ROLE OF SOCIAL MOTIVATION IN THE RELATIONSHIP BETWEEN ENTREPRENEURIAL RESILIENCE AND SUSTAINABLE GROWTH AMONG WOMEN OWNERS OF SMES IN PLATEAU STATE

BY

Godwin Ogabo
Department of Business Administration,
Faculty of Management Sciences
University of Jos

Dr Emeka Ogidi
Department of Business Administration,
Faculty of Management Sciences
University of Jos

Abstract

The study was motivated to investigate the role of entrepreneurial resilience, social motivation and sustainable growth of SMEs in Plateau State. The main objective of the study is to examined the role of entrepreneurial resilience, social motivation and sustainable growth of SMEs among women owners in Plateau State. The study adopted the quantitative method which deals with the use of numerical data to address the current research issues. The study also adopted the survey plan for data collection based on a cross-sectional time horizon so that all respondents can be surveyed at a specific time. A structured questionnaire was used to collect data from 393 respondents, while Smart PLS-SEM was employed to test the formulated hypotheses. The result indicate that **entrepreneurial resilience has a significant relationship on** Sustainable Growth of women-owned SMEs in Jos North LGA, Plateau State also **entrepreneurial resilience is significantly related with** social motivation of women-owned SMEs in Jos North LGA, Plateau State. While **social motivation plays a partial mediating role in the relationship between entrepreneurial resilience and** sustainable growth of women-owned SMEs in Jos North LGA, Plateau State**. The study concluded that** entrepreneurial resilience, through socially motivated actions, drive innovative solutions that support sustainable business practices. Entrepreneurial resilience often embodies values like persistence, motherly optimism, inclusivity, community orientation, and ethical responsibility, which cultivate strong social motivation and recommend that

Sustain entrepreneurial resilience, foster culture of persistent innovation and supportive women entrepreneurship. Women entrepreneurs should cultivate doggedness capacity character for navigating business challenges and opportunities, engage in experimentation, learning and adaptation, while policymakers should ensure training, mentorship and funding to encourage equal gender entrepreneurial activities.
Keyword**: entrepreneurial resilience,** social motivation, sustainable growth, SMEs

1.0 INTRODUCTION

Small and medium-sized enterprises (SMEs) are crucial for accelerating the global economy as engines of innovation, employment, and economic diversification, contributing meaningfully to national GDP and social stability (Mugano&Dorasamy, 2024; Kannan & Gambetta, 2025). In this regard, it is crucial to sustain the growth of SMEs over time. Sustainable growth of SMEs has become an increasingly important concept in the global business landscape, as it is becoming imperative for organizations to operate in a maintainable manner (Malki, 2023). Sustainable growth is viewed as the continuous steady increase in the economic, social and environmental operations and returns without a depletion of the corresponding resources (Nouanpaseuth & Syphoxay, 2025). A research by the United Nations Global Compact and Accenture (2019) shows that only 21% of SMEs have successfully implemented sustainable business initiatives globally. Conversely, the Nigerian Economic Summit group in 2018 found that only 15% of Nigerian's (in this case Plateau State) SMEs have implemented sustainable business initiatives (Iheanachor, 2021; Odunsi, 2024; Olasoju, 2023). These statistics raise concerns of low sustainable growth of SMEs. To address this concern, the United Nations has implemented worldwide interventions to promote sustainable business practices through the framework of the Sustainable Development Goals (SDGs) for Vision 2030.

Entrepreneurial resilience is vital for sustainable business growth, especially in periods of uncertainty (Shepherd et al., 2020; Shore et al., 2024). Resilience in entrepreneurship is focused heavily on the capability to effectively recover either from unexpected or constant adversity approaches (Sadreddin& Ahuja, 2025). In this study, entrepreneurial resilience is componential as emotional resilience for managing stress and maintaining motivation; cognitive resilience for problem-solving and adaptability; and social resilience for building networks and

relationship support during challenging times (Makela & Suutari, 2021). Arising from the foregoing background, it has been established that the nexus between the independent variable, entrepreneurial resilience and dependent variable, sustainable growth indicates consistent findings (Bachtiar et al., 2023; Lean et al., 2020; Muchtar, 2024; Williams et al., 2019). Nevertheless, less attention has been paid to the mechanism that could sustain this relationship fostering the need for current study to consider a mediating variable (social motivation) in the model. The mediation model equally integrates social cognitive theory, institutional theory and social motivation theory to provide better insights for understanding and achieving the sustainable growth of SMEs. Consequently, this study investigated the role of social motivation in the relationship between entrepreneurial resilience and sustainable growth among women owners of SMEs in Plateau State. Focusing on women owners of SMEs is a deliberate attempt to enhance female entrepreneurship.

1.2 STATEMENT OF THE PROBLEM

Sustainable growth means growth that is repeatable, ethical, and responsible and beneficial to, and for, current and future communities (Miller, 2018). Unfortunately, this is hardly achieved by SMEs around the globe. Globally, about 71% of SMEs were unable to attain sustainable growth as of 2019 (United Nations Global Compact and Accenture, 2019). Scholars attributed this gap in sustainability success to lack of awareness and understanding of the concept, complexity of implementing sustainability practice across different areas of the organizations, climate change, resource depletion, social inequality, and failure in changing business model (Chladek, 2019; Suganthan & Sudhakar, 2023). In Nigeria, over 85% of SMEs could not achieve sustainable growth as of 2018 (Iheanachor, 2021; Odunsi, 2024; Olasoju, 2023). The reason for low sustainable growth of SMEs across Africa is affected by economic instability, infrastructure deficiencies, regulatory framework, access to finance, skill gap, lack of awareness, inequalities of the basis of class, gender and age, environmental degradation, over exploitation of natural resources, limited access to technology and high failure of SMEs (Kameri-Mbole&Kabira, 2022; Omeruo, 2024). This scenario is even more alarming for women-owned SMEs, as owning and managing businesses is still dominated by male counterparts (Estrada & Schuber, 2022).

The above evidence suggests there is a problem of low sustainable growth of women-owned SMEs in Nigeria and Plateau State. Moreover, even though the Fate Institute survey acknowledges female-led businesses as constituting 43%

(lesser in Plateau State), the issues around the achievement of sustainable growth still remains complicated and novel (The Faith Institute, 2022). The implication of a low sustainable growth of SMEs is the negative impacts on the viability of businesses and also the broader economic, environmental, and social goals could be hampered. This calls for a robust empirical model that has the potential to foster strong sustainable business growth initiatives as suggested by Jeronen (2023). The problem still remains that entrepreneurs especially the women owners of SMEs are not familiar with the best way to blend entrepreneurial resilience with social motivation to achieve strong sustainable growth. The need to unravel comprehensive understanding of the sustainable growth of women-owned SMEs has necessitated this study to combine entrepreneurial resilience and social motivation in Plateau State where it has not previously existed.

RESEARCH QUESTIONS

The main objective of this study is to investigate the role of social motivation in the relationship between entrepreneurial resilience and sustainable growth among women owners of SMEs in Plateau State. While the specific objectives are as follows;

i. What is the relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North Local Government?
ii. To what extent does entrepreneurial resilience relationship social motivation of women-owned SMEs in Jos North Local Government?
iii. What is the role of social motivation in the relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North Local Government?

RESEARCH OBJECTIVES

i. To examine the relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North Local Government.
ii. To determine the extent to which entrepreneurial resilience relationship social motivation of women-owned SMEs in Jos North Local Government.
iii. To examine the role of social motivation in the relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North Local Government.

2.0 LITERATURE REVIEW

2.1 CONCEPTUAL REVIEW

2.1.1 Sustainable Growth

Growth is an in-depth development and progressive transformation (Dziallas& Blind, 2019). The concept of sustainable growth has been hitherto considered as the ability of firms to maintain constant success over a specific period (Yoo et al., 2018). Nowadays, sustainable growth has shifted focus to how SMEs could achieve continued success without jeopardizing future environmental, social and economic resources (World Bank, 2022). While business growth focuses on short-term gains, centered on the organization alone with value driven by profit maximization; sustainable growth prioritizes long-term prosperity, broadening its impacts in accordance with a triple-bottom-line approach of balancing economic, social, and environmental considerations (Ali et al., 2024). Sustainable growth is essential for the long-term success of SMEs, pairing the need for economic development with the responsibility to protect the environment and contribute positively to society. Sustainable growth is defined as the ability of an organization to maintain growth rate over time without depleting natural resources or causing harm to the environment (World Bank, 2022). Schonfuß et al. (2019) defined sustainable growth as the assurance of long-term success, resilience and positive impacts on society and the environment. Sustainable growth is a development path that balances economic, social, and environmental objectives, ensuring that economic growth does not come at the expense of environmental degradation (United Nations, 2020).

Domesticating the issues of sustainable growth on the behaviors of gender ownership of SMEs, several authors have stressed in the past the need for sustainability practices to be investigated in women entrepreneurship research (Stefan et al., 2021). Female entrepreneurs represent the fastest growing category of entrepreneurship worldwide and have received, especially in recent years, the attention of many academics. According to the emerging literature, women can make a significant contribution to entrepreneurial activity and economic development, in terms of creating new jobs and increasing the gross domestic product (GDP), with positive impacts on reducing poverty and social exclusion (Ayogu & Agu, 2015; Espinoza et al., 2022; Cardella et. al., 2020). Women entrepreneurs have been designated as the new engines for sustainable growth and the rising stars of the economies in developing countries to bring prosperity and welfare (Espinoza et al., 2022). Women entrepreneurs are highly motivated either

by family, society or culture (Noguera et al., 2013). A strong desire to do something positive is an inbuilt quality of entrepreneurial women, who is capable of contributing values in both family and social life. From the above definitions, this study delineates sustainable growth of SMEs as the ability to maintain constant business success by making optimum decisions using economic, social and environmental resources.

2.1.2 Entrepreneurial Resilience and sustainable growth

The concept of entrepreneurial resilience can be assessed from multiple domain theories (Seyfi et al., 2025). Development in psychology view resilience as a dynamic process influenced by interaction between individuals and their environment (Schwarz, 2018). In ecology, resilience is seen as ecosystems' ability to absorb disturbances and reorganize while maintaining existing core functions and structures (Holling, 1973, cited in Seyfi et al., 2025). Engineers view resilience in the form of systems' ability to return to balance post-disturbance, accentuating robustness and recovery speed (Wied et al., 2020). In organizational contexts, resilience is the capability to effectively challenge and recover from disruptions by being equipped and adaptable (Prayag et al., 2024). Entrepreneurship studies consider resilience as the capacity individuals utilize once confronted with difficulty (Haddoud et al., 2022).In the context of this study, entrepreneurial resilience has to consider how resilience mechanisms and outcomes can be shaped by gender, acknowledging that different sexes respond to stressors uniquely due to societal roles, traits, access to resources, and cultural prospects (Bridges et al., 2023; Syfi et al., 2025). Gender roles and relationships are closely connected to economic, political, legal, and social structures, which continuously shape and reinforce individuals' experiences of resilience in business. Accordingly, a gendered perspective on entrepreneurial resilience acknowledges that women may face specific stressors and employ exceptional coping strategies (Bagheri et al., 2023).

H1: There is no significant relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North Local Government.

2.1.3 Entrepreneurial Resilience and social Motivation

Henry et al. (2016) review the literature published on gender and entrepreneurship over a period of 30-years in 18 journals. They identify methodological trends in this area and discuss methodological innovations needed for future research. They find that there are large-scale empirical studies that

primarily focus on comparisons between male and female entrepreneurs. There is often less information given on the industry sector or the sampling methods employed. They suggest that there is paucity of feminist critique and future scholars need to engage with post-structural feminist approaches. They suggest that there is a need to adopt innovative methods like in-depth qualitative approaches to study life histories, case studies or discourse analysis. According to Dobre (2013) and Aljaf and Sadq (2015), motivation is an internal drive to satisfy an unsatisfied need and to achieve a certain goal. It is also a procedure that begins through a physiological or psychological need that stimulates a performance set by an objective.

2.1.4 Social motivation and sustainable growth

Motivations are situations, factors or forces that drive people to do things. Social motivation refers to the drive individuals have to engage in social interactions and relationships for human survival, usually influenced by factors such as psychological, cultural, contextual, and business (Hamilton, 2017). Social motivation has been in existence for a very long time but became very much popular after development of its theory around autism in order to study individuals with social interaction differences (Hamilton, 2017). In this regard, social motivation can be understood as the intrinsic and extrinsic forces that encourage entrepreneurs to connect with others, participate in group activities, and seek social approval or acceptance. Social motivation is a learned psychological drive gained through family, society, and cultural upbringing (Alcantara &Kshetri, 2013). Individuals learn to adopt social motivations to help them reach goals. These goals are often based on their social needs and desires, which usually show up in the thinking patterns or behaviors. Motivation plays a serious role bringing about stimulating entrepreneurs to engage their time and efforts to the organizational success. Nabi et al. (2017) argued that motivation is a process that starts with a physiological deficiency or need that activates a behavior or drive that is aimed at a goal incentive.

Some studies have reported social motivation as a facilitator and while some others as a barrier based on the utilization interactions as a powerful motivator for activity (Alesi & Pepi, 2017; Barr & Shields, 2011; Melbøe&Ytterhus, 2017). In this case, social motivation crucially depends on interactions with people (especially for children or individuals with autism) advances the purpose for physical activity and an opportunity for peer support and peer modelling (Barr

& Shields, 2011). In this regard, social motivation is necessary for making entrepreneurial connections especially for individuals who have low ability to establish and maintain relationships. Studies considering sex-based effects have consistently found females to demonstrate higher levels of social motivation than males (Chawarska, et al., 2016; Harrop et al., 2018; Sedgewick, et al., 2016). Nevertheless, cultural or personality forces can also impede the female entrepreneurs to exhibit high social motivation, thus affecting their abilities to make profound business interactions.

H2: There is no significant relationship between entrepreneurial resilience and social motivation of women-owned SMEs in Jos North Local Government.

2.1.4 Mediating role of Social Motivation in relationship between entrepreneurial resilience and sustainable growth

In social motivation, individuals or entrepreneurs need power, interpersonal communication, belongingness, love, esthetic experience, and knowledge, etcetera. Due to these needs, the dimensions of social motivations include affiliation motivation, achievement motivation, power motivation, communication motivation, altruistic motivation, and aggressive motivation (Ningjian, 2025). The achievement motivation energies entrepreneurs' pursuit of success in performing an activity; the power motivation facilitates entrepreneurs to influence and control other people and the surrounding environment; the communication motivation stimulates entrepreneurs to approach and cooperation with other people for mutual benefits and friendship; the altruistic motivation craves entrepreneurs to be considerate; and the aggressive motivation drives entrepreneurs to intentionally upset others (like competitors) for the sake of achieving own goals (Ningjian, 2025).

The social motivation posits that disinterest in social experiences in life can weaken the development of the social brain network (Bernier et al., 2007). Specifically, social motivation suggests that because individuals with autism are less interested in social information, they often have less opportunities for social learning (such as decreased engagement in joint attention, collaborative play, friendships), which impairs their social development (Beckerson et al., 2022). Based on the research model, the researcher constructs conceptual model, based on the above conceptual reviews from the independent variable as entrepreneurial resilience and the dependent variable as sustainable growth, while the mediating variable as social motivation as displayed in figure 2 which depicts the expected

relationships among independent variables, mediating variable and dependent variable.

H3: Social motivation does not mediate the relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North Local Government

2.2 Conceptual Framework

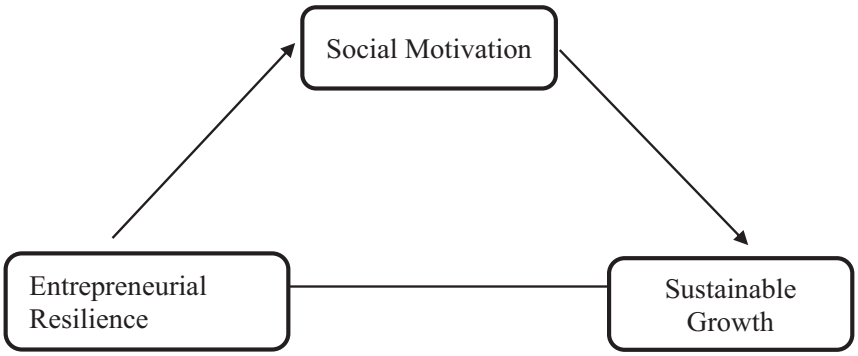

Figure 2: Conceptual Framework

Sources: Lichtenstein et al. (2022); Khazami and Lakner (2021); Ogbumgbada and Onyemauche (2023)

2.3 THEORETICAL REVIEW

2.3.1 Social Cognitive Theory

Albert Bandura developed the social cognitive theory (SCT) in the 1980s as an improvement over the social learning theory (Bandura, 1986). The theory explains how an individual can gain knowledge in a certain social setting in order to maintain a particular behavior through the components of reciprocal determinism, behavioral capability, observational learning, reinforcements, expectation, and self-efficacy (Bandura, 2008; LaMorte-Wayne, 2019). SCT underpins this study because it is able to offer theoretical explanations for more relationships among the variables based on the triadic influences of environment, person and consequences of behavior (Stajkovi &Sergent, 2019). In explaining how entrepreneurial resilience relates with social motivation and sustainable growth, SCT assumes that women owners of SMEs can use reciprocal determinism to develop interaction stimulus behavior from situational experiences surrounding the business (Firmansyah &Saepuloh, 2023). The last assumption, self-efficacy is central to constituting the effectiveness of entrepreneurial resilience. Self-efficacy

can articulate the confidence and belief of women owners of SMEs to execute a course of action like persisting, recovering from impediments, and continuously pursuing sustainable business growth (Kisubi et al., 2021; Lopez-Garrido, 2025). On the contrary, SCT has been criticized for various reasons. For instance, not all environment supports active learning for everyone. Also, the theory deeply focuses on processes of knowledge acquisition and disregards, social network, policy imperative, biological and hormonal tendencies that may influence social motivation and sustainable growth of SMEs. With respect to this study, SCT has given a comprehensive perspective on developing entrepreneurial resilience but has not provided explicit explanation for the linkages to social motivation and sustainable growth of SMEs. This has necessitated the introduction of another theory (social motivation theory) to bridge the gap.

2.4 EMPIRICAL REVIEW

Entrepreneurial resilience and sustainable growth research has gain profound attention in recent times especially on how businesses pilot challenges and adjust to changing environmental issues. In the light of this, research by Ogbumgbada and Onyemauche (2023) found that there is a significant relationship between entrepreneurial resilience (proactiveness and resourcefulness) and sustainable growth (sales growth and business expansion) of small and medium enterprises in Port Harcourt. The study concluded that entrepreneurial resilience has a favorable outcome on business emphasizing that entrepreneur's proactiveness and resourcefulness are the absolute resilient components to combat with adversity internal and external the business, as it promotes effective sales growth and business expansion.

Alshebami and Murad (2022) investigated the moderating effect of entrepreneurial resilience on the relationship between financial literacy and sustainable performance (based on growth and survival) of SMEs in the Kingdom of Saudi Arabia. The study found that entrepreneurial resilience has a significant and positive influence on sustainable performance when entrepreneurs develop the capacity to quickly respond and overcome business and environmental barriers both for present and future needs. Additionally, entrepreneurial resilience has been significantly associated with different levels of organizational success, especially when entrepreneurs employ distinct talents and characteristics for both short and long-term sustainability benefits of the firms (Beattie, 2016; Fisher et al., 2016).

2.5 RESEARCH GAP

Sustainable growth of SMEs is vital to ensure that SMEs progress in the long run (Ismail, 2022). The growth of women entrepreneurs translates into firm growth and invariably national growth. Therefore, it is important to study women entrepreneurs as well as the factors that shape their success. Women entrepreneurs are highly motivated either by family, society or culture (Ayogu&Agu, 2015). Many women start a business due to passion, social or cultural ties, traumatic event such as divorce, to support the family, discrimination due to pregnancy or the corporate glass ceiling, the health of a family member, or economic reasons such as a layoff. However in Nigeria and Plateau State, the problems and constraints (family, social network, culture, etc.) experienced by women entrepreneurs have resulted in restricting the expansion of women owned SMEs. Therefore, it is important to study factors that shape their success. Social motivation entails a learned psychological drive gained through family, society and cultural upbringing (Alcantara &Kshetri, 2013) to help individuals reach their goals. While the concept of social motivation has not been adequately established on women entrepreneurs empirically, they need motivation to stimulate them to engage their time and efforts for firm success. However, women entrepreneurs are poised with social motivational issues emanating from family (family duties), society (perception) and culture (norms). Therefore, it is important to study factors that shape their social motivation hence participation in entrepreneurial activities.Moreover, while a few studies has established direct relationships among the variables of investigations, there is relatively sparse evidence of the indirect linkages. According to literature (Ojong et al., 2021; Cardella et al., 2020), the paucity of research on women entrepreneurship in Africa, Nigeria and Plateau State to address these issues has prompted the study. Thus, this study seeks to examine the relationship between entrepreneurial resilience, social motivation and sustainable growth of women owned SMEs in Plateau State.

3.0 METHODOLOGY

3.1 *Research Design*

This research design adopted a comprehensive plan in answering research questions realistically. The main approaches involved in designing a research structure are quantitative, qualitative and mixed methods (Creswell, 2014). This study adopted the quantitative method which deals with the use of numerical data to address current research issues. The study also adopted the survey plan for data

collection based on a cross-sectional time horizon so that all respondents can be surveyed at a specific time (Creswell & Creswell, 2018). The study adopted a finite population model of Twenty Two Thousand, Three Hundred and Forty Two (22,342) SMEs in Plateau State (SMEDAN & NBS, 2021). The SME sector is a well-organized business segment under the watch of government agencies for its purposeful development and progress. This population therefore includes selected types of business sectors within the categorization of small and medium-sized enterprises in Plateau State. These include hospitality, fashion and designing, technology, hair stylist, trade, education, manufacturing and agriculture.

The sample size for this study is 393 respondents, derived from Yamane's (1967) formula for a representative sample. The estimation provides an adequate representation of the population in order to avoid a situation of wrong inference which can cause systematic and sampling biases in the data (Kathori, 2004). The computation of the sample size was done as follow.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{22,342}{1 + 22,342(0.05)^2}$$

$$= 393$$

Where: N is the population size

n is the sample size

e is the 5% significance level of error precision level of 95% confidence interval.

Table 1: Business Sector Sample Stratification

S/N	Sector	Sample Proportion
1	Agriculture/Agribusiness	49=393/8
2	Education	49
3	Fashion and designing	50
4	Hair stylist	49
5	Hospitality	49
6	IT Services	49
7	Manufacturing	49
8	Trade	49

Source: PASMIDA 2024

3.2 Method of Data Collection

The method of data collection used in this study is the questionnaire. The questionnaire enables the collection of information directly from participants. The questionnaire has four sections: A - for background information of respondents especially the bio data of the female entrepreneurs; B - for entrepreneurial resilience scale; C – for social motivation scale: and D – for sustainable growth scale. Sections B to D of the questionnaire are structured on a scale of 1-5 denoted as 1(strongly disagree); 2(disagree); 3(neutral); 4(agree) and 5(strongly agree).

3.3 *Operationalization and Measurement*

The variables were simplified to formulate the research instrument for easy understanding and measurability. In other words, entrepreneurial resilience, social motivation, and sustainable growth were operationalized and measured at the construct level. Additionally, the measurability of these variables were adapted from previous scales to suit this current research purpose and setting (Sousa et al., 2016) as presented in table 3.

Table 2: Operationalization and Measurement of Variables

Variable	Dimension	Number of Items	Cronbach's Alpha	Source
Entrepreneurial Resilience	One-dimensional	5	0.925	Najeh&Morched, (2023)
Social Motivation	One-dimensional	5	0.80	Gong et al. (2018)
Sustainable Growth	One-dimensional	5	>0.7	Arora et al. (2018)

Source: SPSS version 26

3.4 Method of Data Analysis

The method of data analysis employed in this study is the regression Partial Least Square of Structural Equation Modelling (PLS-SEM) via the SmartPLS4 software. This is used when there is the need to predict the strength of a variable based on the value of two or more other variables. The variable to be predicted is called the dependent variable (or sometimes, the outcome, target or criterion variable). The variables used to predict the value of the dependent variable are

called the independent variables (or otherwise known the predictor, explanatory or regressor variables). The research model is stated in mathematical formats as follows:

$Y=\beta0+\beta1X_1+ \beta2X_2 + \varepsilon$

Where;

Y= Sustainable Growth (SG)

B_0= Constant (intercept)

β_1, β_2, = Coefficients of independent and mediating variables (Entrepreneurial Resilience and Social Motivation)

$X_1 – X_2$= Composite index of independent and mediating variables

ε = Error term (at 5% significant level).

The PLS-SEM analysis uses a two-stage approach for assessing the measurement and structural models, respectively, as Urbach and Ahlemann (2010) suggested. In predictive research, PLS-SEM is known for its ability to identify significant explanatory outcomes in models and to decrease or enhance the residuals (explanation) of dependent indicators and constructs in the model (Dash & Paul, 2021; Richter et al., 2022). Variance-based analysis serves as the foundation for using Smart PLS, primarily for formative indicator and reflective components. Additionally, the Smart PLS can efficiently analyze perfection using any sample size, no matter how little or large.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

The data presentation started with arrangement and editing of the results into figures and tables in American Psychology Association (APA) format. Descriptive statistics were utilized for questionnaire response rate and demographic data presentation, as well as related interpretations. Generally, the data presentation made all-encompassing use of descriptive statistics to present the outcomes.A total number of Three Hundred and Ninety Three (393) copies of the questionnaire were distributed among women-owned SMEs in Jos North LGA, Plateau State. Out of the 393, 391 were returned, while 390 were properly filled and usable for the data analysis, and this represents an acceptable response rate of 99.2%.

4.1.2 Demographic Characteristics of Respondents

It is important to consider the socio-demographic characteristics of respondents to this study. This is to provide insights into the quality of responses

expected and the best way to handle such data. Thus, the background information of respondents necessarily considered in this study include age, marital status, educational attainment and years of experience as women entrepreneurs.

Table 3: Demographic Distribution of Respondents

Distribution of Respondents	Frequency	Percentage (%)
Age		
18-30	78	20.5
31-40	136	35.8
41-50	86	22.6
51 and above	80	21.1
Total	**380**	**100.0**
Marital Status		
Single	123	32.4
Married	195	51.3
Divorced/Separated	20	5.3
Widow/Widower	42	11.0
Total	**380**	**100.0**
Educational Qualifications		
SSCE	39	10.3
OND/HND	32	8.4
BSc	192	50.5
MSc	65	17.1
Others	52	13.7
Total	**380**	**100.0**
Years of Experience		
0-3 years	65	17.1
4-6years	93	24.5
7-9years	180	47.4
10years and above	42	11.0
Total	**380**	**100.0**

Source: Field Survey, SPSS OUTPUT V.26

Table 3 summarizes the characteristic profile of respondents. It revealed the most (35.8%) participated age group in the survey as 31-40 years, although other age groups were more than average. The 31-40 age group is considered the prime time for individual entrepreneurial activities. Also, the marital status of the respondents revealed that more (51.3%) married women entrepreneurs participated in the survey than the singles (32.4%). Furthermore, the educational background of the respondents revealed that the survey had an average majority of 50.5 percent BSc holders. Finally, the years of business experience shows that most (47.4 %) of the respondents have experience of 7-9 years in the business, followed by 4-6 years representing 24.5 percent.

4.1.3 Descriptive Statistics from the SmartPLS Output

Before the PLS-SEM analysis is performed, it is necessary to check the nature and quality of the data, and equally ensure every feature of the data is intact. This informed the need to assess measures of central tendencies to see the characteristics of the data collected in terms of its mean, standard deviation, skewness, and kurtosis. In this case, the skewness and kurtosis have to fall between the criterions values of ±2 and ±1 for the data to be considered normal for analysis.

Table 4: Summary of Descriptive Statistics of the Measurement Model

Name	No.	Type	Missings	Mean	Median	Scale min	Scale max	Observed min	Observed max	Standard deviation	Excess kurtosis	Skewness
ER1	1	MET	0	3.931	5.000	1.000	5.000	1.000	5.000	1.367	-0.279	-1.022
ER2	2	MET	0	3.946	4.000	1.000	5.000	1.000	5.000	1.353	-0.063	-1.118
ER3	3	MET	0	3.841	4.000	1.000	5.000	1.000	5.000	1.413	-0.731	-0.862
ER4	4	MET	0	3.944	5.000	1.000	5.000	1.000	5.000	1.435	-0.281	-1.109
ER5	5	MET	0	3.182	3.000	1.000	5.000	1.000	5.000	1.137	-0.529	-0.288
SM1	6	MET	0	3.828	5.000	1.000	5.000	1.000	5.000	1.465	-0.791	-0.888
SM2	7	MET	0	3.785	4.000	1.000	5.000	1.000	5.000	1.473	-0.904	-0.813
SM3	8	MET	0	3.779	4.000	1.000	5.000	1.000	5.000	1.477	-0.931	-0.804
SM4	9	MET	0	3.687	4.000	1.000	5.000	1.000	5.000	1.502	-1.052	-0.723
SM5	10	MET	0	3.544	4.000	1.000	5.000	1.000	5.000	1.571	-1.366	-0.481
SG1	11	MET	0	3.710	4.000	1.000	5.000	1.000	5.000	1.492	-1.126	-0.672
SG2	12	MET	0	3.387	4.000	1.000	5.000	1.000	5.000	1.637	-1.634	-0.281
SG3	13	MET	0	3.497	4.000	1.000	5.000	1.000	5.000	1.485	-1.251	-0.517
SG4	14	MET	0	3.456	4.000	1.000	5.000	1.000	5.000	1.296	-1.000	-0.546
SG5	15	MET	0	3.774	4.000	1.000	5.000	1.000	5.000	1.263	-0.245	-0.964

Source: SPSS version 26

Table 4 presents only the descriptive statistics of the continuous variables. As can be seen, there are 15 items, 5 measuring each of the entrepreneurial

resilience (ER), social motivation (SM), and sustainable growth (SG). The statistics indicates the absence of missing data by showing (0) all through, mean and medium values within the five Likert scale used for the measurement of the variables. Also, there is a maximum standard deviation of 1.637 suggesting that the responses did not stray off. Lastly, the values of skewness and kurtosis are within ±2 and ±1 respectively, implying a normal data distribution. These descriptive statistics are fair enough to guarantee quality parametric data analysis outcomes.

4.2 DATA ANALYSIS WITH PLS -SEM

The PLS-SEM analysis is conducted in two folds, the measurement and the structural models. The measurement model evaluates both validity (convergent and discriminant) and reliability (indicator loading and internal consistency reliability). Furthermore, the internal consistency and convergent validity, two construct measures of reliability, would suffer where factor loadings less than 0.70 were deleted (Sarstedt et al., 2014). Conversely, the second step in PLS-SEM analysis is to evaluate the structural model. This aspect evaluates the relationships to tests hypotheses statistically (Fauzi, 2022). The details of the both the measurement and structural models can be evaluated from the path model in figure 3. Thus, the reporting of results follows the standard of SmartPLS of the reflective and formative models as documented in Fauzi (2022) and Hair et al. (2018).

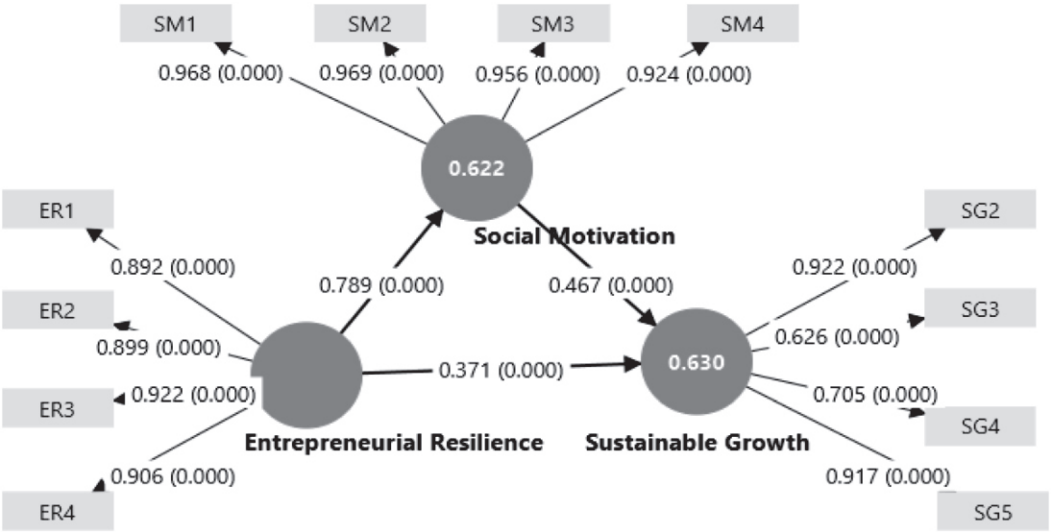

Figure 3: Path Model with Factor Loading and P-value
Source: SMARTPLS-SEM 4.20

4.2.1 Evaluation of Measurement Model

The measurement model analysis focuses on testing for composite reliability, indicator reliability, discriminant validity, convergent validity or the average variance expected and indicator reliability (Hair et al., 2021). In evaluating the reflective measurement model, three indicators (ER5, SM5 and SG1) were deleted from the variables due to poor performance. The results of the remaining indicators are useful in the assessment of construct reliability, convergent validity, and discriminant validity. Also, if the measurement models meet all the required criteria, then the structural model has to be assessed (Hair et al., 2017a).

Factor Loading, Construct Validity and Reliability Evaluation (Reflective)

Table 5: Convergent Validity Result

	Item	Loading	AVE	Composite Reliability (rho_c)	Cronbach' Alpha
Entrepreneurial Resilience	ER1	0.892	0.865	0.962	0.948
	ER2	0.899			
	ER3	0.922			
	ER4	0.906			
Sustainable Growth	SG2	0.922	0.933	0.982	0.976
	SG3	0.626			
	SG4	0.705			
	SG5	0.917			
Social Motivation	SM1	0.968	0.740	0.919	0.884
	SM2	0.969			
	SM3	0.956			
	SM4	0.924			

Source: SMARTPLS-SEM 4.20

Factor loading is usually the first to consider for a possible Confirmatory Factor Analysis. As can be loadings greater than 0.6 were retained indicating that the construct explains more than 50% of the indicator's variance, thus providing acceptable item reliability (Hair et al., 2018). Likewise, the study employs construct validity and reliability analyses to ascertain the internal of the consistency

questionnaire instrument used to collect data, and whether it has been able to measure intended phenomena (Rosli et al., 2021). Consequently, the conventional Cronbach alpha and composite reliability was utilized to measure construct reliability, while average variance extracted is used to test construct reliability (Almufarreh, 2024; Hair et al., 2020). Hair et al. (2011); Hair et al. (2020) recommend that in an exploratory factor analysis, a composite reliability value between 0.6 and 0.7, or from 0.7 to 0.95 is appropriate, and in a measurement model, a minimum threshold value of 0.919 is optimal which is satisfied in this result.

More so, convergent validity acceptable criteria are satisfactorily met when the factor loadings are above 0.6 or 0.7 threshold, significant level is less than 0.05, construct reliability exceeds 0.7, and the average variance extracted (AVE) is greater than 0.5 (Albers, 2010). All these conditions have been satisfied especially with the global variables of AVEs (ER = 0.865, SM = 0.933, and SG = 0.740) exceeding 0.5 threshold. This implies that the latent constructs produced in the exploratory process genuinely converged to measure the projected outcomes of the variables (Fornell & Larcker, 1981).

Evaluation of Discriminant Validity (Reflective)

Table 6: Heterotraits and Monotraits (HTMT) Criterion

	Entrepreneurial Resilience	Social Motivation	Sustainable Growth
Entrepreneurial Resilience			
Social Motivation	0.789		
Sustainable Growth	0.721	0.746	

Source: SMARTPLS-SEM 4.20

Table 7: Fornell & Larcker Criterion

	Entrepreneurial Resilience	Social Motivation	Sustainable Growth
Entrepreneurial Resilience	**0.930**		
Social Motivation	0.759	**0.966**	
Sustainable Growth	0.683	0.712	**0.860**

Source: SMARTPLS-SEM 4.20

Discriminant validity tries to establish that constructs actually differs from one another, that is, entrepreneurial resilience is different from social motivation and both are dissimilar from sustainable growth in terms of content (Hair et al., 2010; Henseleretal., 2014). This study uses both Heterotraits and Monotraits (HTMT) and Fornell and Larcker (1981) criteria to determine the discriminant validity. Though, Henseler et al. (2015) prefer Heterotraits and Monotraits (HTMT) as a better yardsticks, a blend gives comprehensive insights for measuring discriminant validity.

The exact threshold level of the HTMT is debatable; after all, some authors suggest a threshold of less than 0.85 (Clark & Watson 1995; Kline 2011), whereas others propose a value of 0.90 (Gold et al. 2001; Teo et al. 2008). These criteria are all met as the results of table 7 ranges from 0.721 to 0.789. Conversely, to determine discriminant validity, the square roots of the AVEs in each latent variable was used and where the values are greater than the correlation values among the latent variables, discriminant validity is evidently established (Fornell & Larcker, 1981). In this regard, the results of table 8 satisfy the requirements as all values in bold (square root of AVEs) and greater than the values not in bold (correlations).

Indicator Correlation (Formative)

Table 8: Collinearity Statistics

Hypothesis	Relationship	VIF
Ho1	ER ---->SG	2.644
Ho2	ER ---->SM	1.000

Source: SMARTPLS-SEM 4.20

According to Hair et al. (2017a), the evaluation of formative measurement models are grounded on indicator collinearity, statistical significance, and relevance of the indicator weights. Collinearity or multicollinearity is a statistical circumstance of two or more independent variables having high correlation values which implies autocorrelation problem. The method usually employed to check for collinearity is the Variance Inflation Factors (VIF) and the Tolerance values (Diamantopoulos &Siguaw, 2006). As a result, Hair et al. (2010) advanced that the standard range is for the Tolerance and the VIF values not to exceed 4 and not to be less than 0.10 correspondingly.Therefore, the results of table 9 confirm the absence of collinearity because the VIF values (2.644, 1.000 and 2.644) are within the benchmark of below 4.

4.2.2 Evaluation of Structural Model

Structural model or inner model is the second step in PLS-SEM meant for quality testing and assessment of statistical significance of the hypothesize relationships. The structural model defines the relationships between latent or unobserved variables. In the structural model, associations between the latent or unobserved variables and their errors or disturbances are examined. Thus, the main analysis procedures for PLS-SEM structural model analysis comprise goodness-of-fit (GoF) assessment, collinearity assessment, relationship significance and relevance assessment, level of *R2*, level of *F2*, and *Q2* assessment (Hair et al., 2014; Henseler et al., 2014). The structural model with only direct coefficients is presented in figure 4.

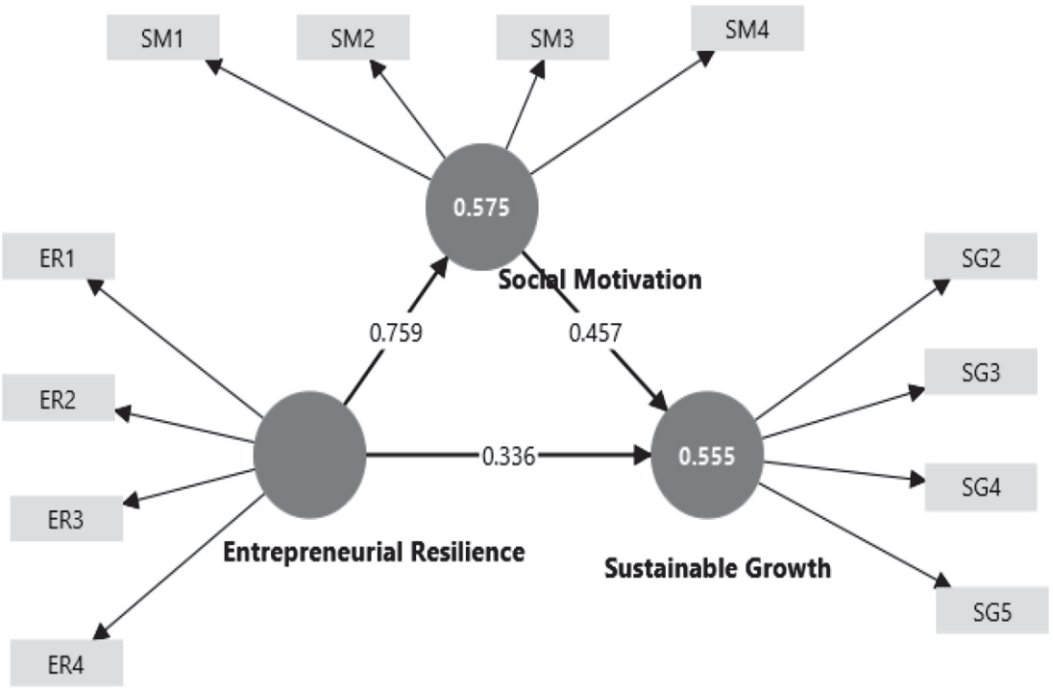

Figure 4: Path Model with Direct Coefficients
Source: SMARTPLS-SEM 4.20

Goodness of Fit (GoF) Model

Table 9: Model Indices

	Saturated model	Estimated model
SRMR	0.075	0.075
d_ULS	0.444	0.444
d_G	0.253	0.253
Chi-square	548.165	548.165
NFI	0.906	0.906

Source: SMARTPLS-SEM 4.20

The goodness of fit indices try to ascertain whether there is inconsistency between the data and the model. In this regard, Henseler et al., (2015) consider as inappropriate where a data set contains more information that the model. In PLS path modeling, the approximation model fit criterion often use is the standardized root mean square residual (SRMR) (Henseler et al., 2015). Hu and Bentler (1999) maintained that a cut-off value of <0.08 signifies appropriate model fit in which 0.075 in table 10 satisfies. Basically, the lesser the SRMR from 0.08 the better the model fit. A different model fit criterion is the Bentler-Bonett index or the normed fit index (NFI) (Bentler & Bonett, 1980). Byrne (2008) advanced that factor models are considered appropriate when the NFI value is greater than 0.90, and the value of 0.906 in table 10 indicates satisfaction of this condition.

Path Coefficients and Hypothesis Testing

Path coefficient offers insights on the position of the actual relationships that were hitherto postulated to determine the nature of the links and the significance among constructs. The path coefficient or the direct effect, t-statistics, and the p-value were performed by utilizing a 5,000-sample bootstrapping command via the PLS-SEM algorithm to evaluate the path measurement in accordance with the hypothesized relationships. The results of both direct and indirect relationships are summarized in table 11.

Table 11: Coefficients for Direct and Indirect Relationships

Relationship	Original sample (O)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision
Ho1: Entrepreneurial Resilience ->	0.789	0.031	25.147	0.000	Rejected

Social Motivation					
Ho2: Entrepreneurial Resilience -> Sustainable Growth	0.371	0.067	5.508	0.000	Rejected
Ho3: Entrepreneurial Resilience -> Social Motivation -> Sustainable Growth	0.517	0.049	10.574	0.000	Rejected

Source: SMARTPLS-SEM 4.20

Interpretation of Results

Null hypothesis 1: There is no significant relationship between entrepreneurial resilience and sustainable growth of SMEs in Jos North LGA, Plateau State. Table 12 results indicate a positive and significant relationship (β= 0.789, t= 25.147, p=0.000 i.e. $p < 0.05$) between entrepreneurial resilience and sustainable growth. The significance result is supported by a t-value of 25.147 because it is greater than 1.96 benchmark for a two-tailed test, leading to the rejection of the null hypothesis (Hair et al., 2020). The finding suggests that the practice of entrepreneurial resilience by women can improve sustainable growth of SMEs by 78.9 in Jos. **It is therefore concluded that entrepreneurial resilience has a significant influence on** Sustainable Growth of women-owned SMEs in Jos North LGA, Plateau State**.**

Null hypothesis 2: There is no significant relationship between entrepreneurial resilience and social motivation in SMEs in Jos North LGA, Plateau State. The results reveal a positive and significant relationship (β= 0.371, t= 5.508, p=0.000 i.e. $p < 0.05$) between entrepreneurial resilience and social motivation. The significance result is buttressed by a t-value of 5.508 for being above 1.96 benchmark for a two-tailed test, bringing about the rejection of the null hypothesis as suggested by Hair et al. (2020). **This therefore concludes that entrepreneurial**

resilience is significantly related with social motivation of women-owned SMEs in Jos North LGA, Plateau State**.**

Null hypothesis 3: Social Motivation does not mediate the relationship between entrepreneurial resilience and sustainable growth of SMEs in Jos North LGA, Plateau State. This was hypothesis postulated to test for mediation or impact of the indirect effect. Cepeda et al. (2018) documents that establishing mediation effect in PLS requires the indirect effect to be significant. This is achieved as results of Table 12 Ho3 indicate a positive and significant relationship (β= 0.517, t= 10.574, p=0.000 i.e. $p < 0.05$). This implies social motivation is a mediator between entrepreneurial resilience and sustainable growth. Additionally, it is necessary to determine the type of mediation that exists. In this case, there is a partial mediation since the direct and indirect relationships (Ho3) are both significant. **Thus, it can be concluded that social motivation plays a partial mediating role in the relationship between entrepreneurial resilience and** sustainable growth of women-owned SMEs in Jos North LGA, Plateau State**.**

4.3 DISCUSSION OF FINDINGS

In order to fulfil objective one, hypothesis 1 was tested which established that there is a significant positive relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North LGA, Plateau State. The finding implies that as women entrepreneurs in Jos North adapt to stressful business situations and resist failures fostering the desire to move forward, they are bound to maintain progress without depleting economic and environmental resources meant the present and future. This finding also aligns with previous discoveries by Ogbumgbada and Onyemauche (2023) who use entrepreneurial resilience (proactiveness and resourcefulness) to predict sustainable growth (sales growth and business expansion) of SMEs in Port Harcourt. Similarly, Alshebami and Murad (2022) equally found that entrepreneurial resilience positively influences sustainable performance in Saudi Arabia when entrepreneurs develop quick response capacity to overcome business and environmental barriers both for press current and future needs.

Furthermore, this current finding resonates with the self-efficacy tenet of social cognitive theory in the sense that when women entrepreneurs develop adaptability self-confidence and belief by persisting to recover from impediments, they can accomplish sustainable economic and environment growth goals (Lopez-Garrido, 2025). Moreover, the institutional theory assumption of exploring capable

path between SMEs and societal needs makes the pursuit of sustainable growth not just a voluntary act but normative, coercive, and mimetic forces that shape environmental, social or economic decision-making (Fauzi & Sheng, 2020; Shibin et al., 2020). These submissions exude the fact that the sustainable attainment of economic and environmental growth warrant women entrepreneurs to develop resilience based on confidence and skills for adaptability, proactiveness, innovativeness, imagination and strategic engagement.

The realization of objective two informed the test of hypothesis 2 which demonstrated a positive and significant relationship between entrepreneurial resilience and social motivation of women-owned SMEs in Jos North LGA of Plateau State. The finding means that as women entrepreneurs apply entrepreneurial resilience by adapting work approaches to emergent situations, they are likely to initiate knowledgeable business interactions and connect with industry moguls to develop social motivation. This outcome is consistent with the findings by Lichtenstein et al. (2022) and Kuckertz et al. (2020) as they postulated that higher levels of entrepreneurial resilience engender the development effective coping strategies to pursue social goals.

Hypothesis 3 was tested in evaluation of objective four, the finding established that social motivation is a partial mediator in the relationship between entrepreneurial resilience and sustainable growth of women-owned SMEs in Jos North LGA. This finding implies that entrepreneurial resilience alone can still predict sustainable growth but the relationship is better mediated by social motivation. In other words, the combinations of entrepreneurial resilience and social motivation accomplish the sustainable growth of women-owned SMEs faster and better. Though prior empirical evidence is lacking on this relationship, the assumptions of social cognitive theory, social motivation theory and institutional theory combined have supported this finding. Majorly, self-efficacy helps to inspire persistency in entrepreneurial activities, social orientation and reward drive the need to maintain business relationships while business regulation informed orderly conduct of business in preserving present and future resources while progressing.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

Firstly, based on the research findings between entrepreneurial resilience Sustainable Growth, this study provides strong empirical evidence that entrepreneurial resilience has a positive and significant effect on Sustainable

Growth of women-owned SMEs by fostering adaptability, innovativeness, responsible risk-taking, proactiveness, imagination and strategic engagement. With this, women entrepreneurs can often navigate complexities and uncertainties of the business environment, acquire unique perspectives and innovative approaches to business management, fostering resilience and adaptability in SMEs. The inclusion of women in entrepreneurship has been linked to greater diversity in decision-making, which enhances problem-solving and promotes sustainable practices. Secondly, entrepreneurial resilience influences social motivation by inspiring responsible caring beliefs and community-oriented practices within and outside the SMEs. The leadership of women entrepreneurs often focuses on improving the welfare of employees, customers, and the broader community. Women entrepreneurs act as role models, fostering inclusivity and encouraging the participation of underrepresented groups, particularly women and youth, in business activities. Women-led SMEs frequently focus on community-oriented and environmentally sustainable business models, contributing to broader societal benefits alongside economic growth. Finally**,** social motivation acts as a bridge, amplifying the positive effects of women entrepreneurship on sustainable growth. Without this motivation, the impact of entrepreneurial initiatives might be less directed toward long-term economic, societal and environmental benefits. Social motivation reinforces the ability of women-owned SMEs to address societal and environmental challenges. Entrepreneurial resilience, through socially motivated actions, drive innovative solutions that support sustainable business practices. Entrepreneurial resilience often embodies values like persistence, motherly optimism, inclusivity, community orientation, and ethical responsibility, which cultivate strong social motivation. This social motivation serves as a critical pathway for translating entrepreneurial activities into sustainable growth.

5.2 Recommendation

1. Sustain entrepreneurial resilience, foster culture of persistent innovation and supportive women entrepreneurship. Women entrepreneurs should cultivate doggedness capacity character for navigating business challenges and opportunities, engage in experimentation, learning and adaptation, while policymakers should ensure training, mentorship and funding to encourage equal gender entrepreneurial activities. This will help to foster strong linkages between entrepreneurial resilience and sustainable growth of women-owned SMEs.

2. Improve work adaptability and business engagement interaction skills. Women entrepreneurs need to seek constant improvement on work adaptability skills by being creative and changing task methods to align with evolution of present day. This will ensure continuous engagement with social actors capable of improving the relationship entrepreneurial resilience and social motivation.
3. Enhance the effect of social motivation in entrepreneurial resilience. Women entrepreneurs inculcate social motivation values in developing resilience character by aligning business goals with societal and environmental priorities. Hence, government and institutions should develop programs that train and support women entrepreneurs in integrating social responsibility into their business models. These findings highlight the importance of fostering social motivation among women entrepreneurs through supportive policies, training, and resources, enabling them to contribute more effectively to the sustainable growth of SMEs.

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