Journal of International Women's Studies

Volume 23
Issue 5 *Bilingual Special Issue in English and Spanish: Gender, Social Inclusion, and Entrepreneurship: Women's Struggles in the Private and Public Sectors Meeting Sustainable Development Goal (SDG) #5*

Article 4

April 2022

Women and Entrepreneurship in Nigeria: What Role Does Social Inclusion Play?

Ezebuilo R. UKWUEZE
Department of Economics, University of Nigeria, Nsukka, Enugu State, Nigeria

Women and Entrepreneurship in Nigeria: What Role Does Social Inclusion Play?

By Divine, N. OBODOECHI[1], Ambrose N. OMEJE[1], Chukwudi C. NWOKOLO[2], Chinasa E. URAMA[1], Henry T. ASOGWA[3], Chinonso V. AGU[1] & Ezebuilo R. UKWUEZE[1]*

1 Department of Economics, University of Nigeria, Nsukka, Enugu State, Nigeria.
2 Centre for Entrepreneurship and Development Research (CEDR), University of Nigeria, Nsukka, Enugu State Nigeria
3 Institute of Development Studies, University of Nigeria, Enugu Campus
* **Corresponding Author: ezebuilo.ukwueze@unn.edu.ng +234-803 572 5779**

Abstract

Women's participation in business enterprises has attracted much attention from policy makers, researchers, NGOs, politicians, the government sector, and international agencies. This is because it has been identified that women's involvement in income generation tends to boost family income, support children's education, improve health of family members, provide food, build assets for the family, and contribute to general development of economies. However, women have not been performing these roles due to constraints placed consciously or inadvertently on women by society, limiting them from engaging in income-earning ventures, especially in developing countries like Nigeria. Even those who wish to venture into economic activities face both economic and non-economic challenges limiting their enterprise. These challenges exclude women from being involved in economic activities. This study is poised to: investigate the role of social inclusion on female owned businesses in Nigeria, examine the impact of economic factors that inhibit female-owned businesses in Nigeria, and investigate the non-economic factors affecting the involvement of Nigerian women in business entrepreneurship. The data for this study will be sourced from the World Bank's Global Findex database (2017), while the logistic regression model will be used for analysis. Findings from the study shows that the number of female account holders, financial institutional accounts in rural areas, grants or loans to startup businesses, rural and household size were all found to be positively and significantly influencing women owned businesses in Nigeria It is recommended that the government needs to set up more viable grant and loans schemes targeted particularly to female entrepreneurs both at the rural and urban areas so as to encourage more female businesses in Nigeria.

Keywords: Entrepreneurship, Female-owned business, Social inclusion, Financial inclusion, Logistic regression, Gender discrimination

JEL: D0; D1; D31

Introduction

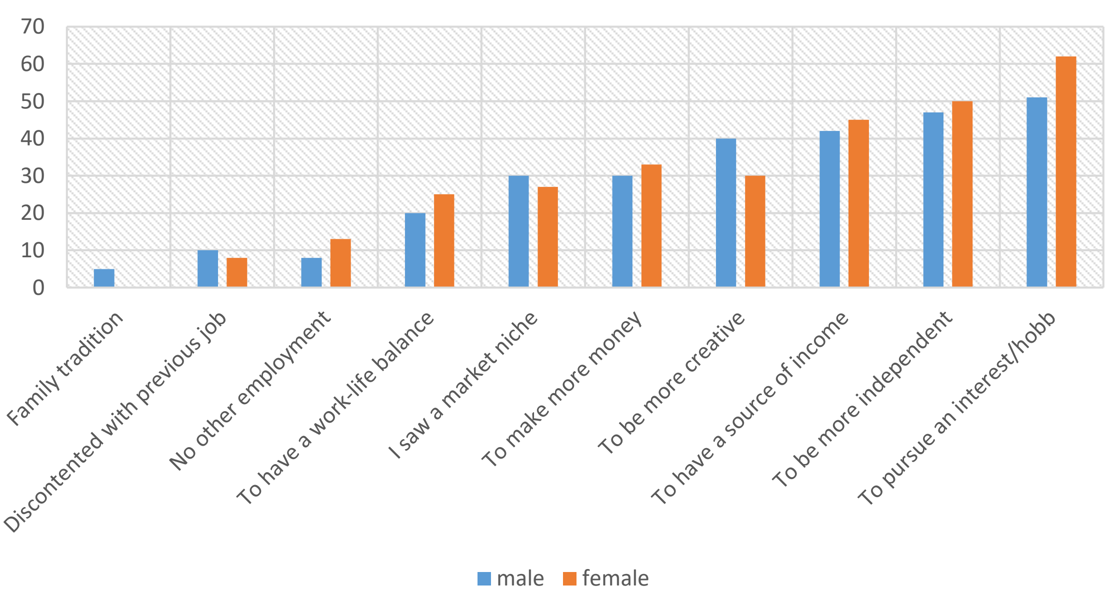
Women's participation in business enterprises has attracted much attention from both policy makers, researchers, NGOs, politicians, the government sector, and international agencies. This is because it has been identified that women's involvement in income generation tends to boost family income, support children's education, improve health of family members, provide food, build assets for the family, and contribute to general development of economies. However, women have not been performing these roles due to constraints placed consciously or inadvertently on women by society, limiting them from engaging in income-earning ventures, especially in developing countries like Nigeria. Even those who wish to venture into economic activities face both economic and non-economic challenges limiting their enterprise. These challenges exclude women from being involved in economic activities.

In Nigeria, with women constituting more than 50% of the population, about 30% of enterprises registered are owned by women (Adetoyinbo, 2021). In every 10 working age females, four out of these 10 indulge in early-stage entrepreneurial activity, and make up about 40.7% with respect to 39% of their male counterparts (Nasimiyu, 2019). PricewaterhouseCoopers (PwC) (2020) revealed that in Nigeria, female entrepreneurs accounted for about 41% of those that own micro businesses. However, average growth of these enterprises owned by women are still at its low ebb when compared to that of men. A number of economic and non-economic factors have been identified as being responsible for this slow growth of firms owned by female entrepreneurs. The economic factors include size, education, location, productivity, profitability, and growth, while the non-economic factors are empowerment, improve women's and family's welfare, social norms and culture, financial discrimination, and business environment (Lawan, 2017).

Other identified factors that limit increased business development of female entrepreneurs in Nigeria are poor culture of savings, wrong business practice, inadequate qualified artisan workers, very few honest and reliable staff, achieving a balance between family and enterprise, and rise in thinking among females and fear of pseudo growth (Lawan, 2017).

Data from Future of Business Survey (2018) of the Organisation for Economic Cooperation and Development (OECD) revealed that the major reasons why female compared to male entrepreneurs engage in businesses and/motivations for entrepreneurships, financing, and learning enterprises in Nigeria include: family tradition, discontented with previous job, not having other employment, to have a work-life balance, having seen a market niche, to make more money, to be more creative, to have a source of income, to be more independent, and to pursue an interest/hobby. These are seen in the figure given below:

Fig.1: Distribution of Reasons Women Indulge in Businesses in Nigeria

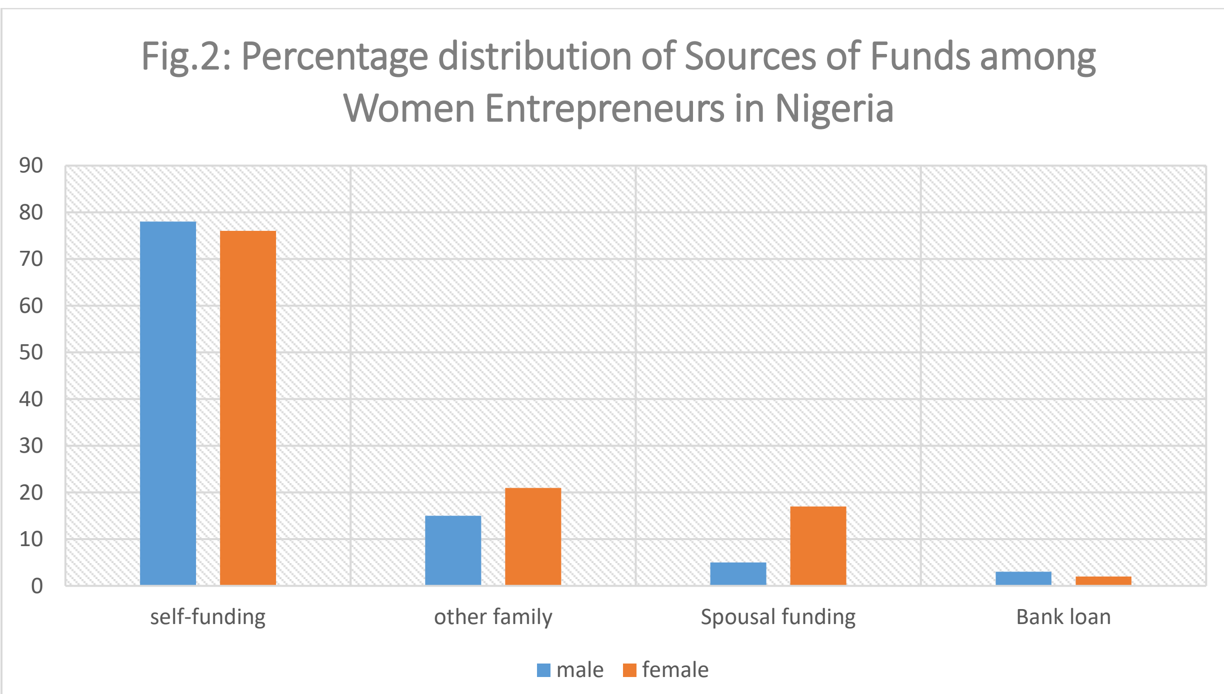


Data Source: Future of Business Survey (2018)

Figure 1 shows that male entrepreneurs indulge in business more than females because of family tradition and because they are discontented with previous jobs. Again, males joining business because they saw a market niche and to be more creative are greater when compared with their female counterparts. However, with respect to having no other employment and a work-life balance, to make more money, to have a source of income, to be more independent, and to pursue an interest/hobby, female entrepreneurs are higher (OECD, Future of Business Survey, 2018).

Nigerian female entrepreneurs strive harder to transform business ideas to goods and services that are saleable and which can bring about a rise in income, reduction in poverty, and overall economic growth of the country (Halkias, Nwajiuba, Harkiolakis, & Caracatsanis, 2011). Female entrepreneurs in Nigeria are committed towards achieving business successes. These Nigerian female entrepreneurs develop their enterprises by joining clubs and societies, asking their husbands for support, and affiliating with relatives, friends, non-governmental organizations (NGOs), professionals, and religious groups (Abass, 2019).

Women in Nigeria also strive to be financially included. They do this by self-funding their enterprises, seeking help from other family members, getting funded by their spouse, getting bank loans, among others. All these struggles are the sacrifices which these female entrepreneurs make in order to be financially included. A look at Figure 2 below shows the percentage distribution of sources of funds among female entrepreneurs in Nigeria.



Data Source: Future of Business Survey (2018)

Figure 2 indicates that more men than women self-fund their enterprises. However, more women than men get financial assistance from family members and spousal funding of their enterprises. On bank loans, more men obtain bank loans than women. This indicates that men are more financially included than women (OECD, Future of Business Survey, 2018). These challenges exclude women from being involved in economic activities the most (Aladejebi, 2020). It is therefore on this premise that this study investigates the role of social inclusion of female owned businesses in Nigeria, examines the impact of economic factors that inhibit female-owned businesses in Nigeria, and investigates the non-economic factors affecting the involvement of Nigerian women in business entrepreneurship. The data for this study was sourced from the World Bank's Global Findex database (2017), while adopting the logistic regression model for the analysis. The null hypotheses for this study include:

i. There is no significant impact of social inclusion on female-owned businesses in Nigeria.
ii. There is no significant impact of economic factors on the performance of women entrepreneurs in Nigeria.
iii. There is no significant impact of non-economic factors on the performance of women entrepreneurs in Nigeria.

Literature Review

The concept of social exclusion was first discussed by René Lenoir in 1974 to connote conceptualization of poverty and deprivation. Following from Lenoir's conceptualization, Silver (1995) as cited in Sen (2000) listed some areas where people may be excluded to include:

> a livelihood; secure, permanent employment; earnings; property, credit, or land; housing; minimal or prevailing consumption levels; education, skills, and cultural capital; the welfare state; citizenship and legal equality; democratic participation; public goods; the nation or the dominant race; family and sociability; humanity, respect, fulfilment and understanding.

From this list, it could be observed that a lot of individuals, people, groups, communities, societies, and nations are excluded advertently and inadvertently. According to Sen (2000), social exclusion leads to other societal deprivations and thus further limiting other living opportunities, such as, undernourishment or homelessness. In most developing countries, female entrepreneurship has lagged behind those of men; getting to understand the potential constraints and challenges facing female entrepreneurs is very essential for increasing their participation in business enterprise. There are two major reasons why women operate smaller businesses, namely, lower start-up capital (due their exclusion in the ownership of assets), and less access to credit to grow their businesses (because women are also excluded from credits). Women do have equal responsibility with men, which can push them into entrepreneurship, on one hand, and also limit their potential as business owners on the other. Unequal family responsibility may push women into entrepreneurship on one side and limit their potential as business owners on the other.

Social inclusion is necessary in its own right and it also matters because it is the foundation for shared prosperity due to the fact that social exclusion is simply too costly. There are substantial costs—social, political, and economic, etc.—to not addressing the exclusion of entire groups of people. The consequences of exclusion are deleterious for human capital development, in particular as well as economic development in general.

Inclusive entrepreneurship is an important vehicular transit for sustainable and inclusive growth, because businesses created by under-represented and disadvantaged groups tend to create jobs and fight social and financial exclusion, thus stimulating economic growth across the economy (OECD 2018). The practice of gender inclusion policy brings changes because internal policies and practices have direct impact on sales, and allow the business to tap into new markets. Bringing a gender inclusion focus into the organizational culture will facilitate the breakdown of unconscious bias.

Though women entrepreneurs everywhere are in a minority, there is considerable variation across countries. There are researchers who assert that psychological and cognitive factors, motivation (desire for fulfillment, need for achievement, and progress and autonomy, etc.) and other personal subjective perceptive targets (self-confidence, recognition of business opportunity, risk tolerance, etc.) all bring to bear in the entrepreneurship profession. Successful entrepreneurs have features and personality traits such as quick investment decision-making and exploiting opportunities which Viinikainen et al., (2017) asserted should be compared to the high market uncertainty. They claimed that most successful women entrepreneurs have been identified with motivation and risk-taking (Nurwahida (2007), while Rasheed (2001) also claims that success is also one of the crucial personal attributes. Previous researches have examined how top female entrepreneurs who possess entrepreneurial intention, managerial skills, and high motivation have been able to achieve business success easier (Al Mamun & Ekpe, 2016). Dolan, Peasgood, and White (2008) found that motivation behavior not only supports the managers but also plays an important role as the pillar for achieving their entrepreneurial objectives.

Some empirical evidence has also shown that women entrepreneurs have significant impact on business success, especially in those firms that require individual attributes like motivation (Ehman et al., 2017), hence, motivation and ability of risk-taking influence those entrepreneurial orientations at the early stage influences personal characteristics and social capital (Chuluunbaatar, Ottavia, and Kung 2011). It has been asserted by Wiklund & Shepherd (2005) that women chief executive officers (CEOs) could take the risk precariously, that might significantly affect firm's performance and success, not necessarily because entrepreneurs are highly inclined to take risks might receive compensation through higher expected profits (Danso, Adomako, Damoah, & Uddin, 2016).

Confidence in entrepreneurship, another personality factor, can be explained as the entrepreneurial capability which helps entrepreneurs to focus on entrepreneurial objectives with a strong belief on achieving success (Twibell et al., 2008). Another personality factor for entrepreneurship, self-confidence, plays a critical role in entrepreneurship literature and has been asserted that it helps in entrepreneurial activities (Hassan & Yusof 2015; Oney & Oksuzoglu-Guven, 2015). Building high self-confidence helps women entrepreneurs gain competitive advantage in emerging markets and while facing a variety of challenges (Abd Rani and Hashim (2017; Mehtap, Pellegrini, Caputo, & Welsh, 2017; Moloi & Nkhahle-Rapita, 2014). However, a study conducted by Dabic, Daim, Bayraktaroglu, Novak, and Basic (2012), which compared male and female entrepreneurs' confidence level, concluded that male entrepreneurs have higher confidence relative to females. Hence, studies from extant literature have proved that women's entrepreneurial confidence and intention positively and significantly affect their business success (Mondal, Ghosh, & Das, 2013; Balogun et al., 2017).

Age is a personal characteristic which influences the participation in business activities by women. It has been asserted by Nearchou-Ellinas & Kountouris (2004) that the average age at which women embrace entrepreneurship ranges between 31 – 44 years of age – thus implying that women engage in business at an older age. The late participation in businesses may be understood on the grounds of several factors including, family obligations (Trihopoulou & Sarri, 1997), lack of finance, and what Kephart & Schumacher (2005) called glass ceiling factors. On the contrary to this assertion, other recent studies show that younger women now start business at a much earlier age. For example, Mordi et al, (2010), in their recent study on Nigerian women entrepreneurs, explains that nearly half of their sample of women entrepreneurs started their business between 19-24 years old. Young people are more vibrant, impatient, aggressive, and ready to take risks, which influence business practice of the entrepreneurs.

Women's entrepreneurship is also affected by economic factors which can be described as the availability of essential data identified with a company's internal financing and external financial situation (Wube, 2010). Afza and Amir Rashid (2009) asserted that external factors, such as political, financial, and social factors, have significantly affected women entrepreneurs in almost all sectors. Abdallah & Alnamri, (2015) showed that small and medium scale enterprises (SMEs) deficient in finance for development and innovation strategies may not maintain and have sustainable competitive advantage and still manage challenges emanating from political, economic and social issues (Saleem, 2017; Lindvert, Patel, and Wincent (2017; Radzi, Nor, & Ali, 2017).

Literature review (for example, Bruni, Gherardi, & Poggio, 2004; Rodríguez & Santos, 2008) has identified, mainly, sociocultural factors concerning women's status in relation to access to corporate networks, information, or business. At the early stages of entrepreneurship, one major determinant of entrepreneurs and entrepreneurship is education and training of women (Pineda, 2014), because entrepreneurship can be expressed as the process of social re-education and self-recognition. It is undoubtable that when the enterprise is running, Rodríguez-Díaz, Jiménez, & Rebollo-Catalán, (2014) posit that women entrepreneurs perceive positive traits in socialization, especially in areas where these social networks are germane, basically at the beginning of the creation of a company. Ruiz, Camelo, and Coduras (2012b)'s research showed that women have less clear possession of a professional social network or knowledge of other entrepreneurs. Jennings & Brush (2013) also opined that women could be pushed into entrepreneurial activity due to the fact that they have fewer occupational alternatives due to limited experience, low education, and frequent career interruptions. In most cases, when women's working conditions are poor and/or they are earning less income as anticipated or desired, as often is the case, they begin to engage in any other thing either to supplement their income and for business purposes (Noguera et al., 2015). Thus, economic necessity and income pushes women into entrepreneurship (Jennings & Brush, 2013).

The constraint controlling the entrepreneurial capacity of women is the responsibilities in the family. The issue between family and business conciliation is an important and recurring theme in discussions and research that analyzes the relationship between women entrepreneurs and family (Bruni et al., 2004; Brush, De Bruin, & Welter, 2009; Álvarez et al. (2012); Aldrich & Cliff, 2003). It has been asserted, Jennings & Brush (2013), that Women in most developing countries may be pushed into entrepreneurship because of survival needs, economic necessities, family education, and health requirements. The data provided by these studies indicate that women who have family responsibilities have a 33.1% probability to undertake, while in the case of men, that decrease is only 2.4%. Consistent with these results, authors like Langowitz and Minniti (2007) and Baughn, Chua, and Neupert (2006) also show from their studies how women with family responsibilities face discrimination, acting as potentially limiting agents. Again, it is known that women who own business enterprises do so out of necessity rather than opportunity (Kelley et al 2010; Allen et al. 2008; Bruhn 2009; Costa & Rijkers 2011). Also related to this is the issue of having children less than six year of age, because raising children is associated with self-employment among the women and has the largest effect on the possibility that women are selfemployed, especially among homeworkers (Paker 2009; Zellweger et al. 2011; Edwards & Field-Hendrey 2002).

Closely related to family constraint on women's involvement in business enterprises is the family size (number of people in the family). Extant literature has shown a strong linkage between family and female entrepreneurial activity. But marriage (and any type of relationships - cohabitation by couples) has been found to be postponed pending the time stable jobs are secured, birth rates are falling, and divorce rates are on the rise. Following this, Unger and Crawford (1992) and Mincer (1985) suggest that reductions in average family size usually give rise to motivation to participate in the job market and/or to start a business; however, evidence still shows that women continue to serve the role of family caretaker. In line with this thinking, OECD's (2002) study showed a negative relationship between the presence of children and female employment rates.

Location factor is another barrier to female success in entrepreneurship. ILO statistical report (2002) shows that about 80 percent or more of industrial workers in developing countries work from home. This home-based location could be attributed to social restrictions to prevent women from traveling outside their homes. The location could also be in the rural areas, which restrict the size of business, constrain expansion, limit opportunities for women entrepreneurs, may also hamper legitimacy of the enterprise in the eyes of creditors and customers (Marlow, 2002), and may limit access to external finance. Again, Ypeij (2000) asserts that home-based business (or location-trapped) may reduce visibility for potential clients and constrain them from access to input markets.

Developing countries are identified with the phenomenon of early marriage, and, hence, a woman's ability to reproduce heirs for continuation of the lineage is highly valued in these countries. For instance, marriages among the Akan tribe, in Ghana, are often preceded by betrothals, which are conducted long before the girl attains the legal marriageable age (Kuenyehia and Ofei-Aboagye, 1998). Those who marry with this objective of continuing their lineage end up entering into the labour market with primary school or secondary school education, little or no education, with low wages, little investment, and few skills (Farrukh et al., 2018). According to Agboli (2007), about 90% of them work in the informal sector of the economy as micro-retailers and micro-entrepreneurs. These types of informal enterprise were described by Rogerson (1996) as survivalist enterprises. Women are mostly found in survivalist enterprises due to the fact that they hardly secure regular wage employment and/or access an economic sector of their choice. Incomes from survivalist enterprises have been found to fall below minimum income levels for and the opportunities for possible expansion are hampered by financial constraints. According to Berner et al (2008), survivalist entrepreneurs are those who try to increase security and smoothen consumption rather than maximise profit, and even the relatively successful ones have been found unable to accumulate capital for expansion.

Pointing to the cultural context, Rehman & Azam Roomi (2012) show that women's participation in business activities creates a lot of challenges with balancing the job and family. Furthermore, a pertinent question seems more glaring when we talk about low income and middle income economies, where women's roles, religious, regulations, and culture seem different from other countries, because the women in these countries face some cultural restraints (e.g. religious obligations), and where religion and culture play critical roles on women (Modarresi et al., 2016; Khan, 2014). Aside from all these religious and cultural constraints in developing countries, there are still other challenges that women face, especially those which relate to women unable to have full access to opportunities when compared to men (Roomi & Parrott, 2008a, 2008b).

Similarly, socio-cultural factors include a mixture of cultural and social factors that affect women entrepreneurs' success. These include socio-cultural issues, traditions, customs, religious and belief systems which influence how women can participate in economic activities, the level of participation, engagement in business activities, etc. In countries where Islamic religion is practiced, family issues, on the one hand, and social and cultural norms, on the other, present the most contentious issues for entrepreneurial women (Poggesi, Mari, & De Vita, 2016). Women's entrepreneurial expertise revolves around and is highly reshaped by a complex web and interaction of socio-cultural factors and social relationships (Mehtap et al., 2017; Arasti, Zandi, and Talebi (2012; Roomi et al. 2018). Omwenga, Mukulu, & Kanali (2013) certifies that social networks and bonds with close relatives and life partners can become a critical issue for women entrepreneurs' success. Balakrishnan and Low (2016) further show that social-cultural factors (such as, family, religion, etc.) significantly influence women entrepreneurs' decision-making and success in developing economies.

Following from the above, the study objective is to investigate both economic and non-economic factors which restrain women entrepreneurs from carrying out their entrepreneurial activities in Nigeria.

Data and Methodology

The World Bank's Global Findex database (2017) and Nigerian Demographic and Health Survey (DHS, 2018) were used to source the data for analysis. The Global Findex database (2017) is the latest version released so far and the 2020 version is expected to be released later this year; hence, the reason for using the 2017 database for our analysis. It is one of the most comprehensive data on financial inclusion, savings, payments made to businesses and risk management. The survey was first carried out in 2011 and has since been published every three years. Over 150,000 adults in over 140 countries all over the world are represented in the survey. The World Bank's Global Findex database 2017 shows about 1.5 billion adults with accounts since 2011 and an additional 512 million by 2017. A thousand people from about 162 countries were randomly sampled in the entire data and face to face interviews were conducted. We used data for Nigeria only, since our study is from Nigeria. The sample for Nigeria excludes a few northern states in Nigeria and they include: Adamawa, Borno, and Yobe. The major reason for this is as a result of the ongoing security concerns in that part of the country. These states only represent 7% of the population of Nigeria (Global Findex data, 2017).

Model Specification

We specify the binary logistic regression model to reflect the dichotomous of a female owned business or not as follows:

$$\text{Logit}p_x = \log\left[\frac{P(Y=1)}{1-P(Y=1)}\right] = \sum_{k=1}^{k} \alpha_k X_k \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Equation 1 shows that there is a linear relationship between the logitp_x and the vectors of explanatory variables X. Therefore, the study can state the probability of a female owning a business as thus;

$$\Pr(Y=1) = \frac{\sum_{e k=1}^{k} \alpha_k X_k}{\sum_{e k=1}^{k} \alpha_{k X_k}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Whereas the probability of a female not owning a business (which is 1 minus the probability of owning a business) is specified thus:

$$\Pr(Y = 0) = \frac{1}{\sum_{e^{k=1}}^{k} \alpha_k X_k} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3)$$

Equations 1 to 3 show the binary nature of the dependent variable which is owning a business categorized as 1 and not owning a business categorized as 0. The final model for determining the impact of social inclusion of female owned businesses in Nigeria is specified below as thus;

$$\text{Logit}(P) = \ln[\frac{P}{1-p}] = \propto_0 + x\beta_1 + x\beta_2 + x\beta_3 + \ldots\ldots\ldots\ldots + x\beta_n + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots \quad (4)$$

The variables in the model are in Table 1. The absenteeism variable is the dependent variable while the rest are the independent variables.

Table 1: Description of Variables in the Model

Variables	**Description**
Female Owned Business	A business owned by a female (1 = yes, 0 = no)
Age	Age of female entrepreneur
Sex	Gender of the entrepreneur (1 = male, 0 = female)
Rural	Business location (1 = urban, 0 = rural)
Female account (age 15+)	Represents female account holders above 15 years in age)
Marital status	Marital status (1 = single, 2 = married, 3 = divorced, 4 = separated, 5 = widowed)
Fin Insti account rural	Financial Institution account in rural areas
Accounts because fin Ins are far away (Financial Inclusion)	Represents accounts because financial institutions are far away
Accounts because of lack of proper documentation	Accounts because of lack of proper documentation
Grants or loan to start a farm or business (female)	Grants given to female to start a business.
hh size	Household size
age	Age of respondents
Muslim	The respondent practices the Muslim religion

Empirical Findings and Discussion

Descriptive Statistics

The results in Table 2 represent the descriptive statistics of the variables analysed in the study. Female owned businesses had 1,000 responses with a mean value of 0.456 owned businesses with a standard deviation of 0.251. Accounts held by females above 15 years of age had a mean value of 39.1% and a standard deviation of 0.4888. This suggests that only about 39.1% of the females above 15 years of age own an account with the bank. Financial institutions in the rural area have a mean value of 33% and a standard deviation of 0.4888. This indicates that financial institutions account for only about 33% in the rural area. A mean value of 0.261 is represented by accounts that are far away from the female businesses, and it has a standard deviation of 0.159. A mean value of 0.51 represents those that received grants or loans to start a farm or business. This suggests that about 51% of the females had access to grants or loans to start a business, with a standard deviation of 0.4999.

Table 2. Descriptive Analysis of the Variables used in the Model

Variable	Obs	Mean	Std. Dev.	Min	Max
Female owned business	1000	0.456	0.2510	0	1
Female account (age 15+)	1000	0.391	0.4880	0	1
Fin. Insti account rural	1000	0.330	0.3371	0	1
Accounts because fin inst are far away (Financial Inclusion)	1000	0.261	0.1592	0	1
Accounts because of lack of proper documentation	1000	0.231	0.4218	0	1
Grants or loan to start a farm or business	1000	0.510	0.4999	0	1
Household size	1000	1261	0.8905	0	1000
Sex	1000	0.428	0.4948	0	1
Rural	1000	0.236	0.4246	0	1
Marital Status	1000	0.764	0.4246	0	1
age	1000	33.44	13.754	15	65
Muslim	1000	0.467	0.4989	0	1

Table 3 reports that when female account holders with ages above 15 increase by one percent, there is the likelihood of female owned businesses to increase by 2.02 percent at the 1 percent level of significance. This indicates that when there are more female account deposits in the banks, there is the likelihood that this will increase the number of female owned businesses, as they will have more funds to establish more businesses due to the volume of deposits they have in the bank. Thus, this will lead to more female owned businesses in Nigeria. On the other hand, when the number of financial institutions being far away increases by one percent, it will lead to a decrease in the likelihood of female owned businesses by 11.9 percent at the one percent level of significance. This indicates that when there is lack of financial inclusion in the area as a result of the fact that financial institutions are far away from businesses, there is a likelihood of a decrease in female owned businesses in the area. This is mainly because businesses find it hard to deposit cash made from sales and hence, they won't be encouraged to open new businesses in the area. Business owners feel safer when financial institutions are closer to them than when they are far apart. This finding is in line with that of (Ehman et al., 2017).

Also, from Table 3, it was found that when more financial institutions are located in the rural areas, they tend to encourage more female business ownership. A one percent increase in financial institution accounts in the rural areas, will lead to the likelihood of an increase in female owned businesses by 4.12 percent at the one percent level of significance. This is because the presence of more financial institutions in the rural areas will encourage more business ownership in the area. This encourages the ease in doing business within the area.

Also, results from Table 3 show that lack of proper documentation reduces the likelihood of female owned businesses by 17.2 percent at the 1 percent level of significance. This implies that when businesses lack the proper documentation to open an account with financial institutions, there is a lower likelihood of female owned businesses to be more. This is because most businesses strive to keep accurate records as recommended by the help of financial institutions and when they lack the proper documentation to be registered in a bank, this doesn't encourage more business ownership.

Grants or loans to start a farm or business increases the likelihood of female business ownership by 1.06 percent at the 1 percent level of significance. This indicates that the more access that businesses have to loans or grants, the more likely people are encouraged to open up businesses, because they know they will either get a loan or grant to start up such a business. Hence, more access to loans or grants will lead to more female entrepreneurs. This finding corroborates the findings of Bruhn and Love (2014); Bauchet et al. (2011); Fielden and Davison (2010) and Karlan and Zinman (2010) which suggests that financial inclusion does have a positive impact on economic growth and women's empowerment.

Table 3: Binary Logistic Regression Result (Dependent Variable: Female Owned Business)

	Economic Factors		**Non-Economic factors**	
	Logit Estimates	**Marginal Effect**	**Logit Estimates**	**Marginal Effects**
Female own Biz				
Female account (age 15+)	0.0856^{***}	0.0202^{***}		
	(0.000)	(0.000)		
Fin Insti account rural	0.177^{***}	0.0412^{***}		
	(0.000)	(0.000)		
Account because fin ins are far away	-0.525^{***}	-0.119^{***}	-0.639^{***}	-0.143^{***}
	(0.000)	(0.000)	(0.000)	(0.000)
Accounts because of lack of proper	-0.819^{***}	-0.172^{***}	-0.925^{***}	-0.191^{***}

documentation				
	(0.000)	(0.000)	(0.000)	(0.000)
Grant or loan to start a farm or biz (female)	0.0448***	0.0106***	0.0228**	0.00538**
	(0.000)	(0.000)	(0.003)	(0.003)
Marital status (d)	1.314***	0.355***	1.345***	0.360***
	(0.000)	(0.000)	(0.000)	(0.000)
rural	0.000119	0.0000281	0.0850***	0.0200***
	(0.994)	(0.994)	(0.000)	(0.000)
hh size	0.00999**	0.00236**	0.0169***	0.00398***
	(0.005)	(0.005)	(0.000)	(0.000)
age	-0.00442	-0.00104	-0.00300	-0.000708
	(0.235)	(0.235)	(0.423)	(0.423)
agesq	-0.000135**	-0.0000318**	-0.000186***	-0.0000440***
	(0.003)	(0.003)	(0.000)	(0.000)
Muslim	-0.671***	-0.156***	-0.407***	-0.0953***
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	89064	89064	89064	89064
Pseudo R2	0.0509	0.0509	0.0583	0.0583
chi2	6066.8	6066.8	6944.6	6944.6
Prob > chi2	0.0000	0.0000	0.0000	0.0000
Correctly classified %	62.72%	62.72%	63.90%	63.90%
Goodness-of-fit test:				
Pearson chi2	88745.99	88745.99	88790.52	88790.52
Prob > chi2	0.0970	0.0970	0.0783	0.0783

Marginal effects; *p*-values in parentheses
(d) for discrete change of dummy variable from 0 to 1
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

From the results on Table 3, we empirically tested the effect of non-economic factors and how they impact on female own businesses. It was found that household size tends to increase the likelihood of female business ownership by 0.398 percent at the 1 percent level of significance. This implies that when household sizes increase, there is every likelihood that female owned businesses will increase as well. This is because females from these households will be forced to search for other available means to increase family income to solve family problems, hence, struggle to own a business. This finding is in consonance with Balakrishnan and Low (2016), Farrukh et al., (2018) and Agboli (2007) in their studies of Asia and Ghana, respectively.

On the other hand, age had no role to play in terms of female business ownership in Nigeria, as it was found to be insignificant both at the 5 percent and 1 percent levels of significance. Another non-economic factor that significantly increased female business ownership is location (rural). The number of women in the rural areas increased the likelihood of female owned businesses by 2 percent. This indicates that there were more female businesses opened in the rural areas than in the urban areas. This could be as a result of the fact that government sponsored grants or loan schemes may be the major reason as to why there was more female business ownership in the rural areas than in the urban areas. Finally, Islamic religion showed negative signs and a significant relationship with female entrepreneurship in Nigeria. This is because the tradition of this religious group does not allow female freedom to engage in many activities outside families. This finding is supported by the findings of Poggesi, Mari, & De Vita (2016) and Balakrishnan and Low (2016).

Hypothesis Testing

Hypothesis One: this hypothesis is rejected on the ground that women are not socially excluded (women are included in financial services both in rural and urban centres) and conclude that social inclusion significantly influences women's involvement in entrepreneurship activities.

Hypothesis Two: this hypothesis is rejected; we therefore conclude the economic factors (access to loans/grants, education etc.) significantly affect women's participation in entrepreneurship activities.

Hypothesis Three: the hypothesis is rejected and we therefore conclude that non-economic factors (marital status, household size, location [rural sector], religion, etc.) have significant influence on women entrepreneurship performance.

Conclusion and Policy Recommendation

This paper was designed to analyze the role social inclusion plays in determining female entrepreneurship in Nigeria. The Binary Logistic model was adopted and the results showed that social inclusion and financial inclusion to be pivotal in determining the volume of female business ownership in Nigeria. The number of female account holders, financial institutional accounts in the rural areas, grants or loans to startup businesses, and rural and household size were all found to be positively and significantly influencing female owned businesses in Nigeria. The implication of this is that financial inclusion is germane for women entrepreneurship to perform effectively, bearing in mind that the more women entrepreneurs have access to finance, the more they flourish in their businesses. Also, the implication of this finding is that there is the need to develop the rural areas where the majority of women live so that they can access finance and have some facilities (electricity, good roads, water) which would boost their efforts in businesses. While it is necessary to have accounts with financial institutions, it is also important for women to be exposed to how to keep records of accounts so that it would be easy for them to have fair deals with financial institutions. The practicing Islamic religion had negatively and significantly affected female owned businesses in Nigeria. The implication of this is that all those cultural, religious, and social beliefs which restrict the women from engaging in entrepreneurship should be reformed for more women to enter in business. These findings call for proper policy recommendations to improve upon the size of female owned businesses in Nigeria, and by so doing will encourage adequate social inclusion in Nigeria

Therefore one policy recommendation from this study is that the government needs to set up more viable grant and loan schemes targeted particularly to female entrepreneurs both at the rural and urban areas so as to encourage more female businesses in Nigeria.

Also, financial institutions could also expand their branches to rural areas so as to cover more businesses, thereby making banks closer to depositors than it is currently. This will encourage more female entrepreneurs to set up businesses in the rural areas.

Furthermore, there could be sensitization programmes organized by both the Federal Government and the private sector to educate local businesses on the importance of necessary business documentations when starting up a business. There is the need for training for knowledge acquisition in the rural areas of bookkeeping and record keeping of business activities. These will go a long way in ensuring that more female entrepreneurs would likely emerge in Nigeria and would also survive into the long-run.

Finally, those social beliefs, culture, and religious practices which limit women from working outside homes and engaging in economics activities should be reformed so the women could engage in entrepreneurial activities.

References

Abass, S.M. (2019). Women entrepreneurship determinants in Nigeria, *Journal of Business and Economics*, 10(4): 356-367, DOI: 10.15341/jbe(2155-7950)/04.10.2019/008

Abdallah, W. M., & Alnamri, M. (2015). Non-financial performance measures and the BSC of multinational companies with multi-cultural environment: An empirical investigation, *Cross Cultural Management, 22(4), 594–607.*

Abd Rani, S. H., & Hashim, N. (2017). Factors that influence women entrepreneurial success in Malaysia: A conceptual framework. *International Journal of Research in Business Studies and Management, 1(4), 16–23.*

Adetoyinbo, B. (2021). Nigeria, Women outnumber men in business startups, *Harambee Today Pubs.* Available Online At: https://harambeetoday.org/index.php/component/k2/item/15 62-nigeria-women-outnumber-men-in-business-startups

Afza, T., & Amir Rashid, M. (2009). Marginalized women social well-being through enterprise development: A glimpse of remote women status in Pakistan. *Journal of Chinese Entrepreneurship, 1(3), 248–267.*

Agboli, M. (2007): Gender and Economic Growth Assessment for Ghana 2007, Washington DC: International Finance Corporation and the Ministry for Women and Children Affairs, Ghana

Aladejebi, O. (2020). 21st Century challenges confronting women entrepreneurs in Southwest Nigeria, *Archives of Business Research*, 8(3): 261-280

Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Towards a family embeddedness perspective. Journal of Business Venturing, 18, 573–596.

Al Mamun, A., & Ekpe, I. (2016). Entrepreneurial traits and micro-enterprise performance: A study among women microentrepreneurs in Malaysia. *Development in Practice, 26(2), 193–202.*

Allen, I., A. Elam, N. Langowitz and M. Dean (2008). *Global Entrepreneurship Monitor 2007 Report on Women and Entrepreneurship*, Wellesley, MA: Babson College and London: London Business School.

Álvarez, C., Noguera, M., & Urbano, D. (2012). Determinants of the environment and female entrepreneurship. A quantitative study in Spain. ˜ Industrial Economics, 383, 43–52.

Arasti, Z., Zandi, F., & Talebi, K. (2012). Exploring the effect of individual factors on business failure in Iranian new established small businesses. *International Business Research, 5(4), 2.*
Balakrishnan, B., & Low, F. S. (2016). Learning experience and socio-cultural influences on female engineering students' perspectives on engineering courses and careers. *Minerva, 54(2), 219–239.*

Bauchet, J., Marshall, C., Thomas, J., and Yalouris, A. (2011), "Latest Findings from Randomized Evaluations of Microfinance", Financial Access Initiative, Innovations for Poverty Action, and Abdul Latif Jameel Poverty Action Lab. Forum 2. Washington, D.C.: CGAP

Baughn, C. C., Chua, B., & Neupert, K. E. (2006). The normative context for women's participation in entrepreneurship: A multicountry study. *Entrepreneurship Theory & Practice*, 30, 687–708

Berner, E./G. M. Gomez/P. Knorringa (2008): Helping a large number of people become a little less poor: the logic of survival entrepreneurs, UNU WIDER project workshop in Entrepreneurship and Economic Development, Helsinki, 21-23 August 2008

Bruhn, M. and Love. I. (2014), The Real Impact of Improved Access to Finance: Evidence from Mexico, *Journal of Finance*, 69 (3): 1347-1376.

Bruni, A., Gherardi, S., & Poggio, B. (2004). Entrepreneur-mentality, gender and the study of women entrepreneurs. *Journal of Organizational Change Management*, 17, 256–268

Brush, C., De Bruin, A., & Welter, F. (2009). A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1, 8–24
Costa, R. and B. Rijkers (2011). Gender and rural non-farm entrepreneurship, background paper for World Bank's World Development Report 2012.

Chuluunbaatar, E., Ottavia, D. B. L., & Kung, S. F. (2011). The entrepreneurial start-up process: The role of social capital and the social economic condition, *Asian Academy of Management Journal, 16(1), 43–71.*

Dabic, M., Daim, T., Bayraktaroglu, E., Novak, I., & Basic, M. (2012). Exploring gender differences in attitudes of university students towards entrepreneurship: An international survey. *International Journal of Gender and Entrepreneurship, 4(3), 316–336*.

Danso, A., Adomako, S., Damoah, J. O., & Uddin, M. (2016). Risk-taking propensity, managerial network ties and firm performance in an emerging economy. *The Journal of Entrepreneurship, 25(2), 155–183.*

Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being, *Journal of Economic Psychology, 29(1), 94–122.*

Edwards, L. and E. Field-Hendrey (2002). Home-based Work and Women's Labor Force Decisions, *Journal of Labor Economics 20(1), 170 – 200.*

Ehman, M. O., Bao, Z., Stiving, S. O., Kasam, M., Lanners, D., Peterson, T., & McGee, K. P. (2017). Automated low-contrast pattern recognition algorithm for magnetic resonance image quality assessment, *Medical Physics, 44(8), 4009–4024.*

Farrukh, M., Alzubi, Y., Shahzad, I.A., Waheed, A. and Kanwal, N. (2018). Entrepreneurial intentions: the role of personality traits in perspective of theory of planned behaviour, Asia *Pacific Journal of Innovation and Entrepreneurship, Vol. 12 No. 3, pp. 399-414*

Fielden, S., & Davidson, M.J. (2010). *Why women enter into small business ownership*, International handbook of women and small business entrepreneurship, Edgar Elgar: MA, USA.

Future of Business Survey (2018). Female vs male entrepreneurs in Nigeria, *Organisation for Economic Cooperation and Development (OECD),* Available Online At: https://www.oecd.org/sdd/business-stats/FBS-Nigeria.pdf

Halkias, D., Nwajiuba, C., Harkiolakis, N. & Caracatsanis, S.M. (2011). Challenges facing women
entrepreneurs in Nigeria, *Management Research Review*, 34(2): 221-235. https://doi.org/10.1108/01409171111102821

Hassan, K., & Yusof, R. (2015). Women in economic and social transformation era: Issue and challenges. *UUM Press Journal of Eastern Europe, 14(1), 1–21*.
International Labor Organization (ILO). 2002. Decent Work and The Informal Economy. International Labour Conference, 90th Session. Geneva.

Jennings, J. E., & Brush, C. G. (2013). Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature? *Academy of Management Annals, 7(1): 663-715*.

Karlan, D. and Zinman, J. (2011). Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation, *Science: Vol. 332. 1278-1284*

Kelley, D., C. Brush, P. Greene and Y. Litovsky (2011). *Global Entrepreneurship Monitor 2010 Women's Report*, Babson College, Babson Park, MA, USA, http://www.gemconsortium.org

Kephart, P. and Schumacher, L. (2005). Has the glass ceiling cracked? An exploration of women entrepreneurship. *Journal of leadership and Organizational Studies. Vol. 12, No. 1, pp. 1-15*

Khan, I. (2014). Female Entrepreneurship and the Women Chamber of Commerce and Industry: Economic Emancipation and Clout for Pakistani Women. *Journal of Women's Entrepreneurship and Education, (1-2), 60–91.*

Kuenyehia, A./E. Ofei-Aboagye (1998): Family Law in Ghana and its implications for women, in: A. Kuenyehia (ed.), Women and Law in West Africa, Legon, Ghana: Human Rights Study Centre, Faculty of Law, University of Ghana

Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory & Practice, 31, 341–364.*

Lawan, U. (2017). Female entrepreneurship in Nigeria: An investigation, *PhD Thesis, Robert*

Gordon University, Available Online At: https://rgu-repository.worktribe.com/output/248914/female-entrepreneurship-in-nigeria-an-investigation
Lenoir, René. 1974/1989. *The Excluded:* Un Francais sur Dix. Paris: Editions of Threshold.

Lindvert, M., Patel, P. C., & Wincent, J. (2017). Struggling with social capital: Pakistani women micro entrepreneurs' challenges in acquiring resources, *Entrepreneurship and Regional Development, 29(7-8), 759–790.*

*Marlow, S. (*2002). Regulating Labour Management in Small Firms. Human Resource Management Journal, 12(3): 25 – 43.

Mehtap, S., Pellegrini, M. M., Caputo, A., & Welsh, D. H. (2017). Entrepreneurial intentions of young women in the Arab world: Socio-cultural and educational barriers, *International Journal of Entrepreneurial Behavior & Research, 23(6), 880–902.*

Miliband, D. (2006). *Social exclusion: The next steps forward*, London: ODPM.

Mincer J (1985). Intercountry comparisons of labor force trends and of related developments: an overview. *Journal of Labour Economics, 3(1):1–32.*

Modarresi, M., Arasti, Z., Talebi, K., & Farasatkhah, M. (2016). Women's entrepreneurship in Iran: How are women owning and managing home-based businesses motivated to grow? *International Journal of Gender and Entrepreneurship, 8(4), 446–470.*

Moloi, K. C., & Nkhahle-Rapita, M. A. (2014). The impact of fashion entrepreneurs' traits on the success of fashion businesses in the Gauteng Province in South Africa. *Mediterranean Journal of Social Sciences, 5(4), 78.*

Mondal, P., Ghosh, A., & Das, S. S. (2013). Relationship between anxiety and achievement motivation of chess players. *Physical Education, 3, 443–444.*

Mordi, C., Simpson, R., Singh, S., and Okafor, C. (2010). The role of cultural values in understanding the challenges faced by female entrepreneurs in Nigeria. Gender in Management: An International Journal. Vol. 25, No. 1, pp. 5-21

Nasimiyu, B. (2019). Nigeria has exceptionally high percentage of female entrepreneurs, says report, *Technology Mirror,* Dec. 18th, Available Online At: https://technologymirror.com.ng/nigeria-has-exceptionally-high-percentage-of-female-entrepreneurs-says-report/

Nearchou-Ellinas and Kountouris, I.O. (2004). Women entrepreneurs in Cyprus: a new dynamic in Cyprus economy. Women in Management Review. Vol. 19 No. 6, pp. 325-332.

Noguera, M., Alvarez, C., Merigó, J. M., & Urbano, D. (2015). Determinants of female entrepreneurship in Spain: an institutional approach. *Computational and Mathematical Organization Theory, 21(4): 341-355.*

Nurwahida, F. (2007). Relationship between psychological characteristics and entrepreneurial success: A study of woman Entrepreneurs in Malaysia Doctoral dissertation, Universiti Utara Malaysia.

OECD (2018). Strengthening social inclusion through inclusive entrepreneurship, Parallel session 5, SME Ministerial Conference, 22-23 February 2018 Mexico City

OECD (Organization for Economic Co-operation and Development) (2002). OECD employment outlook, July 2002. OECD, Paris

Omwenga, J. Q., Mukulu, E., & Kanali, C. (2013). Towards improving the performance of women entrepreneurs in small and medium enterprises in Nairobi County, Kenya: Policy recommendations, *International Journal of Business and Social Science, 4(9), 312–316.*

Parker, S. (2009). *The Economics of Entrepreneurship*, Chapter 6. Cambridge: Cambridge University Press.

Poggesi, S., Mari, M., & De Vita, L. (2016). What's new in female entrepreneurship research? Answers from the literature, *International Entrepreneurship and Management Journal, 12(3), 735–764.*

Radzi, K. M., Nor, M. N. M., & Ali, S. M. (2017). The impact of internal factors on small business success: A case of small enterprises under the FELDA scheme. *Asian Academy of Management Journal, 22(1), 27.*

Rasheed, A. (2001). Passive hypervelocity boundary layer control using an acoustically absorptive surface (Doctoral dissertation, California Institute of Technology).

Rehman, S., & Azam Roomi, M. (2012). Gender and work-life balance: A phenomenological study of women entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development, 19(2), 209–228.*

Rodríguez, M. J., & Santos, F. J. (2008). The entrepreneurial activity of women and the business creation process. *Commercial Information Espanola, 841, 117–134.*

Rodríguez-Díaz, R., Jiménez, R., & Rebollo-Catalán, A. (2014). Entrepreneurship strategies and emotions of businesswomen: innovative proposals in the Andalusian economic context. *Proceedings of the XI Spanish Congress of Sociology, 1, 1523–1532*

Rogerson, C. M. (1996): Urban Poverty and the informal economy in South Africa's economic heartland, *Environment and Urbanization 8:1, 167-79*

Roomi, M. A., & Parrott, G. (2008a). Barriers to development and progression of women entrepreneurs in Pakistan, *The Journal of Entrepreneurship, 17(1), 59–72.*

Roomi, M. A., & Parrott, G. (2008b). Barriers to development and progression of women entrepreneurs in Pakistan, *The Journal of Entrepreneurship, 17(1), 59–72*

Roomi, M. A., Rehman, S., & Henry, C. (2018). Exploring the normative context for women's entrepreneurship in Pakistan: A critical analysis. *International Journal of Gender and Entrepreneurship, 10(2), 158–180.*

Ruiz, J., Camelo, M. C., & Coduras, A. (2012b). Woman and entrepreneurial challenge in Spain: Determining characteristics, *Industrial Economics, 383, 13–22.*

Saleem, M. A. (2017). The impact of socio-economic factors on small business success. Geografia - *Malaysian Journal of Society and Space, 8(1), 24–29.*

Sen, Amartya (2000). Social exclusion: Concept, application, and scrutiny, Social Development Papers No. 1, *Asian Development Bank, Publication Stock No. 120299.*

Trihopoulou, A., Sarri, K.K. (1997). Characteristics and needs of new female business owners, research for the Ergani Center, Thessaloniki.

Twibell, R. S., Siela, D., Riwitis, C., Wheatley, J., Riegle, T., Bousman, D., … Johnson, D. (2008). Nurses' perceptions of their self-confidence and the benefits and risks of family presence during resuscitation. *American Journal of Critical Care, 17(2), 101–111*.

Unger RK, Crawford M (1992). Women and gender: a feminist psychology. McGraw-Hill, New York

Viinikainen, J., Heineck, G., Böckerman, P., Hintsanen, M., Raitakari, O., & Pehkonen, J. (2017). Born entrepreneurs? Adolescents' personality characteristics and entrepreneurship in adulthood, *Journal of Business Venturing Insights, 8, 9–12*

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Benturing, 20(1), 71–91*

Wube, M. C. (2010). Factors affecting the performance of women entrepreneurs in micro and small enterprises. Retrieved May, 18, 2021.

Ypeij, A. (2000). Producing against Poverty Female and Male Micro-entrepreneurs in Lima, Peru. Amsterdam, Netherlands: Amsterdam University Press.

Zellweger, T.M., R.S. Nason, M. Nordqvist and C. Brush (2011). Why Do Family Firms Strive for Nonfinancial Goals? An Organizational Identity Perspective. Entrepreneurship, *Theory and Practice, May 2011: 1 -. 20*