
The Mediating Role of Financial Literacy Skills on the Relationship between Entrepreneurial Skills and Performance of Small Scale Businesses in Maiduguri

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Abstract

The study examined the mediating role of financial literacy skills on the relationship between entrepreneurial skills and SSBs performance in Maiduguri Metropolis. The population of the study is made up of 538 SSBs in Maiduguri Metropolis. 229 sample for the study was obtained using sample size determination by Krejcie and Morgan. Data for the study was collected from the owners/managers of the SSBs by employing structured questionnaires on 5-point Likert scale. The data was analysed by using SPSS 25 and Smart-PLS 3. The findings from the study discovered that, in the direct relationship, entrepreneurial skills are insignificantly related to SSBs performance, while financial literacy skills are directly and significantly related to SSBs performance. Concerning the mediating role of financial literacy skills, it was found that there is a positive and significant mediating role of financial literacy skills on the relationship between entrepreneurial skills and SSBs performance. Therefore, policymakers and other stakeholders should enhance the entrepreneurial skills and financial literacy skills of the SSBs via appropriate policies and training programmes. Equally, the government should be able to determine and deliver precise training packages to improve the performance of the SSBs. The SSBs should endeavour to place more effort by learning and embracing entrepreneurial skills and financial literacy skills that might improve their performance.

Keywords: Entrepreneurial skill, financial literacy skills, Small scale businesses and Performance.

1. Introduction

Small-scale Scale Businesses (SSB) have been recognized as the drivers of entrepreneurship and play an important role in developing the economy by improving technological ability, transmission of innovation and capital mobilization (Nabiswa & Mukwa, 2017). At the individual level, SSBs play an essential role in improving individual sources of income, standard of living, innovation, new ideas, training ground for entrepreneurs, self-employment, and building job satisfaction and employment (Pulka, 2019). It also enhances the acquisition of entrepreneurial skills and knowledge, reduces dependency on family and government, income redistribution stabilizes family income, reduces the level of poverty and it also improves family saving and investment (Pulka, 2019; Pulka & Ndubuisi, 2016; Pulka, Ramli, & Mohamad, 2021).

Small-scale businesses have contributed immensely to the growth of many economies like Nigeria their performance is below the expectations of relevant stakeholders. SSBs are

still striving to grow as they experience high mortality rates. This is evident in the northern part of the country where businesses are generally inclined to failure as only a few manage to survive. Studies have shown that only 20 per cent of SMEs manage to survive in Nigeria (Akugri, Bagah, & Wulifan, 2015; Ayandibu & Houghton, 2017; Eniola, Entebang, & Sakariyau, 2015). Even though SSBs are the major drivers of economic growth and development for many countries, the contributions of SSBs to the Nigerian economy are relatively low compared to other nations. For instance, SSBs in Singapore, Taiwan, the United Kingdom, South Korea and South Africa contribute 49%, 38%, 55%, 50% and 55% to the GDP respectively. However, SMEs in Nigeria contribute 46.54% (Amin, Thurasamy, Aldakhil, & Kaswuri, 2016; Egena, Wombo, Theresa, & Bridget, 2014; Pulka et al., 2021; Rogo, Noor, Shariff, & Hafeez, 2017; SMEDAN, 2017). Therefore, it is imperative to improve the knowledge of SME owners/managers on entrepreneurial skills and financial literacy for better performance Mansoben (2023).

Entrepreneurial skills enable entrepreneurs to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects to achieve objectives (Obioma, Paul, & Yusuf, 2023). Entrepreneurial skills are the combination of a range of technical, management and personal skills. As such, there is no established simple definition of the entrepreneurial skill set. What constitutes entrepreneurial skills has been a subject of much discussion and concern. Entrepreneurial skills are important for economic growth, innovation, productivity and employment. They are relevant for economic dynamism changing business ideas into economic opportunities (Mohammed & Obeleagu-nzelibe, 2014; Miroshnychenko, Strobl, Matzler, & Massis, 2020). The importance of entrepreneurial skills in the performance of SSBs is in line with the introduction of entrepreneurial education for all undergraduates in Nigerian Universities by the Nigerian Universities Commission and provides further evidence of the need for youth empowerment and self-employment as a viable career option. Financial literacy incorporates wide-ranging capabilities, including knowledge and awareness of financial products, understanding of financial institutions, financial skills, financial planning and financial management (Mamun, Fazal, & Mustapa, 2021). Similarly, financial literacy is the ability of an individual to comprehend, use, and manage financial resources effectively (Guest & Brimble, 2018).

Thus, insufficient or lack of entrepreneurial skills and Financial literacy base is a serious block in the survival of small businesses as there is a lack of essential and required expertise in business which might lead to wrong and costly decisions as well as mismanagement (Ezekiel, Glory, & Alfred, 2016). Some SMEs have inadequate financial literacy skills these are seen in their inability to keep proper and complete financial records which may affect SSBs' performance (Smedan, 2021). In Nigeria, despite being one of Africa's largest economies, a significant percentage of the population lacks foundational financial literacy skills, (Chimaobi & Nzewi, 2018). Some studies have stressed that the deficit in financial literacy and entrepreneurial skills poses challenges, particularly in the SMEs where informed financial decisions are vital (Oboh, & Ajiboye, 2018).

SME performance is the embodiment of the results of work achieved by an individual in an organization where they work with high quality and quantity (Fauzi & Nugroho, 2020). Performance is related to work results with an employee's behaviour within a specific period in carrying out his/her duties in an organization (sahir et al 2020). Equally, SMEs' performance is been considered the key driver and guide for economic growth and development in any nation, owing to the point that SMEs contribute to employment growth at a greater pace than larger-scale companies across all sectors of the economy (Abidemi, Aliyu, Abdulmumin, & Aliyu, 2023; Adamu, Kuchich, & Usman, 2023).

The challenges facing SMEs are degenerated by the deficiency of entrepreneurial skills and financial literacy and inadequate financial practices among SME owners/managers (Ajibade, Olawumi, & Abiodun, 2021; Pillai, Sivagnanam, & Rajasekar, 2023). Ajibade et al., (2021) found evidence indicating that many SMEs in Nigeria are facing complications because of inadequate financial literacy. These inadequate entrepreneurial skills and financial literacy deter the ability of SSBs owners/managers to achieve high performance. Likewise, Uba (2020) observed that numerous SSBs owners/managers encounter problems of inadequate entrepreneurial skills financial literacy and digital skills that is making difficult to achieve the desired performance. Likewise, Lawal and Salihu (2020) confirmed that many SMEs have insufficient entrepreneurial skills and financial literacy, which deters better performance of the SMEs. Odetayo, Sajuyigbe, and Adeyemi, (2021) lamented that over 80% of SMEs in Nigeria are experiencing financial exclusion as a result of inadequate financial literacy, leading to untimely failure of the SMEs. Moreover, the World Bank (2018) reported that approximately two million SME owners/managers, particularly in Nigeria, are not either underbanked or unbanked. Odetayo et al., (2021) express alarm that these problems among the SME owners/managers are a result of insufficient entrepreneurial skills and financial literacy. That is why Karadag, (2015) confirmed that the inadequate or lack of entrepreneurial skills and financial literacy among SMEs is obstructing the growth, and development of the SMEs.

Entrepreneurial skills and financial literacy skills have been widely studied in both developed and developing nations (Hakiki, Putra, & Adinugroho, 2023; Ishtiaq, Songling, Hassan, & Hayat, 2020; Pillai et al., 2023). Nevertheless, there is a paucity of studies that have been conducted exploring the mediating role of financial literacy on the relationship between entrepreneurial skills and SSBs performance. Similarly, there is a scarcity of studies that have looked at this conceptual framework, particularly among small-scale businesses, particularly in Maiduguri. Therefore, study to fill in these gaps in the literature. Thus, the objective of the study is to assess the mediating role of financial literacy on the relationship between entrepreneurial skills and the performance of small-scale businesses in Maiduguri. The remaining parts of the paper are structured as follows –literature review, on SSBs performance, entrepreneurial skills, and financial skills. This is followed by methodology, results, discussion of findings and conclusion.

2. Literature Review and Hypothesis Development

2.1 SMEs performance

According to Pulka (2019), SME performance is defined as “the abilities of the SMEs to harness, integrate and utilize various internal and external resources with timely and right reconfiguration to achieve a targeted set of objectives and performance capable of providing employment opportunities, growth of GDP, export and to uplift the standard of living of the society”. The performance of a firm is the actual output or results of an organisation as measured against intended outputs or objectives. Afshan, Shahid, and Tunio (2012) define performance as the achievement of specific tasks measured against predetermined or identified standards of accuracy, completeness, cost and speed. In other words, performance is the accomplishment of a given task measured against pre-set known standards of accuracy, completeness, cost and speed. According to George, Walker, and Monster, (2019), the performance is the degree to which the SMEs have progressed concerning attaining their monetary and nonmonetary objectives. Performance is also seen as SMEs' total financial and nonfinancial health over time by assessing the sound effects of SMEs' decisions and activities Rehman & Anwar (2019). Similarly, (Pekkola & Ukko, 2016) described performance measurement as the basis for an organisation to assess how well it is progressing towards its predetermined objectives and helps to identify areas of

strength and weaknesses to decide on future initiatives for improving organisational performance. Therefore, it is essential to use a combination of financial and non-financial indicators (Aggarwal, Evans, & Nanda, 2012). Richard, Devinney, Yip, and Johnson, (2009) assert that organisational performance comprises three specific areas of firm outcomes: (a) financial performance (profit, return on investment, return on assets) (b) product and market performance (sales, market share), shareholders return (total shareholder return, economic value added).

2.2 Entrepreneurial Skills and SSBs Performance

Entrepreneurial skills comprise numerous sets of skills such as leadership, creative thinking, business management, time management, creative thinking and problem-solving possessed by an individual (Pillai et al., 2023). (Mamun, Fazal, & Muniady, 2019) the findings revealed that entrepreneurial skills positively affect enterprise performance. Entrepreneurial skills also refer to the likelihood of learning and embracing exclusive features that are vital for the accomplishment of entrepreneurial everyday jobs (Pyysiäinen, Anderson, McElwee, & Vesala, 2006). Sariwulan, Suparno, Disman, Ahman, and Suwatno, (2020) entrepreneurial Skills demonstrate an ability to create something new and different. Entrepreneurial skills mean possessing the ability to generate good ideas, find and evaluate business opportunities, gather the necessary resources, initiate appropriate actions to ensure success and implement action to take advantage of the opportunities for rewarding outcomes (Astuti, Supanto, & Supriadi, 2019). Entrepreneurial skills are not just about acquiring skills but acquiring knowledge and driving towards enterprise in skills that enhance personal livelihood through enduring business start-ups, enhancing employment opportunities, and promoting economic development and growth.

Many studies have established a link between entrepreneurial skills and SME performance. For instance, Pillai et al., (2023) investigated the influence of entrepreneurial skills on sustainable performance. The results revealed that entrepreneurial skills are significantly influencing sustainable performance. Gupta and Tyagi, (2023) investigated the relationship and the influence of entrepreneurial skill on business performance. The Results of the study indicated that there is an insignificant influence of entrepreneurial skills on SME performance. Baysa-Carbos and Andres, (2023) found Entrepreneurial Skills are vital to the attainment of performance. Jardim, (2021) argued that individuals need Entrepreneurial Skills to Be Successful in a Digitalised World.

Furthermore, Sariwulan et al., (2020) studied the effects of entrepreneurial skills on the performance of SMEs. The results showed entrepreneurial skills significantly and positively affect the performance of SMEs. Narkhede, Nehete, Raut, and Mahajan, (2014) studied the Impact of entrepreneurial skills on the SME's performance in manufacturing SMEs in India. Entrepreneurial skills are insignificantly related to the SME's performance. Similarly, Simotwo (2023) Assessed Entrepreneurial Skills on the Performance of Transport Business. The results showed a significant increase in performance. Olowe and Aliyu (2015) conducted a study on the impact of entrepreneurial skills on small-scale business performance Findings revealed that entrepreneurial skills have a significant impact on SSBs performance. Therefore, it is hypothesized that:

H1: Entrepreneurial skills has significant influence on SSBs performance

2.3 Financial Literacy Skills and Performance

Financial literacy is the skills and understanding required by SME owners/managers to manage their business finances effectively (Gayatri & Muzdalifah, n.d.; Rahmawantari & Puspitaningtyas, 2022). Similarly, financial literacy is having insight into concepts from finance, understanding of communication about a financial concept, financial management capabilities both personally and within SMEs, and skills and accuracy in making financial

decisions in every situation (Hilmawati & Kusumaningtias, 2023). Several studies have empirically tested the influence of financial literacy on SME performance. Sariwulan et al., (2020) studied the effects of financial literacy on the performance of SMEs. The results showed financial literacy significantly and positively affects the performance of SMEs. Kemigisha (2023) studied the Effects of financial literacy knowledge on the profitability of small and medium-scale enterprises. The findings of this study reveal a significant positive correlation between the level of financial literacy and SME profitability. Murtadho and Trisnawati, (2023) studied The Influence of Literacy, Inclusion, Financial Performance, Information Technology, and Entrepreneurial Characteristics on the Sustainability of Women SMEs. The results showed that financial literacy has a significant influence on the sustainability of women's SMEs.

Additionally, Mberia (2023) studied the influence of financial literacy on financial performance. The study established a significant positive relationship between financial literacy and financial performance. Neneh (2019), studies the relationship between financial literacy and the success of women-owned businesses. The results revealed a significant positive correlation between financial literacy and business performance. Aiyedogbon, David, and Kelechi, (2023) investigated the effect of financial literacy on the performance of selected women-owned SMEs. Findings revealed that financial literacy significantly influences SME performance. Patel, D'souza, and Bharamgoudar, (2018) investigated how financial literacy shapes the trajectory of women-owned enterprises in India. It was found that higher levels of financial literacy significantly propelled the success of women-owned enterprises. Those with enhanced financial knowledge were found to experience accelerated growth and business expansion.

Moreover, Adeleke, Ogunwoye, and Ajagbe (2021) examined the impact of financial literacy on the performance of women-owned SMEs in Lagos, Nigeria. It was found that higher financial literacy significantly improved SMEs' performance. Oyedele, Oriowo, Egunjobi, and Togun (2023) investigated the influence of financial literacy on financial behaviour SME performance. The results revealed that financial literacy significantly predicts SME performance. Oscar, Mansoben, Kuniasih, Widuri, and Aggraeni, (2023) studied the influence of financial literacy on the performance of micro, small and medium enterprises. The results that there is a positive influence between Financial Literacy on MSME performance. Suoniemi, Kautonen and Koskinen (2020) studied in what manner financial literacy affects the financial decision-making of women small business owners in Finland. The results indicated financial literacy is positively related to sound financial management practices. Likewise, Kiyosaki (2012) in Oyedele et al., (2023) asserted that SME owners possessing financial skills demonstrate better financial behaviour and effectively manage their financial resources, leading to improved financial performance. Similarly, Ong, Wong, and Teo, (2020) reaffirmed that SME owners with cognitive abilities consistently handle their finances to achieve predetermined goals and meet expected expenses.

Also, Esiebugie, Richard, and Emmanuel, (2018) studied the effect of financial knowledge on the performance of SMEs. The study concluded that financial literacy influences SME performance. Wahyud and Sari, (2021) conducted a study on the effect of financial literacy and financial inclusion on SMEs' financial performance Findings revealed that financial literacy affects financial performance. (Chepkemoni, 2017) studied the effects of financial literacy training on business performance. The findings revealed that financial literacy positively influenced the performance of SMEs. Awais, Elahi, Wahga, Majid and Ikram, (2021) conducted a study on entrepreneurial skills and financial performance. The Findings revealed that financial literacy has a positive and direct influence on an SME's financial performance. Hence, it is hypothesized that:

H2: financial literacy has significant influence on SSBs performance

H3: financial literacy has significant mediating influence on entrepreneurial skills and SSBs performance

3. Theoretical Review

3.1 Behavioural Finance Theory

This work is underpinned by behavioural finance theory and human capital theory. First of all, the central issue of the Behavioural Finance Theory it provides valued viewpoints on the factors that could have an impact on the financial behaviour of individuals and the role played by financial literacy in decision-making and taking (Chavali, Mohanraj, & Ahmed, 2021). Khadijah and Wan, (2019) argued that behavioural finance theory offers insights into real-world financial behaviour by examining irregularities from rationality, allowing financial institutions, policymakers and individuals to improve financial strategies that alleviate the adverse effects of financial behavioural predispositions. Lawal and Salihu, (2020) documented many SMEs have inadequate financial knowledge and its benefits, which could hamper their ability to achieve better performance. Thus, this theory emphasises the importance of providing financial literacy skills to SME owners/managers to understand and appreciate the benefits and functionality that drive financial literacy that could enhance SME performance.

Similarly, SMEs, given the participation of owners/managers in decision-making, are particularly vulnerable to behavioural predispositions that could lead to either achieving the desired performance or not (Chavali et al., 2021). Thus, Behavioural finance theory might help understand the challenges facing SMEs and provide sound strategies for improving their performance through financial literacy (Oyedele et al., 2023). It has been expounded that behavioural finance theory throws more understanding on how financial literacy and financial behaviour could benefits SME owners/managers to embrace and manage their business successfully (Klychova, Zavalkovskaya, & Klychov, 2018).

3.2 Human Capital Theory

The human capital theory was postulated by Becker (1962) and Rosen (1976). The theory is emphasising that individuals who hold numerous skills, abilities, and personalities that could be employed to improve human capital and performance of the SMEs. According to Chebet (2015), " human capital the SMEs include an individual's knowledge, capabilities, skills, and experience of the SMEs employees, owners and managers that are relevant to the tasks in the SMEs. The human capital theory suggests that investing in education, training, and skills acquisition can enhance individuals' productivity and earnings. This theory postulates that human capital development is a significant driver of economic growth and development. According to the theory, individuals who acquire technical and entrepreneurial skills are better equipped to create and manage successful businesses, which in turn contributes to the growth and development of the economy. Therefore, According to Fix (2021) SMEs can boost and ensure going concern of profits by investing in human capital through education and training of SMEs employees. In the context of this study, the human capital theory implies that entrepreneurs who acquire entrepreneurial skills are more likely to create and manage successful businesses, which will contribute to better SMEs performance. The theory suggested that the level of entrepreneurial skills amongst SMEs owners/managers.

To conclude, Behavioural Finance Theory and human capital theory are providing a theoretical underpinning for the study in understanding the significance of skills acquisition for achieving better performance in the SMEs. The theories suggests that investing in financial literacy skills and entrepreneurial skills contributes to the accomplishment of success in SMEs. This in turn could serve as a driving force for

economic growth and development of the country. Consequently, the theoretical framework for this study is providing accommodation for the variables in this study that could lead to the achievement of better performance by SMEs.

4. Methods

The population of the study are all registered small-scale businesses in Maiduguri Metropolis. The number of registered small-scale businesses is 538 according to Smedan (2017). A sample size of 229 was obtained from the population using Taro Yamane (1973). This study used of simple random sampling technique in selecting the respondents. This study adopts a survey research method utilizing a primary source of data through a structured questionnaire. The questionnaires were self-administered to owners and managers of small-scale businesses. Questionnaires are adapted from previous studies. The variables used in the study were measured on a five-point Likert scale anchored by 1 = strongly disagreed, 2= disagreed, 3= undecided, 4= agreed, and 5= strongly agreed (Vagias, 2006). The data collected was analysed using SPSS version 25 and Smart-PLS version 3. Preliminary analysis was conducted using SPSS, while Smart-PLS was used to test the hypotheses of the study.

5. Results

Common Method Variance

Common method variance (CMV) is the amount of spurious correlation between variables that is created by using the same method—often a survey—to measure each variable (Craighead, Ketchen, Dunn, & Hult, 2011) Therefore, if CMV is not treated might lead to erroneous conclusions about relationships between research variables by inflating or deflating findings (Conway & Lance, 2010; Pulka, 2022). To detect CMV, Harman’s (1976) one-factor assessment was employed. CMV occur when the results of the factor provide one-factor accounts for more than 50% of the variance in the predictors and criterion variables, it designates that CMV exist, then again when it is less than 50%, CMV does not exist (Jakobsen & Jensen, 2015; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The analysis showed that one component explained 41.16 per cent of the variance. Thus, the figure is less than 50 per cent, hence, there is no CMV in the data of this study. Table 1 presents the results of the CMV.

Table 1: Common Method Variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	2.701	41.016	41.016	2.701	41.016
2	0.700	27.006	68.022			
3	0.606	12.117	80.139			
4	0.553	11.066	91.205			
5	0.440	8.795	100.000			

Extraction Method: Principal Component Analysis.

Source: Field Survey (2024)

Furthermore, data normality was checked using skewness and kurtosis. The results showed that the data is normally distributed. Thus, Curran, West, and Finch, (1996) and West, Finch, and Curran, (1995) argued that the values of the skewness should be less than 2, while the values of the Kurtosis should be less than 7. Table 2 presents the results of the normality test. All the values of skewness are less than 2, while those of Kurtosis are less than 7. This signifies that the data is normally distributed.

Table 2: Normality Test: Skewness and Kurtosis Statistics

Variables	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Entrepreneurial Skills	233	0.742	0.159	0.682	0.318
Financial Literacy Skills	233	0.779	0.159	0.513	0.318
SSBs Performance	233	0.890	0.159	1.454	0.318

Source: Field Survey (2024)

Moreover, multicollinearity was assessed using tolerance and VIF (variance inflation factor). The value of the VIF has to be between 0.1 and less than 10 (Hair, Anderson, Babin, & Black, 2010; Hair, Wolfinbarger, Ortinau, & Bush, 2010; Pallant, 2010). From Table 3, the results indicated that the values of the tolerance level and VIF are greater than 0.1 and less than 10. Therefore, data is normally distributed.

Table 3: Multicollinearity Test based on Tolerance and VIF Values

Variables	Collinearity Statistics	
	Tolerance	VIF
Entrepreneurial Skills	0.650	1.539
Financial Literacy Skills	0.646	1.547

Source: Field Survey (2024)

Assessment of measurement model

When using PLS in data analysis, the first stage is to assess the measurement model (Hair, Hult, Ringle, & Sarstedt, 2017; Henseler, Ringle, & Sinkovics, 2009). The measurement of the model comprises the assessment of individual outer loading of all items, Cronbach alpha reliability, composite reliability and average variance extracted (AVE). Followed by an assessment of convergent and discriminant validities (Hair Jr, William, Babin, & Anderson, 2014). Figure 1 shows the outer loadings and AVE of the research variables.

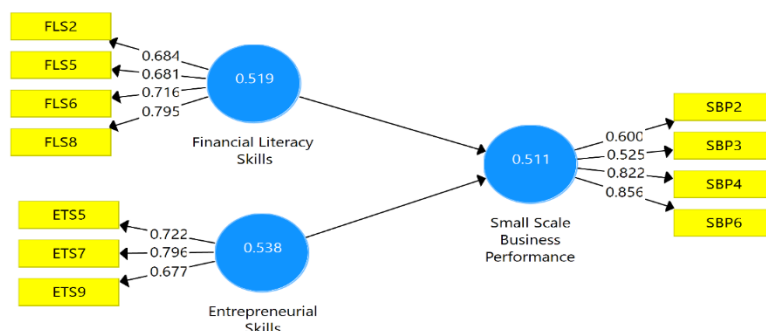


Figure 1: Measurement Model

4.5.1.2 Internal Consistency Reliability

The Individual item reliability was assessed using outer loadings of each item (Joseph F. Hair, Sarstedt, Pieper, & Ringle, 2012; Sarstedt, Ringle, Smith, Reams, & Hair, 2014). Thirty-one (31) items were removed from the analysis because the values of their loadings were below the threshold of 0.40 (Joseph F. Hair et al., 2017; Sarstedt et al., 2014). Table 4 presents the results. Similarly, reliability was assessed using Cronbach alpha and composite reliability. The results revealed that Cronbach’s alpha and composite values for all variables were greater than 0.7 except for financial literacy skills which slightly fall

below the threshold with the values of 0.690 and 0.695 respectively. This has shown that all items were reliable.

Table 4: Loadings, Composite Reliability and Average Value Extracted Values

Variables	Standardized Loadings	Cronbach's Alpha	Composite Reliability	AVE
Financial Literacy Skills	0.684	0.690	0.695	0.519
	0.681			
	0.716			
	0.795			
Entrepreneurial Skills	0.722	0.773	0.788	0.538
	0.796			
	0.677			
SSBs Performance	0.600	0.780	0.801	0.511
	0.525			
	0.822			
	0.856			

4.5.1.3 Convergent Validity

Convergent validity measures the amount of associations between alternative measurements in research (Hair et al., 2017; Sarstedt et al., 2014). Indicators are said to have convergent validity when the indicators or the items share a high proportion of variance (Sarstedt et al., 2014). Thus, Fornell and Larcker, (1981) and Chin (1998) recommended that the research variable’s AVE ought to be at least 0.50 as threshold. The AVE values of all the variables in this study have surpassed 0.50, and this indicates that the variables display satisfactory convergent validity. Table 4 presents convergent validity through the average variance extracted.

4.5.1.4 Discriminant Validity (Fornell-Larcker Criterion)

Firstly, the Fornell-Larcker Criterion was employed to measure discriminant validity in this study. Discriminant validity measures the degree to which a variable is different from another variable (Barroso, Carrion, & Roldan, 2010; Byrne, 2010; Hair, Anderson, et al., 2010). To attain discriminant validity, Chin (1998) suggested that all the indicator loadings should be higher than the corresponding cross-loadings. Thus, the whole indicator loadings are greater than the corresponding cross-loadings and demonstrate sufficient discriminant validity. Table 5 presents the result of the discriminant validity.

Table 5: Variables Correlations and Square Roots of AVE

Variables	Entrepreneurial Skills	Financial Literacy Skills	SSBs Performance
Entrepreneurial Skills	0.733		
Financial Literacy Skills	0.314	0.721	
SSBs Performance	0.257	0.557	0.715

Secondly, Heterotrait-Monotrait Ratio (HTMT) was used in assessing discriminant validity. The result of all variables satisfied the criterion (Joseph F. Hair et al., 2017; Jörg

Henseler, Ringle, & Sarstedt, 2015). Thus, HTMT is the “ratio between-trait correlations to the within-trait correlations” of all the variables in the study (Hair et al., 2017). If the value of the correlation is greater than 0.9, it points to the non-appearance of discriminant validity among the constructs of the study (Hair, Ringle, & Sarstedt, 2013). Accordingly, the results from Table 6 specified that the values of the HTMT for all the variables are less than 0.9. So, it is concluded that there is discriminant validity among all the variables of the study.

Table 6: Heterotrait-Monotrait Ratio (HTMT)

Variables	Entrepreneurial Skills	Financial Literacy Skills	SSBs Performance
Financial Literacy Skills	0.499		
Small Scale Business Performance	0.416	0.762	

4.5.2 The Assessment of Significance of the Structural Model

Table 11 and Figure 2 present the results of the direct relationships between financial literacy skills, entrepreneurial skills and SSB performance. For the first hypothesis, the results showed there is a positive and significant influence of financial literacy skills on SSB performance with $\beta = 0.542$, $t \text{ stat} = 10.289$ and $P \text{ value} = 0.000$. For the second hypothesis there is an insignificant influence of entrepreneurial skills on SSB performance where $\beta = 0.070$, $t \text{ stat} = 1.135$ and $P \text{ value} = 0.256$. About the mediating role of financial literacy skills, there is an insignificant mediating role of financial literacy skills on the relationship between entrepreneurial skills and SSB performance, the results indicated that $\beta = 0.190$, $t \text{ stat} = 5.441$ $P \text{ value} = 0.000$. Therefore, H1 and H3 are supported, while H2 is rejected.

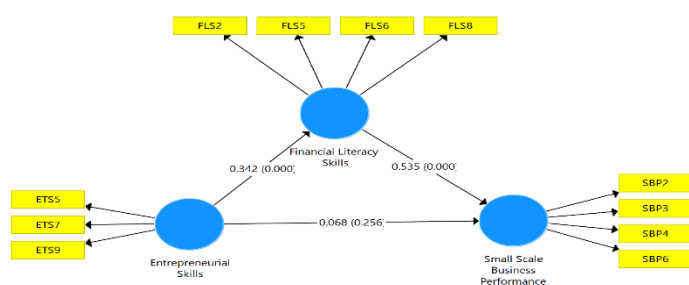


Figure 2: Hypotheses Testing Results

Table 7: Results of the Relationships (Hypotheses Testing)

Hypotheses	Mean	Std. Dev	T Stat.	P Values	Decision
Entrepreneurial Skills => Small Scale Business Performance	0.070	0.060	1.135	0.256	Rejected
Financial Literacy Skills => Small Scale Business Performance	0.542	0.052	10.289	0.000	Accepted
Entrepreneurial Skills => Financial Literacy Skills => Small Scale Business Performance	0.190	0.034	5.441	0.000	Accepted

4.5.2.2 Assessment of Coefficient of Determination (R²)

The R square measures the ratio of the change in the SSB performance that is expounded by entrepreneurial skills in research work (Hair et al., 2013). The acceptable level of R

square is categorised into three; 0.25 is considered weak, 0.50 is considered moderate, and 0.75 is considered substantial (Hair, Ringle, & Sarstedt, 2011). The outcomes of this study discovered that the value of the R square is 0.317 (60%). This suggests that entrepreneurial skills and financial literacy skills bring about 32% changes in the SSB's performance in Maiduguri (Hair *et al.*, 2017). Table 8 depicts the results of the R square.

Table 8: Assessment of Coefficient of Determination (R2)

Variable	R Square	R Square Adjusted
Small Scale Business Performance	0.317	0.311

4.5.2.3 Assessment of Effect Size (f²)

The effect size measures the influence of individual entrepreneurial skills and financial literacy skills on SSB performance (Chin, 1998). As suggested by Cohen (1988), entrepreneurial skills have a small effect size (0.011) and financial literacy skills have a large effect size (0.368). These results infer that financial literacy skills on SSB performance contribute meaningfully to the achievement of better SSB performance in Maiduguri. Table 9 depicts the Assessment of the Effect Size.

Table 9: Assessment of the Effect Size (f2)

Variables	F ²	Effect Size
Entrepreneurial Skills	0.011	Small
Financial Literacy Skills	0.368	Large

4.5.2.4 Assessment of Predictive Relevance (Q²)

In assessing the predictive relevance, blindfolding technique is suggested (Geisser, 1974; Hair *et al.*, 2017). Duarte and Raposo, (2010) stated that the blindfolding method is used to complement the evaluation of the goodness of fit in the PLS-SEM examination. A study with a predictive relevance value of more than zero is well thought-out to have predictive relevance (Henseler & Fassott, 2010). Table 10 demonstrates the predictive relevance of the research model is 0.282 predictive relevance. That implies that the model has a predictive relevance.

Table 10: Assessment of the Predictive Relevance (Q2)

Variables	SSO	SSE	Q ² (=1-SSE/SSO)
Financial Literacy Skills	932.000	886.152	0.049
Small Scale Business Performance	932.000	798.389	0.143

6. Discussion of Findings

From the result presented in this study, it is apparent that financial literacy skills are significantly and positively linked to SSB performance. It suggested that owners/ managers of the SSBs with a high level of financial literacy skills are to be expected to accomplish better than those with a low level of financial literacy skills. Equally, the results advocated financial literacy skills as one of the robust resources of the SSBs that could lead to the attainment of improved SSB performance.

Empirically, the findings from this study have concurred with some previous studies (Adeleke *et al.*, 2021; Aiyedogbon *et al.*, 2023; Mberia, 2023; Neneh, 2019; Oscar *et al.*, 2023; Oyedele *et al.*, 2023; Patel *et al.*, 2018; Suoniemi, Kautonen & Koskinen, 2020). Theoretically, the findings of this hypothesis have supported the underpinning theory of the study, Behavioural Finance Theory. Where the theory emphasises the importance of providing financial literacy skills to SME owners/managers to understand and appreciate the benefits and functionality that drive financial literacy that could enhance SME performance. Theory and empirical findings from the study provide an understanding of

how financial literacy skills might be of benefit to SMEs to embrace and manage their business successfully (Klychova et al., 2018). Therefore, it can be concluded that both theoretically and empirically financial literacy skills are vital for survival as well as for achieving better SSB performance.

Regarding entrepreneurial skills, the results indicated that entrepreneurial skills are insignificantly related to SSB performance. These findings contradict previous results in the literature that found entrepreneurial to be related to SSB performance (Baysa-Carbos & Andres, 2023; Gupta & Tyagi, 2023; Jardim, 2021; Pillai et al., 2023; Sariwulan et al., 2020; Simotwo, 2023). Also, the findings did not provide support for the theory. Despite the findings of this study, entrepreneurial skills are a crucial resource needed by SSBs that might help in attaining improved performance.

Moreover, the study statistically found a significant and positive mediating role of financial literacy on the relationship between entrepreneurial skills and SSB performance. The findings from the study area suggest that for SSBs to achieve better performance, there is a need for the owners and managers to possess financial literacy skills that intercede and enhance entrepreneurial skills. Thus, SSBs need both entrepreneurial skills and financial literacy skills to succeed in their businesses.

7. Conclusion

In conclusion, therefore, entrepreneurial skills and financial literacy skills are vital resources needed by SMEs to achieve better performance. Though entrepreneurial skills alone is insignificantly related to SSBs, when mediated by financial literacy skills, it would improve the SSB's performance. Established on the findings, the Owner/manager of the SSBs should strive to possess entrepreneurial and financial literacy skills.

The study has contributed to the understanding of behavioural financial theory by assessing the relationship between entrepreneurial skills, financial literacy skills and SSB performance. The study also contributed to the literature by examining both the direct and mediating role of financial literacy skills. Therefore, the government and other stakeholders should enhance entrepreneurial skills and financial literacy skills through appropriate policies and training programmes. Similarly, the government should be able to ascertain and provide specific training programmes to improve the survival of the SSBs. The SSBs should strive and put in lots of effort by learning and adopting entrepreneurial skills and financial literacy skills that might improve their performance.

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