

# Effect of Female Entrepreneurial Experience on Start-Ups of Educational Institutions: An Empirical Study of North-Central Nigeria

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*Abstract:* - This study evinced the cruciality of female entrepreneurial experience as a gainful propeller of start-up educational institutions in North-Central Nigeria. The focal aim of this study is to ascertain the effect of female entrepreneurial experience on start-ups specifically in the educational sector, which over the years recorded a tremendous influx of female entrepreneurs. A descriptive research design was adopted as the framework for this study and the population of the study comprised 43,470 female educators within the North-Central region of Nigeria. The Cochran sample size determination technique was used to obtain the sample size of 385 respondents. Bowley's allocation formula was adopted to determine the sample size of each North-Central state while simple random and purposive sampling was used to select participants. The questionnaires were structured in a 5-point Likert scale as a validity and reliability test was conducted to ensure their credibility. Data retrieved were analyzed using descriptive and inferential statistics via the aid of the Statistical Package for Social Sciences (SPSS) version 25 statistical tool. The results of the regression analysis validated the data at a 0.05 significance level. The findings revealed that socio-cultural expectations, exceptional economic support, social networking, innovation, and self-efficacy have a significant effect on the growth of educational institutions in North-Central Nigeria. Hence the study concludes that female entrepreneurial experience adversely affects the growth of educational institutions and start-ups in North-Central Nigeria. The study recommends that good government policies geared towards equal support of female entrepreneurs as endorsed by the liberal view of the feminist-based entrepreneurship theory.

*Key-words:* Entrepreneurial Experience, Start-ups, Educational Institutions, Nigeria, Female Entrepreneur, Female Entrepreneurial Experience.

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## 1 Introduction

Currently, emerging literature has unequivocally acknowledged female entrepreneurship as the fastest-growing category of entrepreneurship globally, [1]. In [2] a report extracted from 59 countries' economies, disclose that the global Total Entrepreneurial Activity (TEA) was 10.2 % for women and 3.4 % for men. Also, out of scrutinized start-ups across 59 countries, 6.2 % are possessed by women while men retained 9.5 %. However, the sub-Saharan African (SSA) region houses five nations (Uganda, Ghana, Botswana, Malawi, and Angola ranked 1st, 2nd, 3rd, 7th, and 9th respectively) among the top-10 nations with necessity-driven women-led businesses globally unlike opportunity-driven women-led businesses prevalent in high-income economies, [2]. Nigeria is in 43rd position

despite being the most populated in Africa with more than half of its population classified as females, [2]. The Nigerian entrepreneurship industry is fragmented into micro, small and medium enterprises (acronymized as MSMEs). In [3] the authors validated by the recent Price water house Coopers (PWC)'s MSME According the Survey in [68], the industry accounts for more than 90 % of the business, 80 % of total employment jobs, and the sector formally contributes 50 % to the nation's income (gross domestic product). The foregoing statistics underscore the strategic importance of this sector to Nigeria's overall growth, through job creation, poverty reduction, and improving the standard of living among others. However, notwithstanding the sector's unrivalled importance, the experiences of sector players have continued to be shaped by certain issues

continue, which to a large extent determine the overall industrial competitiveness.

Besides the fact that the industry remains largely male-dominated with 77 % and females 23 % , [68], different entrepreneurial studies have variously identified prevailing socio-cultural expectations, special economic support, social networking, risk-taking propensity, innovativeness, and self-efficacy as factors shaping the experiences of the sector players. Although these factors affect the players (particularly, male and female) separately, [4], however, the preponderance of mainstream entrepreneurship literature pays less attention to female entrepreneurial experience despite the growing female population and the positive trajectory of female entrepreneurs, nationally, continental, and globally, [3]. Nevertheless, inspecting the connection between female entrepreneurship experiences cum start-ups stands relevant for a sturdy and all-inclusive economic policy.

Socio-culturally, different investigations additionally show that gender-role generalization is a key factor in women's entrepreneurial activity, [5], [6]. Sexual orientation might be utilized as a premise for generalizing with regard to business-goal, [7]. Mostly, researchers contend that the picture ascribed to business people is masculine. Throughout the long term, the business has been characteristically emphatically connected with manly attributes and contrarily connected with ladylike ones, [8], [4]. Therefore, the easiness of special support for female entrepreneurs in Nigeria is nearly meager asides from the prevalent allocation to entrepreneurs in Nigeria. The female constitutes about 48 % of the Nigerian workforce despite having to juggle work with family and care responsibilities, [3]. Notwithstanding these, [9] remarked that being a female entrepreneur attracts limited benefits from the government. They are left to compete with their male entrepreneur who is more culturally, societally, and economically supported due to the gendered nature of Nigeria, [10], [11], [12].

Furthermore, researchers stress the significance of social networking to invigorate businesses. However, social networks are mostly gender-oriented [13], [14], [15], [16]. In actuality, some researchers, [12], found that women do not utilize their network contacts successfully like men. Observably, there is long-standing proof that women-led business does not actively partake in the networks that offer such help for their male partners. [17] noted that this

is caused by the absence of individual courage, uneasiness about separation, and perceived absence of ability compared with male individuals including concern about time and efforts needed to advance with networks.

Entrepreneurship involves risk. This is why entrepreneurs are generally characterized as risk-takers. However, the level of entrepreneurial risks, or the risk-taking ability of each entrepreneur differs especially at the gender level, [18], [19]. Nevertheless, attitude toward risk could influence entrepreneurs' decisions to access business support. A growing number of studies examine gender differences in attitudes toward risk, and results vary depending on the context. For instance, in the context of physical and health safety, [20] showed that women are more risk-averse than men while, in financial decisions, the effect of gender appears more mixed, [21]. This higher risk aversion is also likely to affect women's access to credit, [22].

Also, entrepreneurs are characteristically regarded as highly innovative people, [23], [24]. This unique feature primarily defines who an entrepreneur is, and the chances of surviving the turbulent business environment. However, women-owned businesses have been regarded to be less innovative, unlike their male counterparts and this partly accounts for the reason they have mostly been limited to micro-businesses, [25]. Finally, successful entrepreneurial efforts have been closely linked with self-efficacy. Preponderance entrepreneurial studies agreed that female entrepreneurs suffer from low self-esteem, and lack of confidence in their entrepreneurial capabilities, [26], [27], [28].

In view of the foregoing apparent female entrepreneurial experience, coupled with the sparse study devoted to x-ray their effect on start-ups in Nigeria, based on published studies as at the time of conducting this research, this study is therefore motivated to fill the vacuum by examining how they drive female start-ups, particularly in the educational sector, which has, since the last decade, been recording more female entrepreneurial presence, [67]. Consequently, this study evaluates the effect of female entrepreneurial experience on educational institutions start-ups in North-Central Nigeria.

This study, no doubt has theoretical, practical, and methodological contributions to the Female entrepreneurial experience. Theoretically, the adopted liberal view of the feminist-based theory which stresses the need for the provision of

equal privileges and opportunities between male and female entrepreneurs, without bias and sentiments of limited performance. Practically, this study adds another cap to its unique contribution to the female entrepreneurship field in Nigeria. This is because the field of educational institutions in Nigeria is still largely male-dominated. Successive governments have endeavoured to boost entrepreneurship in Nigeria, having recognized its indispensability to overall economic development. Although empowering women for entrepreneurship purposes is an activity supported by governments in view of the fact that they are nation-builders, however, in practice, almost no serious attention is given to x-ray the female entrepreneurial experience, [13].

Methodologically, there are contributions made by this study to advance the field of female entrepreneurship in Nigeria. Although there are notable scholarly attempts made to unravel the challenges facing women entrepreneurs, however, none of these studies have attempted to be broad-based in their methodological structure. In other words, virtually all these studies focused on each specific challenge (like finance, education, infrastructural facilities) aspect of women's entrepreneurship and are all states-specific, [26]. However, this study employed a cross-state methodology by focusing on the seven states of the north central region of Nigeria and focused on various popular measures (sociocultural, special economic supports, social networking, risk-taking propensity, innovation, and self-efficacy) of the female entrepreneurship experience, and even introduced government entrepreneurship policies (as control variable), in an attempt to examine their influence on growth start-ups of educational institutions in North-Central, Nigeria.

The remaining segments of this are allotted as follows: The first constitutes the literature review, discussions on Educational Institutions in Nigeria, Women Entrepreneurs in Northern Nigeria, theoretical framework, and formulated hypotheses. The second aspect showcases the methodology and model specification while the third and fourth section reveals the results and conclusion respectively.

## 2 Literature Review

Decipherable scholarly works have been initiatively introduced on female entrepreneurial undertakings in Nigeria for decades. For instance the authors in [29]

ferreted out female entrepreneurs' financial obtainability to business start-ups and growth using structured questionnaires disseminated to 132 female-owned businesses. Descriptive statistics results divulged that the widespread presence of female entrepreneurs is confronted by financial containments, low self-esteem, and gender preconception reigned over by tribal and cultural standards which negatively struck business start-ups and growth. Thus, the government is espoused to economically invigorate women to withstand sociocultural setbacks and initiate business start-ups. Similarly, [30], assessed the contributory effect of women-owned SMEs on socioeconomic development in Ogun state using 150 structured questionnaires. Data investigation was executed using simple frequency tables and regression analysis. Result delineated that female-owned SMEs have a far-reaching influence on poverty (socio-economic proxy). Thus, the government is encouraged to back up female entrepreneurs via a wide-ranging propitious business environment. Using a similar methodology, in [31] the authors found that poor finance, low education, high poverty and interest rates, low mobility, family responsibilities, fierce competition, and low risk-bearing ratio due to family pressure affect female entrepreneurs.

On the other hand the authors in [32] evaluated factors that motivate women to be entrepreneurial in Nigeria using 200 CBN-trained women entrepreneurs drawn from its Entrepreneurship Development Centre. The data were scrutinized by deploying descriptive statistics. The findings divulged that economic liberty is the propelling element of women entrepreneurs. It was ratified that the government should make available an advantageous environment that supports and motivates women entrepreneurs. A similar result was reported by [33], [34].

The authors in [35] investigated women's entrepreneurial contribution to entrepreneurship development in Nigeria using four cooperative societies in Enugu State. Using 182 questionnaires and the Pearson chi-square statistical tool, results disclosed that economic liberty and self-accomplishment are stimulating factors for female entrepreneurship. More so, it was re-counted that some government guidelines and finance negatively affect women's entrepreneurial engagement (employment and poverty mitigation). However, NGOs, the private sector, and the

government opted to amplify enabling platforms for business-minded women.

In the same vein, the article [36] investigated the performance of informal women entrepreneurs in Enugu state, south-east using data obtained from 432 self-designed and administered questionnaires to selected women entrepreneurs in Enugu. Data analyses were done using descriptive and simple linear regression techniques. Findings revealed that the sustenance of informal women entrepreneurs is entirely on agriculture and allied activities. As economic operators, their operations were characterized by poor resource situations orchestrated by capital inadequacy, which culminated in the development of informal women's cooperative and micro-credit societies. According to other findings made by [36], NGOs are still the major financial backbone of informal women's cooperatives. The further quantitative result indicated that credit repaid is positive and statistically significant with the disbursed credits. The regression result shows that repayment depends on savings that the women's group generated.

Using a survey method (804 structured questionnaires), the study in [37] assessed women entrepreneurs' accessibility to growth capital and socio-economic development in Sokoto state. Analysis was done using logistic regression and findings show that a significant affiliation exists between socio-cultural constraints and the incapability of women entrepreneurs to secure growth capital in Sokoto State. It was further uncovered that women entrepreneurs found it problematic to secure capital via formal financing institutions due to strict acquiescence with collateral precondition by such institutions and there is a high degree of semi-illiteracy, which impaired their record ability.

Interrogating how women's entrepreneurship affects sustainable economic development, the study in [38] distributed 680 structured questionnaires to the states in the South-Western geo-political zones of Nigeria. Personal interview was also granted. Data examination was accomplished using simple %age, mean, chi-square, and linear Regression. The results uncovered that female entrepreneurial inclusion has a tremendous mark on sustainable economic development. The results invariably stipulated that a large number of women have been strengthened via voting in elections, having accessibility to education, as they thrived from empowerment coaching.

Additionally, results delineated that women's entrepreneurial inclusion largely influences economic development. Results also uncovered that deficiency to secure funds, work and home skirmishes as well as low ethical sustenance from family members are the foremost issues confronting female entrepreneurs in Nigeria. There is therefore no gainsaying that women's entrepreneurship involvement remains a key driver of sustainable economic development.

In [39] the authors distributed 117 questionnaires to women entrepreneurs in Enugu. Findings from the Step-wise multiple regressions reveal that self-efficacy is statistically significant. Also, the three dimensions of entrepreneurial goal orientation explicitly state; learning, prove (performance-prove), and avoid (performance-avoid) were statistically significant as female involvement in entrepreneurship. This implies that high self-efficacy women are more likely to be entrepreneurs. Thus, tactics to build high self-efficacy amongst women are desirable to urge more women to become entrepreneurs to augment national or grass-root development.

Furthermore, the authors in [40] scrutinized the effect of female entrepreneurs' experience on business survival in Ogun State deploying a questionnaire to 100 female entrepreneurs to collate data. The results retrieved from simple linear regression unveiled that gender disparity, bereft family support, and socio-cultural standard negatively shake female entrepreneur business survival. Consequently, it was put forward that female entrepreneurs should be empowered with effective support platforms as well as invigorating environments to advance female business survivability frequency.

Similarly, the authors in [41] assessed women's entrepreneurship attributes, using 236 questionnaires distributed to selected Kano women entrepreneurs (mostly home-based enterprises) using a multistage sampling method. Analysis was done using logit regression. Findings showed that marital status, educational level, income generating level in formal business, level of equipment at the individual disposal, business income level, number of people employed, business flexitime, and social networking supports were significant drivers of entrepreneurship characteristics. However, the age of the entrepreneurs including the number of dependents that an entrepreneur has insignificant effects. The authors advised the government and relevant authorities to initiate policy measures to promote and strengthen

women's enterprises, particularly home-based enterprises.

However, the authors in [42] assessed entrepreneurial competencies among women farmers in Nasarawa State. Expanding structured interviews and descriptive statistics, data was recouped from 165 women from six local governments. The findings laid bare that meager information, scarce infrastructural amenities, and start-up capital deficit, were inhibitive determinants of women's entrepreneurial development. However, the scholar postulated that governments are to establish beneficent amenities and an encouraging business atmosphere to expand women's entrepreneurship development. A similar result was put forward by [24] on entrepreneurial innovativeness and women entrepreneurs' performance.

The scholars in [43] investigated how human and financial capital influence women entrepreneurs' performance in Small and Medium Enterprises (SMEs) using quantitative methodology. Thus, 630 questionnaires were distributed to women entrepreneurs in Ekiti state. Regression results show that on the negative value, human capital significantly determines business performance while financial capital has a significant positive effect on business performance. This implies that human and financial capital critically determines women's entrepreneurial performance. Consequently, the government and relevant authorities were advised to provide human and financial capital assistance to female-run businesses.

Similarly, the authors in [44] examined women entrepreneurs in a patriarchal society using sociocultural perceptions of women in a beer parlor business in Ibadan, Nigeria by distributing 375 copies of questionnaires aside from interviews. Statistical analyses were done using descriptive techniques and hypotheses were tested using cross-tabs, chi-square, and Pearson Correlation. Findings show that there is no significant affiliation between respondents' age, educational level, marital status as well as religious connection and dictum towards women in the beer parlor business. Also, it was found that most women in the beer parlor business were perceived negatively (viewed as prostitutes and husband-snatchers) by most female respondents compared to the majority of the male respondents who perceived them as business women. The findings further revealed that clerics of the two major religions in the country have different perceptions

about women in the beer parlor business. This, therefore, affects the performance of women-led businesses in this line of trade. Therefore, more sensitization and awareness campaigns were suggested to the government to educate religious leaders on the need for women to start-up businesses. However, the authors in [24] studied the relationship between entrepreneurial networking and women entrepreneurs' contribution to employment creation in Rivers State using primary data collection methods. To this end, 181 questionnaires were distributed. Descriptive statistics and Spearman's rank correlation were used to analyze the data. It was found that entrepreneurial networking significantly relates to women entrepreneurs' enrolment. Consequently, it was clinched that entrepreneurial networking positively and significantly influences women entrepreneurs' backing to employment creation.

In another dimension, the researchers in [45] assessed determinants of credit accessibility among entrepreneurs. Structured questionnaires were distributed to 185 entrepreneurs within the Kastina metropolis. Data obtained were statistically analyzed using a multinomial logistic model. Findings showed that entrepreneurial experience year, number of active accounts that an entrepreneur has flexible financial products, financial products information availability, record keeping, and business proposal determine entrepreneurial credit accessibility. Also, the authors discovered that both borrowing cost including collateral security availability determines entrepreneurial credit accessibility. Findings indicate that informal sources largely constitute entrepreneurs' source of initial capital. Consequently, they suggested the need for a conducive operational environment, including the need for designated agencies to offer more financial training for entrepreneurs to have easier financial services accessibility. In addition to these, the bottlenecks/cumbersomeness associated with the credit process and transaction costs for entrepreneurs is advised to be removed or reduced drastically.

Also, the scholars, in [46], studied the specific challenges faced by women entrepreneurs. Data were generated from 720 structured questionnaires distributed to women businesses across the capital of the six South-western states in Nigeria. Specifically, data were collected from 502 structured questionnaires which are duly filled and returned. Descriptive analysis was employed to interpret the

data and findings indicate that inadequate training and shortage of accessibility of start-up capital including weak familial support emerged as the topmost challenges facing female-run businesses across the Southwest region. The author strongly suggests the need for effective policy measures to address women entrepreneurs' challenges. In [46] the authors studied only addressed two of the six variables focused on in this study, besides, the study concentrated only on the south-western states in Nigeria, whereas this study focused on north-central, Nigeria.

Specifically, in [47] they assessed the motivational patterns of women entrepreneurs in SMEs in Nigeria using 376 questionnaires. Data analysis was done by exhausting simple statistical techniques (tables and %ages) and descriptive statistics. Findings show that the personal peculiarities of women entrepreneurs have an impact on their performance. It also shows that funds obtainability, absence of owned assets (land), indurate competition, derisory access to training, reachability to raw materials, and access to technology were the chief economic features that impede the performance of women in business. More so, the study established that social admissibility, dissonant gender roles, and inter-relation with people were the core social factors that impede entrepreneurs.

Furthermore, the authors in [48] questioned how entrepreneurship development influences women graduates. 190 copies of structured questionnaires were administered to women selected from the National Centre for Women Development in Abuja. Descriptive analysis was employed to interpret the data. It was discovered that different skills training was received by women. Also, it was found that the knowledge gained by women empowered them to run their businesses which ignited their business's sustainability. The study, however, found weak financial support from the government for women's businesses. Thus, it was advised that the government should step-up entrepreneurial support for women so as to enhance their entrepreneurial activities. This study largely focused on training and the usefulness of the knowledge gained from training. Clearly, the study did not address the women's entrepreneurial variables that formed the focus of this study.

Empirically, the scholars in [49] investigated moderating effect of competence on women entrepreneurs' assertiveness and their social performance. 103 copies of structured questionnaires

were distributed to women entrepreneurs were drawn from the Nigerian Association of Small-Scale Industrialists. Simple regression results show that women's assertiveness strongly impacts social responsibility. Also, assertiveness (focus, confidence, and flexibility) and competence have a significant positive effect on social responsibility. Therefore, the author advised women entrepreneurs to step up their competence to improve their social performance. They also advised the government to show more support for women entrepreneurs through good design supportive policies. The study in [49] partly addressed one (that is self-efficacy) of the six variables that are the focus of this study.

In [50] x-rayed issues limiting female entrepreneurs' financial accessibility with the fundamental target of accomplishing long-lasting sustainable access. Data were collected from 230 female entrepreneurs across micro, small and medium enterprises that patronize microfinance institutions. Specific focus was given to variables like savings, loan conditions, business enrolment as well as the magnitude of bank accounts owned by the entrepreneurs. Four models assessing the facets of access until further notice and what's to come were assessed with customary least squares relapse.

The ordinary least square regression was used to determine the four models specified to estimate the access determinants. Findings reveal that simpler advance conditions are needed to help female entrepreneurs to accomplish maintainable acknowledge access, as it turned out essentially detrimental in two of the models while mandatory reserve funds stores ought to be less underlined. This suggests the need for more investment in women-run businesses to ensure sustainable growth. Credit access is improved likewise by the standard utilization of the organizations for monetary exchanges. Also, education has a strong positive effect on savings. This suggests that continuous education is important for women entrepreneurs.

A look at the Educational Institutions in Nigeria Nigeria's education system is decomposed into three subdivisions: basic education (nine years), post-basic/senior secondary education (three years), and tertiary education (four to six years, depending on the program of study). Basic education covers 9years of formal (compulsory) schooling divided into six years of elementary and three years of junior secondary education (National Policy on Education, 2014). Post-basic education comprises three years of senior

secondary education. At the tertiary level, the classification includes university and non-university sectors with the latter consisting of polytechnics, mono-technic, and colleges of education. The tertiary sector as a whole offers opportunities for undergraduate, graduate, vocational, and technical education. However, in this study, primary and secondary education is the focus. Primary education is the main stage of the country's education system and is viewed as an essential layer. Despite the fact that it is easily proven wrong to say which of primary, secondary, post-secondary, and advanced education sub-systems is the main, no one will differ that primary education is the stage disparaged by a lot of students. Though not all recipients of primary education get to different levels, all recipients of different degrees of education should initially go through primary schools. After the successful completion of primary education, the next educational stage is secondary education for children that want to further their education before proceeding to tertiary education. Essentially, secondary education is aimed at further developing a child since primary education is inadequate for them to obtain proficiency, numeracy, and relational abilities, [51].

Junior secondary stage: This is the initial three years of secondary education. The curriculum at this stage is pre-professional and scholastic in degrees. Pre-professional and non-prevocational subjects make up the curriculum. At this stage, the subjects are English Language, Mathematics, French, and a significant Nigerian language besides Environment, Basic Science, Social Studies, Citizenship Education, and Basic Technology. The pre-professional subjects incorporate Agricultural Science, Business Studies, Home Economics, Local Crafts, Fine Arts, Computer Education, and Music while the non-prevocational subjects incorporate Religious Knowledge, Physical and Health Education, and Arabic, [52]. Confirmation of successful completion of the junior secondary stage is determined by the student's performance during the Continuous Assessment (CA) including the Junior School Certificate Examination (JSCE) result, composed by State Ministries of Education or Federal Ministry of Education (whenever possessed by the Federal Government). A child with the least number of passes in the subjects in the curriculum including English Language and Mathematics (changes across the States) meets all requirements to continue to the Senior Secondary

(SS) level where he/she will be prepared for an extra three years, [53].

Senior secondary phase: This is the following three years after the junior secondary phase. It has a more extensive degree than the Junior Secondary (JS) phase and targets widening the information and abilities of a student beyond the JS level and hence prepares him/her for advanced education. It is scholastic and professional in degree, [54]. A student has to offer a minimum of seven and a maximum of eight subjects, containing the six centre subjects: English Language, Mathematics, a significant Nigerian language, one science, workmanship, and a professional subject. A couple of different electives are to be chosen from art, science, specialized, social science, and professional subjects. Confirmation of successful completion depends upon the student's performance at Continuous Assessment (CA) and Senior School Certificate Examination (SSCE), composed by the West African Examinations Council (WAEC) and National Examinations Council (NECO). A student must obtain at least five credits at two sittings including English Language and Mathematics before advancing to the tertiary level, [55].

In Nigeria, secondary education targets setting up a person for helpful living within the larger society including advanced education, [56]. In particular, it focuses on i) furnishing all primary school leavers with the chance for education of a more significant level independent of sex, societal position, strict or ethnic foundation, ii) offering enhanced curriculum to cook for contrasts in gifts, openings, and future jobs, iii) Providing prepared labor in applied science, innovation, and business at sub-proficient levels, iv) Developing and advancing Nigerian languages, expressions, and culture with regards to the world's social heritage, v) motivating understudies with a craving for personal growth and accomplishment of greatness, vi) cultivating public solidarity with an accentuation on the normal ties that join us in our variety, vii) raising an age of individuals who can have an independent perspective, regard the perspectives and sensations of others, regard the poise of work, appreciate those qualities indicated under our wide public objectives, and live as productive members of society and viii) giving specialized information and professional abilities, fundamental for agrarian, modern, business and economic development, [41], [57], [58].

### **Women Entrepreneurs in Northern Nigeria**

A typical trait of business firms in men-centric social orders is the staggering attitudinal response towards male work. [33] noted that, defining gender roles becomes more unbending in men than in women's social orders (societies). In male-centric social orders, the lines are generally honed and clearly defined regarding roles and how they ought to be carried out. Gender-related issues have suggestions for employee modern relations in firms managing the two genders. Profoundly manly societies on the planet today incorporate Austria and Japan, though Sweden is mostly viewed as a women's activist society, [24]. Most Hausa/Fulani states are male-centric with solid paternalistic propensities, in which men who are the family gatekeepers, ensure the provision of monetary and social security to their women-counterpart, [59]. Functional Islamic scientific categorizations and Hausa social morals necessitate that men and not women are mandated for their family sustenance. Hausa women's role in the formal economic sector remains very insignificant, [60], however, this does not infer that confined women working outside the formal economy do not make significant overall economic contributions, [17].

Gender role socialization in the Hausa community frequently commences at a youthful age; ranging between three to four years, [23]. The cultural comprehension of women's economic role emanates from sociocultural and religious teachings. Occasionally, satisfactorily secured women are reluctant to work in the 'open economy', since female work in a plant, for example, could be viewed as an irregularity. The social and religious necessities of female unobtrusiveness make occupations that include enormous actual afflictions and incessant association with non-family male partners unsatisfactory for women. Islamic and Hausa customary originations of commendable womanhood incorporate humbleness, moodiness and submissiveness, [61].

### **Theoretical Framework**

This study adopts the Feminist-Based Entrepreneurship Theory. Specifically, a liberal feminist is adopted because it stresses the need for equal provision of access to essential entrepreneurial resources for the competitive growth of female-owned entrepreneurs. The liberal feminist theory argues from an essentialist perspective because it

stresses that men and women are basically comparative. Normal reasoning is expected and the two sexes are seen as 'similarly capable'. Cultural rates of women's subjection emerge from discrimination on the basis of socio-cultural impediments, [11]. Consequently, these impediments envelop women from acquiring entrepreneurial experience and access to needed entrepreneurial resources [62]. The proponents of this theory place that women understand their maximum capacity less because they are denied fundamental benefits (such as government entrepreneurship policies) prohibited from useful monetary organizations or due to non competitive jobs, [12], [60].

Normal generalizing practices might institute a critical obstruction for imminent entrepreneurs, for example, young ladies might be deterred from going for scientific or engineering courses at educational institutions, and venture capitalists might reject helping women entrepreneurs, financially. Liberal feminism contends the need to identify and ensure destruction of both legal barriers including the more treacherous discriminatory types. The thought is that women can eradicate these obstructions. They are urged to make a move to redress the awkwardness: to establish 'young ladies' organizations' to match the 'old young men organizations' and also contend with the educational/occupation gap, [63], [64]. Thus, the theory submitted that when these sociocultural disparities are eliminated, both genders can compete. However, the liberalist feminists' view faces criticisms from its other 'sisters' feminists' approaches (socialist feminism and social constructive feminism), [65].

Contrary to the liberal theoretical view of the feminist entrepreneurship theory, the social feminism theoretical view disagrees that men and women entrepreneurs can compete given equality of resources. In other words, social feminism argues that, right from birth; men and women are (viewed) different due to their different exposures (experiences), and this singularly shapes their worldview, [66]. Women's socialization makes alternate viewpoints, objectives, and decisions for them, [67], resulting in different business choices – therefore the rise of 'female' activity areas (like retail, services, etc.). The connection between family and work is demonstrated to mostly affect women. Thus, instead of differentiating their business as distinct from the social world, they view it as being an interconnected arrangement of relations (family,

local area, and business), [46]. Though these do not suggest that women entrepreneurs are less viable than men, however, their entrepreneurial approaches (to innovation, risk-taking propensity, and social networking and self-efficacy) may be less effective than their male counterparts, [68].

Based on the afore-stated reviews, the hypotheses deemed for this study are as follows:

H<sub>1</sub>: Socio-cultural expectations of female entrepreneurs have no significant effect on the growth of educational institution start-ups in North-Central Nigeria.

H<sub>2</sub>: The existence of a special economy for female entrepreneurs has no significant effect on the growth of educational institution start-ups in North-Central Nigeria.

H<sub>3</sub>: Social Networking pattern of female entrepreneurs has no significant effect on the growth of educational institution start-ups in North-Central Nigeria.

H<sub>4</sub>: Risk-taking propensity of female entrepreneurs has no significant effect on the growth of educational institution start-ups in North-Central Nigeria.

H<sub>5</sub>: The innovation of female entrepreneurs has no significant effect on the growth of educational institution start-ups in North-Central Nigeria.

H<sub>6</sub>: The self-efficacy of female entrepreneurs has no significant effect on the growth of educational institution start-ups in North-Central Nigeria.

### 3 Methodology

The study adopted positivist research philosophy because this philosophical position aligns with the use of a scientific paradigm that has a standardized approach to solving social issues. More so, the research design is a fixated descriptive survey of the quantitative approach adopted. This research design was adopted because the study seeks to describe the current phenomenon of female entrepreneurial experience in Nigeria's ecosystem and relates this to the growth of their educational institution start-ups. The study population covers the entire 43,740 female educators within the north-central region of Nigeria (spread across the seven north-central states FCT-3,057, Niger-7,770; Kogi-4,724; Benue-5,122; Plateau-3,137; Kwara-13,745 and Nasarawa-6185). However, a sample size of 385 was adopted using Cochran Formula (1963), a sample size determination technique. Bowley's allocation formula was adopted to determine each north-central

state council's sample size using simple random and purposive sampling was employed to finally select the participants. Structured questionnaires were used to generate data for the study. The questionnaire was a 5-point Likert scale questionnaire divided into three segments, namely, the introduction segment, the demographic profile segment, and the research statements segment. Credibility research instruments were performed using the validity and reliability measures, while validity was done using content, construct, and criterion-related validity and reliability measure was done using internal consistency. Data obtained were subjected to statistical measures. Specifically, this encompasses inferential (aided by correlation and regression) analyses.

#### 3.1 Model Specification

To test for the predictability power of the dependent (growth of educational institutions start-ups) and independent variable (female entrepreneurial experience), the general regression model for this study is:

$$Y_{it} = \delta_0 + \sum \delta_n X_{it} + \varepsilon_{it} \quad (1)$$

Where:

$Y_{it}$  = Dependent variable of female business,  $i$  in time,  $t$ ;

$\delta_0$  = Constant term or intercept of the explanatory variable regression line;

$\delta$  = Regression coefficient of the explanatory variable;

$n$  = serial number of regression coefficient of the explanatory variables in the prediction model;

$X_{it}$  = Independent variable in the estimation model of female business,  $i$  in time,  $t$ ;

$\varepsilon_{it}$  = Error term of female business,  $i$  in time,  $t$  (assumed to have zero (0) mean and independent across time period).

The hypothesized relationship, based on the general regression model expressed above, is functionally expressed as follows:

$$GEIS = f(FEE) \quad (2)$$

Where:

GEIS = Growth of Educational Institution Start-up

FEE = Female Entrepreneur Experience

In its structural form, the functional equation above becomes:

$$SEIS_{it} = \beta_0 + \beta_1 SCE_{it} + \beta_2 SES_{it} + \beta_3 SNW_{it} + \beta_4 RTP_{it} + \beta_5 INV_{it} + \beta_6 SEF_{it} + \beta_7 GEP_{it} + \mu_{it} \quad (3)$$

Where:

SEIS = Size of Educational Institutional Start-Ups  
 SCE = Socio-Cultural Expectations  
 SES = Special Economic Support  
 SNW = Social Network  
 RTP = Risk-Taking Propensity

INV = Innovation  
 SEF = Self-efficacy  
 GEP = Government Entrepreneurship Policies

$f$  = functional relationship  
 $U$  = Stochastic term.  
 $\beta_0$  = Model relationship Intercept.  
 $\beta_1 - \beta_7$  = the coefficients of explanatory variables.

## 4 Results

Correlation result

Table 1. Correlations

		SEIS	SCE	SES	SNW	RTP	INV	SEF	GEP
SEIS	Pearson Correlation	1							
	Sig. (2-tailed)								
	N								
SCE	Pearson Correlation	-.505**	1						
	Sig. (2-tailed)	.000							
	N	379							
SES	Pearson Correlation	.335**	-.106	1					
	Sig. (2-tailed)	.000	.110						
	N	379	379						
SNW	Pearson Correlation	-.866**	.378**	.410**	1				
	Sig. (2-tailed)	.000	.000	.000					
	N	379	379	379					
RTP	Pearson Correlation	-.945**	.592**	.235**	.808**	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
	N	379	379	379	379				
INV	Pearson Correlation	.727**	-.605	.591	.663	.507	1		
	Sig. (2-tailed)	.000	.013	.007	.011	.005			
	N	379	379	379	379	379	379		
SEF	Pearson Correlation	.706**	-.666	.677	.441	.532	.349	1	
	Sig. (2-tailed)	.000	.012	.025	.031	.019	.029		
	N	379	379	379	379	379	379	379	
GEP	Pearson Correlation	.872**	.590**	.205**	.696**	.880**	.772	.404	1
	Sig. (2-tailed)	.000	.000	.002	.000	.000	.008	.022	
	N	379	379	379	379	379	379	379	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: The authors

Table one presents the summary of the correlation statistics between female entrepreneurial experience and the growth of educational institutional start-ups. Based on the table, the correlation between Socio-Cultural Expectation (SCE) and SEIS is -.505 with Sig. value of .000, implying that a strong inverse relationship exists between them, such that an increase in SCE by 50.5 % will lead to a decrease in SEIS by the same value. However, the correlation between Special Economic Supports (SES) and SEIS is .335 with Sig. value of .000, which suggests that a strong direct relationship exists between them, thus,

an increase in SES by 33.5 % will lead to an increase in SEIS by the same value. Contrarily, the correlation between Social Networks (SNW) and SEIS has a value of -.866 with Sig. value of .000, which indicates that a strong inverse relationship exists between them, thus, an increase in SNW by 86.6 % will lead to a decrease in SEIS by the same value. In the same vein, the correlation between Risk-Taking Propensity (RTP) and SEIS is -.945 with Sig. value of .000, implying that a strong inverse relationship exists between them, as a result, an increase in RTP by 94.5 per cent will lead to a decrease in SEIS by

the same value. However, the correlation between Innovation (INV) and SEIS has a value of .727 with Sig. value of .000, which suggests the presence of a strong direct relationship between INV and SEIS, such that an increase in INV by 72.7 per cent will lead to an increase in SEIS by the same value. Similarly, the correlation between Self Efficacy (SEF) and SEIS has a value of .706 with Sig. value of .000, implying the existence of a strong direct relationship between the two proxies, such that an increase in SEF by 72.7 per cent will lead to an increase in SEIS by the same value. Finally, the correlation between Government Entrepreneurship Policies (GEP) and SEIS has a value of .872 with Sig. value of .000, implying that a strong direct relationship exists, thus, an increase in GEP by 87.2 per cent will lead to an increase in SEIS by the same value.

#### 4.1 Regression Result

Table 2. Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 <sup>a</sup>	.727	.701	1.51875
a. Predictors: (Constant), SCE, SES, SNW, RTP, INV, SEF, GEP				
b. Dependent Variable: SEIS				

Source: The authors

Table two is the model summary of the regression result. Specifically, it depicts the relationship between the growth of educational institutional start-ups [(measured by Size of Educational Institutional Start-up (SEIS)] and female entrepreneurial experience [(measured by Socio-Cultural Expectations (SCE), Special Economic Support (SES), Social Network (SE), Risk-Taking Propensity (RTP), Innovation (INV) and Self-efficacy (SEF)] is strong at .778 (or 77.8 %). The implication of this is that a strong connection exists between female entrepreneurial experience measures and the growth

of educational institutional start-ups in Nigeria. This result is supported by previous empirical evidence [33], [39], [42], [40] reports that, depending on the operating environment, the experiences (good or bad) either serve as enablers or resistors to women’s entrepreneurial intention and growth. Also, the variation in the growth of educational institutional start-ups attributed to female entrepreneurial experience is .727 (72.7 %) as shown by the R-Square, and even after degrees of freedom adjustment, the variation still stands at .701 (or 70.1 %) which suggests that female entrepreneurial experience predictors (SCE, SES, SNW, RTP, INV, SEF, and GEP) have high influence on the growth of educational institutional start-ups. The remaining .289 % (or 28.9 %) is caused by other unaccounted variables in the model. This implies that there are other influencing factors (such as economic situation, political stability, infrastructural conditions, and market availability among others) concerning the growth of educational institutional start-ups, aside from female entrepreneurial experience measures considered by this study, though these factors appear to have lower statistical power, judging by the results. In order words, the female entrepreneurial experience measures are good predictors of start-ups’ growth, and can therefore be relied upon for improving start-ups’ growth, especially among women entrepreneurs in Nigeria. The std. the error of estimation of 1.51 is small, suggesting that observed values are not far from the fitted line; implying that there is less variability in responses to the structural statements. Also, it implies that the sample well represents the population. Consequently, the regression model shows that all the explanatory variables have a high influence on the growth of educational institutional start-ups because the coefficient of determination suggests that the regression model perfectly explains the observed data.

Table 3. ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	268.991	6	44.831	9.482	.000 <sup>b</sup>
	Residual	1758.874	372	4.728		
	Total	2027.865	378			
a. Dependent Variable: SEIS						
b. Predictors: (Constant), SCE SES SNW RTP INV SEF GEP						

Source: The authors

Table three is the ANOVA table which depicts the model significance vis-à-vis the overall results. Put differently, the table indicates how significantly accurately the regression model predicts the dependent variable. In other words, it examines the accuracy of the female entrepreneurial experience proxies to account for differences (or variability) in the growth of educational institution start-ups (the response variable). In general, it is another way of ascertaining the overall statistical significance of the model outcome, besides using the standard error of the estimate. Thus, from the table, the F-Change is 9.482.

This value is significant because the significance level is =.000 which is less than five %. This result implies that overall; the regression model is statistically significant, valid, and fit; hence the hypothesis of a significant linear relationship between the predicting and response variables, all taken together, is as a matter validated. The implication of this is that the estimated response variable has an overall goodness-of-fit especially when the significance of the computed F-statistic (9.482) exceeds the general significance value of five %.

Table 4. Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	10.074	.726		13.876	.000
	SCE	-.550	.142	-.332	-3.873	.001
	SES	.571	.131	.328	7.359	.003
	SNW	-.549	.124	-.317	-7.430	.000
	RTP	-.487	.115	-.275	-7.235	.003
	INV	.622	.174	.368	8.089	.011
	SEF	.452	.135	.286	8.144	.008
	GEP	-.533	.109	-.312	-7.890	.002

a. Dependent Variable: SEIS

Source: The authors

Table four presents information about the regression coefficients. Specifically, it depicts the respective coefficient values of each of the measures of the predictors and response variables. This study, it explains the strength of the statistical relationship between female entrepreneurial experience and the growth of educational institutional start-ups in Nigeria. Based on the standardized coefficients beta values, the Sociocultural Expectations (SCE) has a negative value of -.332 with a Sig. value of .001 which implies that SCE negatively and significantly affects the Size of Entrepreneurial Institutional Start-ups (SEIS). Thus, one % increase in SCE, holding other proxies constant will result in a 33.2 per cent decrease in SEIS. However, the Special Economic Supports (SES) has a positive value of .328 with a Sig. value of .003 implying that SES positively and significantly affects the Size of Entrepreneurial Institutional Start-ups (SEIS). Consequently, a %age increase in SES, holding other proxies constant, will result in a 32.8 per cent increase in SEIS.

Furthermore, the Social Network (SNW) has a negative value of -.317 with a Sig. value of .000,

suggesting that SNW negatively and significantly affects the Size of Entrepreneurial Institutional Start-ups (SEIS). Thus, a one per cent increase in SNW, holding other proxies at constant, will result in a 31.7 per cent decrease in SEIS. Similarly, the Risk-Taking Propensity (RTP) has a negative value of -.275 with a Sig. value of .003 which implies that RTP negatively and significantly affects the Size of Entrepreneurial Institutional Start-ups (SEIS). Therefore, a one per cent increase in RTP, holding other measures constant, will result in a 27.52 per cent decrease in SEIS.

However, innovation (INV) has a positive value of .368 with a Sig. value of .011 which implies that INV positively and significantly affects the Size of Entrepreneurial Institutional Start-up (SEIS), such that a %age increase in INV, holding other proxies at constant, will result in a 36.8 per cent increase in SEIS. Similarly, Self-Efficacy (SEF) has a positive value of .286 with a Sig. value of .008 that suggests that SEF positively and significantly affects the Size of Entrepreneurial Institutional Start-ups (SEIS). Thus, a one per cent increase in SEF, holding other

proxies at constant, will result in a 28.6 per cent increase in SEIS. Finally, the Government Entrepreneurship Policies (GEP) has a negative value of -.312, with a Sig. value of .002 which implies that GEP negatively and significantly affects the Size of Entrepreneurial Institutional Start-ups (SEIS). Consequently, a one per cent increase in GEP, holding other proxies at constant, will result in a 31.2 per cent decrease in SEIS.

#### 4.2 Regression Diagnostic

This study performs “collinearity diagnostics” as a means for testing the multi-collinearity of the independent variables. Multi-collinearity is the state of very high inter-correlations among independent variables in an empirical model. Multi-collinearity is detectable using the Variance Inflation Factor (VIF).

Table 5. Variance Inflation Factor (VIF)

Date: 27/06/21 Time: 06:44			
Sample: 0001 0379			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	0.126933	88.78754	NA
SCE	0.005987	99.10305	2.016780
SES	0.010498	92.66777	2.716884
SNW	0.001740	18.23736	1.208195
RTP	0.005732	88.87367	1.673788
INV	0.708947	26.76843	1.094094
SEF	0.400495	37.54453	1.089725
GEP	0.267363	67.56362	1.893783

Source: The authors

Table five above shows that SCE, SES, SNW, RTP, INV, SEF, and GEP has respective Centred VIFs of 2.01, 2.71, 1.20, 1.67, 1.09, 1.08, and 1.89 respectively. Apparently, all the regressors have a VIF which is far less than the 10 prescribed benchmarks. This, therefore, indicates that there is the absence of multi-collinearity among the regressors. Table five shows that all the centered variance inflation factors VIF (which is numerically identical to  $1/(1 - R^2)$ ) are even far less than 30 for one to talk of the severe presence of multi-collinearity. Precisely, all the variables have VIF of less than 10. Thus, the VIF indicates no severe multi-collinearity among the differenced variables. Thus, all the predictors are relevant determinants of the growth of educational institution start-ups in Nigeria.

## 5 Conclusion

First, this study concludes that sociocultural expectation adversely affects the size of educational institution start-ups in Nigeria. This is because women shoulder huge family responsibilities (child birth and nurturing, to house manager among) others. This domain usually leaves no time for them to attend to entrepreneurial demands. Thus, they setup micro or small businesses that do not conflict with family duties. Secondly, this study concludes that special economic support aids the size of women-owned educational institution start-ups in Nigeria. This is because, judging by the theoretic position (Feminists-Based Entrepreneurship Theory), women are not a strong competitors to their male counterparts due to the absence of critical resources that are not available to them. Furthermore, this study concludes that social networking is a key driver of the size of women-run educational institution start-ups in Nigeria. Entrepreneurially, social networking reduces the costs of the transaction, creates business opportunities, and generates knowledge spill-overs that entrepreneurs needed to achieve their entrepreneurial goals. Also, this study concludes that the risk-taking propensity of women entrepreneur affects the size of educational institution start-ups in Nigeria. For a longtime, it has been generally accepted that the field of entrepreneurship is coiled with various risks, and only the high risk-taker can survive and remain competitive in the field. However, women entrepreneurs are not known to be high risk-taker, yet today’s entrepreneurial ecosystem is increasingly getting riskier due to the volatility of operating environments. Furthermore, this study concludes that the innovation capability of women entrepreneur affects the size of educational institution start-ups in Nigeria. Although female-run businesses in Nigeria have been able to launch numerous kinds of innovations (especially product, process, and marketing) into their entrepreneurial fields, all these innovations fall under incremental innovation. Finally, this study concludes that the self-efficacy of women entrepreneur affects the size of educational institution start-ups in Nigeria. Entrepreneurial self-efficacy remains an essential element when evaluating intentions toward start-up businesses. The higher the entrepreneurial self-efficacy the more prepared an entrepreneur is to withstand embedded challenges within the entrepreneurial field.

While this study possesses a unique feature, judging by published studies, it is however conducted within

the north-central region of Nigeria despite the fact that there are female entrepreneurs across the other regions of the country, especially the north-eastern and north-western regions which are more educationally backward than the north-central region. Consequently, this study calls for more similar empirical studies that are dedicated to exploring the female entrepreneurial experience across the northeast and north-western states vis-à-vis the performance of educational institutional start-ups. Furthermore, this study suggests the need for comparative regional studies (such as a northern region versus a southern region) on female entrepreneurial experience and performance of educational institutional start-ups in Nigeria, so as to help in furthering the robustness of this study's findings. Also, this study suggests the need to replicate this study in other start-up sectors, like the field of science and technology, because not many women entrepreneurs are known to exist within these sectors.

#### References:

- [1] Elam, A. B., Brush, C. G., Greene, P. G., Baumer, B., Dean, M., & Heavlow, R. (2019). Global entrepreneurship monitor 2018/2019 women's entrepreneurship report. *Babson College: Smith College and the Global Entrepreneurship Research Association*.
- [2] Global Entrepreneurship Monitor (2019). 2018/2019 Women's Entrepreneurship Report. Retrieved (05/22/2020) from <https://www.babson.edu/media/babson/assets/blank-center/GEM-2018-2019-Women%27s-Report.pdf>.
- [3] World Bank Group. (2019). *Profiting from Parity: Unlocking the Potential of Women's Business in Africa*. World Bank.
- [4] Basahal, A. S. (2020). Female entrepreneurship in Saudi Arabia: Motivations and barriers. *International Journal of Human Potentials Management*, 2(2), 1-17.
- [5] Vadavi, S. S. (2017). Women entrepreneurship development in India. *Advances in Business Management*, 3(2), 102-106.
- [6] Pinkovetskaia, I. S., Gromova, T. V., & Nikitina, I. N. (2020). Assessment of women's early-stage entrepreneurial activity in 2018. *Zagreb International Review of Economics and Business*, 23(1), 35-49.
- [7] Vaillant, Y. & Lafuente, E. (2019). Entrepreneurial experience and the innovativeness of serial entrepreneurs. *Management Decision*, 57(11), 2869-2889.
- [8] Banihani, M. (2020). Empowering Jordanian women through entrepreneurship. *Journal of Research in Marketing and Entrepreneurship*, 19(3), 145-159.
- [9] Brush, C. D & Bruin A. D. and Welter, F. (2019). A gender aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1(1), 8-28.
- [10] Henry, C., Foss, L., & Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. *International Small Business Journal*, 34(3), 217-241.
- [11] Cantzler, I. & Leijon, S. (2017). Team-orientated women entrepreneurs: A way to modern management. *Journal of Small Business and Enterprise Development*, 14(4), 732-746.
- [12] Etim, E. & Iwu, C.G. (2019). A descriptive literature review of the continued marginalisation of female entrepreneurs in sub-Saharan Africa. *International Journal of Gender Studies in Developing Societies*, 3(1), 1-19.
- [13] Fang S, Tsai F, Lin JL. (2015). Leveraging tenant incubator social capital for organizational learning and performance in incubation programme. *International Small Business Journal*, 28(1), 90-113.
- [14] Farr-Wharton R, Brunetto Y. (2017). Women entrepreneurs, opportunity recognition and government-sponsored business networks: A social capital perspective. *Women Management Review*, 22(3), 187-207.
- [15] Hoang H. & Antoncic B. (2013). Network-based research in entrepreneurship: A critical review. *Journal of International Small Business*, 20(2), 213-219.
- [16] Anggraini, V., Ka, R. & Syah, T. Y. R. (2019). Entrepreneurial characteristics on entrepreneurial tendencies as age moderated: a study on university Indonesia. *Russian Journal of Agricultural and Socio-Economic*, 5(89), 104-118.
- [17] Neumeyer, X., Santos, S. C., & Morris, M. H. (2019). Who is left out: exploring social boundaries in entrepreneurial ecosystems. *The Journal of Technology Transfer*, 44(2), 462-484.

- [18] Langowitz, N. and Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341-364.
- [19] Emami, A. (2017). Gender risk preference in entrepreneurial opportunity: evidence from Iran. *International Journal of Entrepreneurship and Small Business*, 30(2), 147-169.
- [20] Barsky, R. B., Juster, F. T., Kimball, M. S., & Shapiro, M. D. (2007). Preference parameters and behavioral heterogeneity: An experimental approach in the health and retirement study. *The Quarterly Journal of Economics*, 112(2), 537-579.
- [21] Croson, R. & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(2), 448-474.
- [22] Bardasi, E., Sabarwal, S., & Terrell, K. (2011). How do female entrepreneurs perform? Evidence from three developing regions. *Small Business Economics*, 37(4), 417-428.
- [23] Henry, C., Orser, B., Coleman, S. & Foss, L. (2017). Women's entrepreneurship policy: a 13-nation cross-country comparison. *International Journal of Gender and Entrepreneurship*, 9(1), 01-30.
- [24] Adim, C. V., Tamunomiebi, M. D., Akintokunbo, O. O. & Adubasim, I. E. (2018). Entrepreneurial innovativeness and performance of women entrepreneurs in rivers state, Nigeria. *World Journal of Entrepreneurial Development Studies*, 2(1), 9-23.
- [25] Adom, K. (2015). Recognizing the contribution of female entrepreneurs in economic development in sub-Saharan Africa: some evidence from Ghana. *Journal of Developmental Entrepreneurship*, 20(1), 1550003.
- [26] Elnadi, M., & Gheith, M. H. (2021). Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *The International Journal of Management Education*, 19(1), 100458.
- [27] Neto, R. D. C. A., Rodrigues, V. P., Stewart, D., Xiao, A., & Snyder, J. (2018). The influence of self-efficacy on entrepreneurial behavior among K-12 teachers. *Teaching and Teacher Education*, 72, 44-53.
- [28] Anambane, G. and Adom, K. (2018). Assessing the role of culture in female entrepreneurship in contemporary sub-Saharan society: insights from The Nabadam District of Ghana. *Journal of Developmental Entrepreneurship*, 23(3), 1-17.
- [29] Adesua-Lincoln, A. (2012). Assessing Nigerian female entrepreneur's access to finance for business start-up and growth. *African Journal of Business Management*, 5(13), 5348-5355.
- [30] Iyiola, O. & Azuh, D. (2014). Women entrepreneurs as small medium enterprise (sme) operators and their roles in socio-economic development in Ota, Nigeria. *International Journal of Economics, Business and Finance*, 2(1), 1-10.
- [31] Zivkovic, J. (2014). Participation of women entrepreneurs in northern Nigeria. *Journal of Humanities and Social Science (IOSR-JHSS)*, 19(1), 95-104.
- [32] Ademokun, F. & Ajayi, O. (2015). Entrepreneurship development, business ownership and women empowerment in Nigeria. *Journal of Business Diversity*, 12(1), 72-87.
- [33] Adekola, P. O., Olawole-Isaac, A., Ajibola, A. B. & Salau, O. P. (2015). Exploring the hindrances to women entrepreneurship, development and prosperity in Nigeria. *Journal of Entrepreneurship: Research & Practice*, 6(5), 1-13.
- [34] Chinonye, M. L., Iyiola, O. O., Akinbode, M. O., Obigbemi, I. A. & Eke, O. P. (2015). Women entrepreneurship in Nigeria: Policy framework, challenges and remedies. Retrieved from <http://eprints.covenantuniversity.edu.ng/9196/1/article8.pdf03/22/2020>.
- [35] Ayogu, D. U. & Agu, E. O. (2016). Assessment of the contribution of women entrepreneur towards entrepreneurship development in Nigeria. *International Journal of Current Research and Academic Review*, 3(10), 190-207.
- [36] Opata, P. I., & Arua, R. N. (2017). Assessment of the performance of informal women entrepreneurs in Enugu State, south east Nigeria. *African Journal of Agricultural Research*, 12(11), 923-931.
- [37] Koko, M. A., Maishanu, M. M. & Hassan, A. (2017). Women entrepreneurs' accessibility to growth capital and socio-economic development

- in sokoto state, Nigeria. *Journal of Business and Management*, 19(5), 69-75.
- [38] Sajuyigbe, A. S., & Fadeyibi, I. O. (2017). Women entrepreneurship and sustainable economic development: evidence from south western Nigeria. *Journal of Entrepreneurship, Business and Economics*, 5(2), 19-46.
- [39] Isiwu, P. I. & Onwuka, I. (2017). Psychological factors that influences entrepreneurial intention among women in Nigeria: A study based in southeast Nigeria. *The Journal of Entrepreneurship*, 17(4), 118-134.
- [40] Adeoye, I. A., Olajide-Arise, T. & Egwakhe, J. A. (2018). Female entrepreneurs' experiences and business survival: Evidence from selected female venture owners in remo community, ogun state. *International Journal of Advanced Academic Research | Social & Management Sciences*, 4(8), 7-20.
- [41] Ismail, A. A., & Kabuga, N. A. (2018). Examining the characteristics of women entrepreneurship in kano metropolis, Nigeria: An empirical insight from women home-based micro bakery enterprises. Proceedings of the 2nd International Conference and Doctoral Colloquium organized by Faculty of Social and Management Sciences, Bayero University, Kano-Nigeria pp1007-1018.
- [42] Kagbu, J. H. (2018). Constraints to women farmers' entrepreneurial development in Nasarawa State, Nigeria. *Journal of Agricultural Extension*, 22(1), 44-54.
- [43] Abiodun, E. A. & Amos, D. D. (2018). The performance of women entrepreneurs: Human and financial capital. *A Research Journal of Social Science and Humanity*, 2(1), 030 – 037.
- [44] Adenugba, A. A. (2018). A means to an end or an end in itself: motivation and challenges facing women in the beer parlour business in Ibadan, Nigeria. *Gender and Behaviour*, 16(1), 10719-10738.
- [45] Kabuga, N. A., & Musa, A. U. (2019). Factors influencing access to credit among entrepreneurs in Katsina Metropolis, Nigeria. *Dutse International Journal of Social & Economic Research (DIJSER)*, 2(2), 82-91.
- [46] Aladejebi, O. (2020). 21st century challenges confronting women entrepreneurs in Southwest Nigeria. *Archives of Business Research*, 8(3), 261-280.
- [47] Ekwochi, E. A. (2020). Assessment of motivational patterns of women entrepreneurs in small and medium enterprises (smes) in Nigeria: a study of rural women entrepreneurs in south east state of Nigeria. *Assessment*, 1(1), 212-225.
- [48] Roseline, Y. A., Ibrahim, R. R., & Opeyemi, O. A. (2020). Effect of entrepreneurship development on women graduates of the national centre for women development, Abuja. *International Journal of Multidisciplinary Research and Technology*, 1(3), 1-15.
- [49] Agumadu, M. A., Moses, C. L., Adeniji, A. A., & Olaoye, O. P. (2020). Demystifying the mediating role of competence on assertiveness and social responsibility of women entrepreneurs in lagos state. *International Journal of Management (IJM)*, 11(7), 803-809.
- [50] Adetiloye, K. A., Adegboye, F. B., & Akinjare, V. A. (2020). Sustainable financial access for female entrepreneurs in the micro, small and medium enterprises sector in Nigeria. *Cogent Social Sciences*, 6(1), 1823600-1823609.
- [51] Osakwe, R. N. (2014). Classroom management: A tool for achieving quality secondary school education in Nigeria. *International Journal of Education*, 6(2), 58.
- [52] Ehigiamusoe, U. K. (2012). Private sector participation in secondary education in Nigeria: Implications for national development. *International Journal of Development and Sustainability*, 1(3), 1062-1074.
- [53] Ige, A. M. (2014). Poverty of primary education in Nigeria: The way forward. *Education 3-13*, 42(6), 637-647.
- [54] Akinbi, J. O., & Akinbi, Y. A. (2015). Gender disparity in enrolment into basic formal education in Nigeria: Implications for national development. *African Research Review*, 9(3), 11-23.
- [55] Ikoya, P. O., & Onoyase, D. (2008). Universal basic education in Nigeria: Availability of schools' infrastructure for effective program implementation. *Educational studies*, 34(1), 11-24.
- [56] Fafunwa, A. B. (2018). *History of education in Nigeria*. Routledge.

- [57] Obor, D. O., & Okafor, E. E. (2020). Challenges and support mechanisms for women in the informal sector in iwo, osun state, Nigeria. *The Nigerian Journal of Sociology and Anthropology*, 14(2), 93-114.
- [58] Giglio, F. (2020). Access to credit and women entrepreneurs: A systematic literature Review. *European Research Studies*, 23(4), 312-335.
- [59] Berger, E. S. C. & Kuckertz, A. (2016). Female entrepreneurship in startup ecosystem worldwide. *Journal of Business Research*, 12(8), 212-227.
- [60] Bui, H. T. M., Kuan, A. & Chu, T. T. (2018). Female entrepreneurship in patriarchal society: motivation and challenges. *Journal of Small Business & Entrepreneurship*, 30(4), 325-343.
- [61] Hisrich, R. D. & Ozturk, S. A. (2019). Women entrepreneurs in a developing economy. *The Journal of Management Development*, (18), 114-124.
- [62] Carter, N., Brush, C. B., Greene, P. G., Gatewood, E., & Hart, M. (2003). Women entrepreneurs who break through to equity financing: the influence of human, social and financial capital. *Venture Capital*, 5(1), 1- 28.
- [63] Orobia, L.A., Tusiime, I., Mwesigwa, R. & Ssekiziyivu, B. (2020). Entrepreneurial framework conditions and business sustainability among the youth and women entrepreneurs. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(1), 60-75.
- [64] Chowdhury, F., Audretsch, D. B., & Belitski, M. (2019). Institutions and entrepreneurship quality. *Entrepreneurship Theory and Practice*, 43(1), 51-81.
- [65] Garg, S. & Agarwal, P. (2017). Problems and prospects of woman entrepreneurship – a review of literature. *Journal of Business and Management*, 19(1), 55-60.
- [66] Surangi, H.A.K.N.S. (2020). Systematic literature review on female entrepreneurship: Citation and thematic analysis. *Kelaniya Journal of Management*, 9(2), 40–54.
- [67] SMEDAN (2019). Micro, small, and medium enterprises (msme) national survey 2017 report. Retrieved from SMEDAN%20REPORT%20Launch%20Presentation%202017%20(2).pdf3/22/2020
- [68] PwC (2020). MSME Survey. Retrieved (09/03/2020) from <https://www.pwc.com/ng/en/assets/pdf/pwc-msme-survey-2020-final.pdf>.

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