Williams (2004) deduce that the time and energy women spend on raising children reduce the duration of the entrepreneurial venture. It means that family also has a way of inhibiting women entrepreneurship activities since a substantial amount of time and resources is invested in maintaining the home front. Hence there is need for policy makers to consider childcare policies in line with entrepreneurial policies in areas where conflicts exist between work and home life.

Additionally, Eddleston and Powell (2012) suggest that women entrepreneurs tend to nurture satisfaction with work – family balance by creating work family synergies, while the male entrepreneurs tend to nurture satisfaction with work – family balance by obtaining family support at home. Also, Baughn *et al.* (2006) and Langowitz and Minniti (2007) observe in their studies that in societies where a woman plays traditional role within the family, the chance of women entrepreneurship is minimal.

Similarly, Brush *et al.* (2009) proposes a new gender-aware framework to increase the chances of women entrepreneurship, among which include motherhood which represents the family context of women entrepreneurs; this has much influence on women than on men.

Singh *et al.* (2011); Narayanasamy *et al.* (2011); Greve and Salaff (2003) and Jennings and McDougald (2007) found in their analyses that family support is very important to the probability of starting up a business, with respect to orientation and recognition in developing countries. Therefore, we hypothesize that;

H<sub>0</sub>: family context does not significantly influence women entrepreneurial participation.

### iii. METHODOLOGY

This study is a cross sectional descriptive survey research designed to evaluate the influence of family context factors on women entrepreneurial participation in five sectors (wholesale and retail, agriculture, education, manufacturing & processing, and hospitality sectors in Sokoto and Kebbi state of Nigeria. A total of four thousand four hundred and three (4403) registered women-owned enterprises in five activity sectors, namely, wholesale & retail, agriculture, education, manufacturing & processing and hospitality sector constitute the population of the study (SMEDAN). Of this number 2,616 operates in the wholesale and retail sector, while 1,297 operate in the agriculture sector. The hospitality sector has a total of 705 women-owned enterprises. While the manufacturing/processing sector has a total of 610 women-owned enterprises. The education sector is the lowest with a total of 344 registered women owned school in Sokoto and Kebbi State, (SMEDAN).

A total sample size of 500 was drawn from the population size of 4403. The sample size of 500 was determined using the Krejcie and Morgan (1970) sampling approach for calculating sample size for a finite (known) population. A 99% confidence level (with a Z-value of 2.576) and a 5% margin of error was assumed for the computation of the sample size. The choice of confidence level, population proportion and degree of accuracy was informed by the researcher's observed realities on the field while collecting the data and in line with previous research. The Krejcie and Morgan's (1970) method of calculating sample size for a finite (known) population was used to determine the total sample size for the study. Therefore, to arrive at the most representative sample of firms and elements to be approached with the research instrument, stratified. Proportionate and purposive sampling procedure was adopted. This is justified by considering the heterogeneity of the population. Stratified random sampling technique was used to draw representative sample of firms from each of the five sectors and across all LGAs in Sokoto and kebbi state.

A multinomial logistic regression was conducted to investigate whether family context (independent variable) predict women entrepreneurial participation (dependent variable). In five categorical levels. The overall model significance for the multinomial logistic regression was examined by the collective effects of the independent variable. Presented with a chi square( $X^2$ ) coefficient. The Nagelkerke  $R^2$  and Cox and snell statistics were used to assess the variability accounted for on the dependent variable by the independent predictor variable. Individual predictors were assessed by the Wald coefficient. predicted probability of an event occurring were determined by the Exp ( $\beta$ ). for significant predictor, an Exp ( $\beta$ ) greater than one indicates that given a one-unit increase in the independent variable, the dependent variable will be X times more likely to be coded 1 or fall into the comparison category. Significant predictors with an Exp ( $\beta$ ) less than one will be evaluated by  $1/ \text{Exp} (\beta)$ , meaning that a one-unit increase in the independent variable will be X times more likely to be code 0 or fall into the reference category. A total of five multinomial logistic regression models were designed however, only 4 models (i.e K-1). Were estimated, using the agriculture sector as reference category, to determine the extent to which family context influence women entrepreneurial participation in the five sectors, the following models are drawn:

$$\ln Pr (WR/Ref. Agric) = a_0 + \beta_1 HIBD + \beta_2 SFM + \beta_3 DMTH + \beta_4 CFRB + \beta_5 STC + e \quad (1)$$

$$\ln Pr (Edu/Ref. Agric) = a_0 + \beta_1 HIBD + \beta_2 SFM + \beta_3 DMTH + \beta_4 CFRB + \beta_5 STC + e \quad (2)$$

$$\ln Pr (Hs/Ref. Agric) = a_0 + \beta_1 HIBD + \beta_2 SFM + \beta_3 DMTH + \beta_4 CFRB + \beta_5 STC + e \quad (3)$$

$$\ln Pr (Mp/Ref. Agric) = a_0 + \beta_1 HIBD + \beta_2 SFM + \beta_3 DMTH + \beta_4 CFRB + \beta_5 STC + e \quad (4)$$

$$\ln Pr (Agric/Ref. Agric) = a_0 + \beta_1 HIBD + \beta_2 SFM + \beta_3 DMTH + \beta_4 CFRB + \beta_5 STC + e \quad (5)$$

**Where:**

*WR; EDU; HB; MP; AGRIC; The Five Sectors/Dependent Variable.*

*HIBD = Whether Family Highly Influence Business Decision.*

*SFM = Get Support from Family Members.*

*DMTH = Dedicate More Time to Household Work Than My Business.*

*CFRB = Combine Family Responsibility.*

*STC = Spend More Time Caring for The Children Than My Enterprise.*

*B<sub>i</sub> (i=1,2,3,4,5) = Coefficient of Independent Variables.*

*e = Error Term.*

*Ln Pr = Probability of Dependent Variable*

The above equations explain the extent to which family context motivate women to participate in entrepreneurial activities in the five different sectors.

**Measurement of Variables**

There are two types of variables in this work, the dependent and independent variables and were measured as follows;

**Dependent Variable**

**Women Entrepreneurial Participation**

The dependent variable is women entrepreneurial participation (WEP) in five different sectors, namely wholesale and retail, agriculture, education, manufacturing & processing, hospitality sectors. Following the Global Entrepreneurship Monitor (GEM) (2010) project, women entrepreneurial participation in the different sectors was measured by the number of women-owned enterprises in the various sectors in Sokoto and Kebbi States of North-western Nigeria.

**Independent Variables**

**Family Context (FC)**

Family context is conceived as a primary social group of people related by blood, marriage, law or custom. Family context was measured using a five-point Likert scale of 1-5. family context was measured based on the following variables, viz whether family highly influence business decision, whether individual get support from family members, if women dedicate more time to household work than business, combine family responsibility, spend more time caring for the children than my enterprise.

**iv. RESULTS AND DISCUSSION**

**Overall Model Significance**

The overall model was tested and found to be significant with a chi square value,  $\chi^2 (20) = 48.437, p=0.039 < 0.05$ . This suggests that, family contexts variables, HIBD, SFM, DMTH, CFRB, and STC have been found to have a combined significant effect on the odds of observing women entrepreneurship in the five sectoral categories of wholesale & retail, agriculture, education, manufacturing/processing, as well as hospitality sectors

**Table1: Model Fitting Information**

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1115.550			
Final	1087.113	48.437	20	.039

### Degree of Relationship

The strength of multinomial logistic regression relationship was determined using the pseudo R square measures presented in Table 2 below. The amount of variation in the dependent variable (women entrepreneurship) is indicated by the Cox & Snell R Square and the Nagelkerke R square values in Table 2 which are 0.55 and 0.58 respectively. This suggests that between 55 percent and 58 percent of the variability in women entrepreneurship is explained by the set of variables used in the model.

**Table 2: Pseudo R-Square**

Cox and Snell	.55
Nagelkerke	.58
McFadden	.19

**Table 3: Likelihood Ratio Tests**

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	1096.358	9.245	4	.055
HIBD	1090.849	3.736	4	.443
SFM	1092.589	5.476	4	.042
DMTH	1094.022	6.909	4	.141
CFRB	1094.634	7.522	4	.011
STC	1096.263	8.150	4	.047

*sNote: p=0.05 HIBD = Whether Family Highly Influence Business Decision, SFM = Get Support from Family Members, DMTH = Dedicate More Time to Household Work Than My Business, CFRB = Combine Family Responsibility, STC = Spend More Time Caring for The Children Than My Enterprise.*

Table 3 shows that the result of goodness of fit of the model and statistical significance of each of predictor's contribution in the multinomial logistic regression model. The chi-square results 5.476 (P value of  $0.042 < 0.05$ ), 7.522 (P value of  $0.011 < 0.05$ ) and 8.150 (P value  $0.047 < 0.05$ ). SFM, STC and CFRB respectively revealed that the predictors are significant in the prediction of women entrepreneurial participation in wholesale and retail, agriculture, education, manufacturing & processing and hospitality sectors, while DMTH and HIBD have less or non-significant impact.

**Table 4: Multinomial Logistic Regression of Family Context Factors on Women Entrepreneurial Participation**

SECTOR <sup>a</sup>	B	Std. Error	Wald	Df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
							Lower Bound	Upper Bound
W/R	Intercept	-.552	.438	1.592	1	.207		
	HIBD	-.191	.139	1.886	1	.170	.826	.630 1.085
	SFM	.279	.123	5.124	1	.024	1.321	1.038 1.682
	DMTH	-.258	.100	6.632	1	.010	0.595	1.064 1.576
	CFRB	.080	.119	.447	1	.504	1.083	.857 1.368
	STC	-.181	.107	2.863	1	.091	.835	.677 1.029
EDU	Intercept	-1.896	.632	8.993	1	.003		
	HIBD	.076	.191	.158	1	.691	1.079	.742 1.570
	SFM	.095	.179	.279	1	.598	1.099	.773 1.562
	DMTH	.134	.146	.832	1	.362	1.143	.858 1.523
	CFRB	.285	.168	2.872	1	.090	1.330	.956 1.849
	STC	-.228	.156	2.139	1	.144	.797	.587 1.080
HSP	Intercept	-.678	.546	1.541	1	.214		
	HIBD	-.024	.167	.020	1	.887	.976	.703 1.356
	SFM	.155	.154	1.021	1	.312	1.168	.864 1.578
	DMTH	.163	.126	1.677	1	.195	1.177	.920 1.507
	CFRB	.050	.152	.109	1	.741	1.051	.781 1.416
	STC	-.311	.135	5.303	1	.021	.733	.562 .955
MP	Intercept	-.689	.567	1.476	1	.224		
	HIBD	-.207	.177	1.365	1	.243	.813	.574 1.151
	SFM	.177	.159	1.238	1	.266	1.193	.874 1.628
	DMTH	.104	.127	.682	1	.409	1.110	.866 1.422
	CFRB	-.231	.161	2.058	1	.151	.794	.579 1.088
	STC	.053	.134	.155	1	.694	1.054	.811 1.371

a. The reference category is: AGRIC.

Note:  $p=0.05$  HIBD = Whether Family Highly Influence Business Decision, SFM = Get Support from Family Members, DMTH = Dedicate More Time to Household Work Than My Business, CFRB = Combine Family Responsibility, STC = Spend More Time Caring for The Children Than My Enterprise.

Table 4 shows the coefficient of multinomial logistic regression of HIBD = Whether Family Highly Influence Business Decision, SFM = Get Support from Family Members, DMTH = Dedicate More Time to Household Work Than My Business, CFRB = Combine Family Responsibility, STC = Spend More Time Caring for The Children Than My Enterprise using agriculture sector as reference categories. These results are reported as follows:

### FAMILY CONTEXT AND WOMEN ENTREPRENEURIAL PARTICIPATION

The result of analysis shown in Table 4 shows the extent to which family context variable affect women entrepreneurial participation in the wholesale and retail, education, hospitality, and manufacturing and processing sectors relative to women entrepreneurship participation in agriculture sector in Sokoto and Kebbi State. The Wald test statistic for the predictor, whether family highly influence business decision (HIBD) are 1.886 with an associated P value of  $0.170 > 0.05$ , and 0.158 with an associated P- value of  $0.691 > 0.05$ , and for hospitality is 0.020 with an associated P- value of  $0.887 > 0.05$  also for M/P is 1.365 with an associated P- value of  $0.243 > 0.05$ . At 5% level of significance. Additionally, the regression coefficient has not been found to be statistically different from zero. This provide sufficient evidence to infer

that HIBD has no significant influence on women entrepreneurial participation in all the sectors examined.

The result in Table 4 reveal the extent to which family context variable affects women entrepreneurial participation in the selected subsectors in north-western Nigeria in the wholesale and retail sector. The Wald test statistics for whether individual get support from family members (SFM) is 5.124 with an associated P-value of  $0.024 < 0.05$ , at 5% level of significance. The regression coefficient has been found to be statistically different from zero. This provide sufficient evidence to say that (SFM) has significant influence on women entrepreneurial participation in wholesale and retail sector. This is in line with the findings of Singh et al (2011), Narayanasamy et al (2011), Greve and Salaf (2003) and Jennings and Mc Dougald (2007) who found in their analysis that family support is very important to the probability of starting up a business, with respect to orientation and recognition in developing countries. Additionally, with a B-value of 0.279, if a woman entrepreneur increases her SFM influence score by one point she would prefer entrepreneurship in the wholesale and retail sector. Based on the Exp (B) value of  $1.321 > 1$ , the relative risk of being in wholesale and retail sector would be 1.321 more likely when other variables in the model are held constant. In other words, an increase in SFM score women entrepreneurship will prefer to participate in wholesale and retail business rather than in agriculture sector.

The extent of the relationship between family context variable whether individual dedicate more time to house hold work than business (DMTH) affects women entrepreneurial participation in the wholesale and retail relative to agriculture sector was determined from the results of multinomial logistic regression analysis presented in table 4. The Wald test statistics for the predictor whether individual dedicate more time to household work than business (DMTH) is 6.632 with an associated P-value of  $0.010 < 0.05$ . The regression coefficient has been found to be statistically different from zero, given that all other variables are in the model. This provide sufficient evidence to say that DMTH has significant influence on women entrepreneurial participation in the wholesale & retail sector. Additionally, with a B-value of -0.258, if a woman entrepreneur increases her DMTH influence score by one point she would prefer entrepreneurship in agriculture rather than wholesale & retail sector. Furthermore, with EXP(B) value of  $0.595 < 1$ , the relative risk of being in wholesale & retail sector would be 0.595 less likely when other variables in the model are held constant. In other words, an increase in DMTH score, women entrepreneurship will prefer to participate in Agriculture business rather than in wholesale & retail sector. This result is in conformity with the findings of Noguera (2012) who found that dedicating one's time to housework decreases the probability of being an entrepreneur, the odds ratios in her empirical analysis demonstrates that being a woman and having family responsibilities reduces the probability of being an entrepreneur and that of Baughn *et al.* (2006) and Langowitz and Minniti (2007) observe in their studies that in societies where a woman plays traditional role within the family, the chance of women entrepreneurship is minimal

The extent of the relationship between family context variable whether individual combine family responsibility with business (CFRB) affect women entrepreneurial participation in education relative to women entrepreneurial participation in agriculture. The Wald test



statistic for CFRB (whether individual combine family responsibility with business) is 2.872 with an associated P-value of  $0.09 < 0.10$ . At 10% level of significance. The regression coefficient has been found to be statistically different from zero given that all other variables are in the model. Additionally, with a B value of 0.285. This provide sufficient evidence to infer that CFRB (whether individual combine family responsibility with business) has a significant influence on women entrepreneurial participation in the education sector. This result is in contrast with the findings of Noguera (2012) who found that being a woman and having family responsibilities reduces the probabilities of being an entrepreneur. Therefore, if a woman entrepreneur should increase her CFRB influence score by one point the multinomial log odd of preferring entrepreneurship in the education sector would be expected to increase by 0.285 while holding all other variables in the model constant. Based on  $\text{Exp}(B)$  value of  $1.330 > 1$ . Women entrepreneur will prefer entrepreneurship in the education sector rather than agriculture.

Table 4 shows the extent to which family context variable whether individual spend more time caring for the children (STC) affect women entrepreneurial participation in the wholesale and retail relative to women entrepreneurial participation in agriculture sector, the Wald test statistic for the predictor STC is 2.863 with an associated P- value of  $0.091 < 0.10$ . At 10% level of significance. Additionally the regression coefficient has been found to be statistically different from zero, given that all other variables are in the model, with a B-value of -0.181. This provide sufficient evidence to conclude that STC has significant influence on women entrepreneurial participation in wholesale and retail .Therefore, if a woman entrepreneur was to increase her STC influence score by one point the possibility of preferring entrepreneurship in the wholesale and retail sector would be expected to decrease by 0.181 while holding all other variables in the model constant. Based on  $\text{EXP}(B)$  value of  $0.835 < 1$ , women entrepreneur will prefer entrepreneurship in the agriculture than wholesale and retail sector. This result is in line with the findings of Rosa and Dawson (2006) and William (2004) who found that the time and energy women spent raising children reduced the duration of entrepreneur venture.

Based on the result in table 4, the extent to which family context variable (SFM) whether individual get support from family member affect women entrepreneurial participation in the education, hospitality and manufacturing and processing sector in Sokoto and Kebbi State was determined. The Wald test statistic for the predictor SFM are 0.279 with an associated P-value of  $0.598 > 0.05$ , and 1.021 with an associated P- value of  $0.312 > 0.05$  and 1.238 with an associated P- value of  $0.266 > 0.05$  respectively. At 5% level of significance. The regression coefficient has not been found to be statistically different from zero. This provide sufficient evidence to infer that SFM has no significant influence in the education, hospitality and manufacturing and processing sectors in Sokoto and Kebbi State.

The result in table 4 shows the extent to which family context variable whether individual dedicate more time to house hold work than their enterprise (DMTH) affects women entrepreneurial participation in education, hospitality and manufacturing and processing sectors in Sokoto and Kebbi State relative to agriculture. The Wald test statistic for the predictor (DMTH) are 0.832 with an associated P- value of  $0.362 > 0.05$ , and 1.677 with an

associated P- value of  $0.192 > 0.05$ , and  $0.682$  with an associated P- value of  $0.409 > 0.05$  respectively. At 5% level of significance. The regression coefficient has not been found to be statistically different from zero. This provide sufficient evidence to infer that DMTH has no significant influence on women entrepreneurial participation in the education, hospitality, and manufacturing and processing sectors.

The result in table 4 further shows the extent to which family context variable whether individual combine family responsibility with business (CFRB) affects women entrepreneurial participation in wholesale and retail, hospitality manufacturing and processing sectors in Sokoto and Kebbi State. The Wald test statistics for the predictor CFRB are  $0.447$  with an associated P- value of  $0.504 > 0.05$ , and  $0.109$  with an associated P value of  $0.741$  and  $2.058$  with an associated P- value of  $0.794 > 0.05$  respectively. The regression coefficient has not been found to be statistically different from zero. This provide sufficient evidence to infer that CFRB has no significant influence on women entrepreneurial participation in wholesale and retail, hospitality, manufacturing and processing sectors.

The result in table 4 further shows the extent to which family context variable whether individual spend more time caring for the children than their enterprise (STC) affects women entrepreneurial participation in the education, manufacturing and processing sectors relative to agriculture sector. The Wald test statistic for the predictor STC are  $2.139$  with an associated P- value of  $0.144 > 0.05$ , and  $0.155$  with an associated P-v value of  $0.694 > 0.05$ . At 5% level of significance. The regression coefficient has not been found to be statistically different from zero. This provide sufficient evidence to infer that STC has no significance influence on women entrepreneurial participation in the education, manufacturing and processing sectors in Sokoto and Kebbi State.

On the contrary, the result in table 4 shows the extent to which family context variable whether individual spend more time caring for the children than their enterprise (STC) affect women entrepreneurial participation in hospitality relative to agriculture sector. The Wald test statistic for the predictor (STC) is  $5.303$  with an associated P- value of  $0.021 < 0.05$ . At 5% level of significance. Additionally, the regression coefficient was found to be statistically different from zero, given that all other variables are in the model, with a B -value of  $-0.311 < 1$ , the relative risk of being in the hospitality sector would be  $0.311$  times less likely keeping other variables constant. Therefore, if a woman entrepreneur increases her STC influence score by one point she would prefer entrepreneurship in agriculture rather than hospitality sector This result is in consonance with the findings of Rosa and Dawson (2006) and William (2004) who found that the time and energy women spent on raising children reduced the duration of the entrepreneurial venture. However, while the research focused on the developed country, it was unable to establish the linkage between family context and entrepreneurship participation in developing countries such as Nigeria north-western State in particular.

## v. CONCLUSION

Based on the results of findings the study concludes that family context variables HIBD, SFM, DMTH, CFRB and STC jointly predict women entrepreneurial participation.

HIBD have no significant influence on women entrepreneurial participation in all the sectors examined in Sokoto and Kebbi State. SFM was found to have positive significant influence on women entrepreneurial participation in the wholesale and retail relative to agriculture. SFM have no significant influence on women entrepreneurial participation in the education, hospitality and manufacturing/processing sectors relative to agriculture sector. DMTH was also found to have negative influence on women entrepreneurial participation in the wholesale and retail relative to agriculture sector but have no significant influence on women entrepreneurial participation in the education, hospitality, and manufacturing/processing sectors. It was also found that CFRB have positive influence on women entrepreneurial participation in the education sector. CFRB have no significant influence on women entrepreneurial participation in wholesale retail, hospitality, and manufacturing/processing sectors relative to agriculture. It was found that STC have negative influence on women entrepreneurial participation in the wholesale retail and hospitality sector relative to agriculture. STC have no significant influence in education and manufacturing/processing sectors.

The findings demonstrate sufficient evidence to infer that SFM have positive significant influence only in the wholesale retail sectors and STC has negative significant influence on women entrepreneurial participation in the wholesale retail and hospitality sectors relative to agriculture, while CFRB have positive significant influence on women entrepreneurial participation only in the education sector. None of the family context variables have significant influence in the manufacturing and processing sector in Sokoto and Kebbi State.

## **Recommendations**

Based on the findings of the research, the study recommends that

1. Since SFM was found to have positive significant influence on women entrepreneurial participation only in the wholesale and retail sector relative to agriculture. Women entrepreneurs in the other sectors should utilize their family members for the benefit of their enterprise, since the family constitutes one of the most common entrepreneurial teams and significant entrepreneurial potential could be found within the family. Moreover, family context can be a foundation for social support for new ventures created by women.
2. STC was found to have negative significant influence on women entrepreneurial participation in wholesale and retail and hospitality sectors. Barriers posed by family context variable in those sectors examined should be properly addressed by all stakeholders. It is recognized that the time and energy women spend on raising children reduce the duration of the entrepreneurial venture. Challenges arising from women spending more time caring for the children should be tackled. Hence, there is need for policy makers to consider childcare policy in line with entrepreneurial policies in areas where conflicts exist between work and home life.

## **Limitations of the study**

There are a number of limitations associated with this study. First, the survey research design was employed in this work. Therefore, the outcome of this study is limited by the degree to which the respondents were honest and without bias in completing the questionnaire.

Second, this research was only focused on women entrepreneurial participation in North-western Nigeria. It therefore failed to examine or compare the male entrepreneurial conditions even though the male entrepreneurs might experience more or less or just about the same socio-cultural conditions.

### **Suggestion for further research**

The study used cross-sectional data which does not give room for measurement of changes in the significance of determinants of women entrepreneurship. It is therefore suggested that a longitudinal study on women entrepreneurial activity in Northern Nigeria be carried out so that information on women entrepreneurial activity over a longer period of time will be collected in order to examine the significance and effect of changes in determinants. A regional study should be conducted to provide a better understanding of urban and rural peculiarities in the study of socio-cultural constraints to women entrepreneurial participation in North-western Nigeria as determinants of women entrepreneurial participation might differ between urban and rural regions.

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