Investigating The Effect of Insurance Literacy on Sustainable Performance in Small and Medium Enterprises

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ABSTRACT

The importance of sustainability in organisations is growing due to consumer demand, which has elevated sustainability from a nice-to-have to an essential business concern. The study explored the impact of insurance literacy on the sustainable performance of Nigerian Small and Medium Enterprises (SMEs). The study examined the influence of insurance knowledge, understanding insurance and perceived benefit of insurance on economic and social sustainability of Nigeria's SMEs. The study employed the structural equation method (SEM-AMOS) to analyse data from 364 SME managers in Nigeria. Results from the analysis showed that understanding insurance and perceived benefits significantly affect economic and social sustainability. Insurance knowledge had a positive but insignificant effect on social sustainability. The findings can help SMEs shape sustainable performance strategies. The study recommends promoting mass enlightenment campaigns to improve SMEs' insurance literacy. SMEs should focus on improving insurance literacy, with insurers educating them about its importance. Policymakers should prioritize insurance literacy and develop programs to increase it.

Keywords: Insurance knowledge, Understanding Insurance, Perceived Benefits, Sustainable Performance

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INTRODUCTION

Today's global challenges to sustainability are unparalleled (Yang, Ng, Xu, & Skitmore, 2018). Business discontinuities, environmental damages, population growth (Gyamfi, Ozturk, Bein, & Bekun, 2021), increasing poverty, and climate change all impact the world's health and welfare. A new approach to innovation and business model creation concentrated on a sustainable future rather than short-term profits will be necessary to overcome these difficulties (Scheyvens, Banks, & Hughes, 2016). Previous research has demonstrated the importance of Small and Medium Enterprises (SMEs) for the growth of any economy (Chipambwa, Moalosi, Molwane, & Rapitsenyane, 2023; M. Garba, Salleh, & Hafiz, 2021; Istipliler, Bort, & Woywode, 2023; Roman, Marcu, Rusu, Doacă, & Siriteanu, 2023). Therefore, growing SMEs is a sure strategy to lower poverty rates and enhance people's living standards through wealth creation (Salleh, Rohaizad, et al., 2021). Public and private sector organisations, including SMEs, work hard to maintain their performance and gain a competitive edge (Akanmu, Hassan, & Bahaudin, 2020).

The outbreak of the COVID-19 pandemic creates panic in the global business environment (Ozili, 2020). Businesses are disturbed due to lockdowns imposed in many countries. Aside from the imposition of movement restrictions, many businesses including SMEs have been closed down (Crane, Decker, Flaaen, Hamins-Puertolas, & Kurz, 2022) because they cannot withstand the adverse effects of COVID-19 lockdowns. This trend has created a multiplier effect on the overall supply chain of many SMEs. In Nigeria, many SME workers were temporarily laid unemployed, raw materials supply declined, and the production of many larger firms were reduced, thereby creating huge decline in the country's GDP. This sharp decline creates social and economic sustainability issues in the SME sector (Hossain, Akhter, & Sultana, 2022). Many families suffer economic and social hardships like poverty, unemployment, social vises and economic dependence. Consequently, the demand for insurance as a survival strategy among Nigerian SMEs surged. However, many of these SME owners lack the insurance literacy thus, cannot make wise risk-based decisions (M. Garba, Salleh, Hafiz, & Bakar, 2022), which causes them to suffer the consequences of operational disruptions (Salleh, Awang, Rashid, & Burhan, 2021).

Despite the rising interest in insurance literacy and social sustainability, there is a dearth of literature on social evaluations and quantitative social sustainability (Popovic, Barbosa-Póvoa, Kraslawski, & Carvalho, 2018). Businesses are focusing on risk reduction to meet consumer expectations, with financial inclusion being a major cause of concern. Considering this, the study developed a model and examined the effect of insurance literacy on SMEs' sustainable performance.

Although scholars have researched on sustainability, involving the triple bottom line of environmental, social and economic dimensions of sustainability, (Edeigba & Arasanmi, 2022; Matthews, Tse, O'Meara Wallis, & Marzec, 2019; Muñoz-Pascual, Curado, & Galende, 2019; Philbin, Viswanathan, & Telukdarie, 2022; Qeke & Dubihlela, 2021). The current study investigated the impact of

insurance knowledge, understanding insurance and the perceived benefits of insurance on the sustainable performance of SMEs in Nigeria.

LITERATURE REVIEW

Over the past ten years, financial and insurance products have come in a broader range of complexity levels (Cucinelli, Lippi, & Soana, 2021). Changes in consumer behaviour, the COVID-19 pandemic, and the changing economy have given the sector opportunities and obstacles. As a result, the demand for market penetration has increased as the market for financial products has grown (Śmiglak-Krajewska & Wojciechowska-Solis, 2021). Regulators in various countries have implemented economic reforms aimed at reducing information asymmetry by gradually transferring decision-making authority to small firms and consumers. Financial and insurance literacy is essential because people and businesses can understand information and make better decisions (Hongbing, 2019).

Insurance literacy encompasses the capacity to read, absorb, and apply knowledge to understand insurance policies and practices to protect one's business (Garba, Salleh, Hafiz, & Bakar, 2022; Salleh, Darwish, Setiawan, & Md Fadzil, 2024). It consists of a combination of positive attitudes, behaviours, and a few externally-enabling factors, as well as knowledge and cognitive skills (Goyal & Kumar, 2021). Accordingly, the present study used insurance knowledge (Chen & Volpe, 1998; Hongbing, 2019), understanding of insurance (Allodi, 2020; Lin, Bruhn, & William, 2019; Servon & Kaestner, 2008) and perceived benefit (Goda & Hong, 2008; Weedige, Ouyang, Gao, & Liu, 2019) as determinants of insurance literacy.

According to Łazowski (1928), insurance knowledge is a collection of scientifically informed messages that strive to comprehend the fundamental ideas and practices of the insurance industry and establish the parameters for its future growth. However, Olejnik and Białowąs (2015) contend that knowledge of insurance is a component of financial knowledge and encompasses all the knowledge required to comprehend every issue about the effective operation of the insurance market.

Thus, in line with Evita Allodi, Bocchino, and Stella (2021), the study operationalised insurance knowledge as the ability to comprehend and apply insurance principles deliberately that assists the consumer in making deliberate financial decisions. Individuals and SMEs often opt for heavily marketed plans, seek assistance from family or friends with low insurance understanding, and continue with past coverage despite better options (Loewenstein et al., 2013). The study therefore operationalised insurance understanding as the ability of people and organisations to distinguish between insurance products or services and make better investment and financial decisions.

The general population of Nigeria faces economic difficulty due to its low level of financial literacy, which also limits the growth of the SME sector (Babajide

et al., 2021). The researchers emphasized the strong evidence supporting the importance of financial literacy for SMEs (Babajide et al., 2021; Anthony Abiodun Eniola & Entebang, 2017; Utami, Aprilia, & Putra, 2021) and encourage greater financial education and awareness in Nigeria, especially for SME business owners. Nigeria's poor financial literacy (including insurance) made the decision to learn about and understand insurance necessary.

Sustainable Performance

Sustainable Performance involves balancing the economic, social and environmental objectives in delivering core business activities to maximise value (Hao, Liu, & Goh, 2021). Scholars' focus on sustainability has grown since the Brundtland Report (1987) gave it its initial consideration (WCED, 1987). The term is a developing research field that has captured the interest of commercial organisations, the scholarly community, and regulatory bodies globally (Shad, Lai, Fatt, Kleme, & Bokhari, 2019). According to the report, the term relates to a development that satisfies present-day wants without jeopardising the ability of future generations to satiate their own needs (Reda, 2020; WCED, 1987).

Sustainability and societal needs are evolving due to manufacturing strategies, with climate change impacting shareholder value. Due to the close relationship between underwriting losses and losses in the value of capital investments, the relevance for insurers is exceptionally high. Several sustainability assessment methods focus on metrics that reflect the Triple Bottom Line's (TBL) economic, environmental, and social facets (Junior, de Oliveira, & Helleno, 2018). Integrating economic efficiency, environmental conservation, and social justice has highlighted the TBL's aims for economic, environmental, and social consequences (Miemczyk & Luzzini, 2019).

Slaper and Hall (2011) argued that the lack of a standard measurement methodology for the three bottom lines of Economic, Social, and Environment has made measuring these three dimensions a source of worry. Thus, this study focussed on economic and social sustainability. Little evidence supports the idea that insurance and social and economic sustainability are correlated (Chiaramonte, Dreassi, Paltrinieri, & Piserà, 2020; Garba, Salleh, Hafiz, & Bakar, 2022; Weedige et al., 2019). Moreover, there is a dearth of research relating insurance literacy to SMEs' sustainability, particularly in Nigeria. A few studies have linked the importance of insurance literacy to the performance of SMEs as a part of financial literacy (Mutegi, Njeru, & Ongesa, 2015; Uddin, 2017; Ye & Kulathunga, 2019). However, none of these studies focused on understanding or knowledge of insurance and their likely effects on creating a sustainable SME. Thus, to fill this gap, this study investigated the effect of insurance literacy (insurance knowledge, understanding insurance and perceived value) on economic and social sustainability of Nigerian SMEs.

Insurance Knowledge

Insurance knowledge is the capacity to comprehend and apply principles deliberately (Evita Allodi et al., 2021). People not knowledgeable of insurance and its significance do not view an insurance policy as a risk management instrument (Evita Allodi et al., 2021; Tennyson, 2011). Due to this, people frequently underinsure themselves when an adverse event occurs or fail to insure themselves sufficiently (Lin et al., 2019). Behavioural finance research reveals that biases and irrational outcomes can impact decision-making, highlighting the need for insurance knowledge to prevent overly optimistic and confident decision-makers from thoroughly examining risks. People are, therefore, ignorant of preventative measures like insurance that can shield them from risky situations, especially low-likelihood and high-effect risks (Weedige et al., 2019). According to empirical studies, people lack the knowledge and decision-making abilities to buy insurance (Uddin, 2017; Salleh et al, 2024).

Many SMEs in Nigeria could not develop and expand their businesses without proper insurance. They often rely solely on government programmes like employee health insurance leaving many SMEs without the same insurance coverage as larger businesses. SMEDAN (2017) estimates that only 36% of SMEs have insurance. As a result, 22.9 percent of them temporarily closed in the first four to six months of operation, and 80 percent perished before being in business for five years (Israel & Okoh, 2018). SMEs face challenges in growth due to unfair insurance burdens, hindering economic benefits and prevents Nigeria's potential growth by limiting the number of workers employed by SMEs.

Understanding Insurance

The fundamental tenet of behavioural finance is that people lack sufficient knowledge of probability and risk concepts. However, a nation's financial literacy may be essential for a strong economy (Zait & Bertea, 2015). According to Mazambani and Mutambara (2018), insurance is new to underprivileged, illiterate individuals in the informal sector who do not know insurance products. Despite the value of insurance and its need to permeate society, most Sub-Saharan Africa (SSA) countries lag behind other regions in adopting risk protection (Hafiz, Salleh, Garba, & Rashid, 2022).

Lin et al. (2019) posited that insurance literacy entails understanding the idea of insurance, being informed about its products, understanding its risk coverage and applying that knowledge and understanding to evaluate the various insurance options to make better decisions. SMEs have developed an understanding of insurance as a tool for financial security and a way to safeguard others. Driver, Brimble, Freudenberg, and Hunt (2018) claimed that insurance trust based on knowledge and understanding is more likely to create belief in insurance and inspire firms to take action in their favour. The knowledge can help SMEs accomplish sustainability objectives like cost-effectiveness without sacrificing safety and quality.

Perceived Benefit

The perceived benefits of insurance outweigh the price in importance (Eling & Pankoke, 2016). SMEs frequently believe that insurance is only advantageous for high-risk or expensive businesses. However, reality and perception are mismatched. Insurance can offer various benefits for each firm, such as financial security and occasionally broader coverage than a self-funded policy (Turgaeva et al., 2020). In this study, the researcher defined perceived benefit as SMEs' expectation of how much their business will profit from insurance. As a result, SMEs are more likely to buy insurance when they see greater benefits from insurance solutions (Ajemunigbohun, Isimoya, & Elegunde, 2020). SMEs purchase insurance for benefits like loss payouts and risk-controlling behavior, enhancing their capacity to manage risk and promoting sustainable performance. Managing risks can improve the business environment and overall economy state.

Theoretical Issues and Hypotheses

Many theories relate a firm's behaviour to risk or production function (Chen, Chen, Elston, & Zhang, 2023). The Stakeholder Theory (Bouguerra, Hughes, Cakir, & Tatoglu, 2023), Knowledge-based View Theory (Hughes, Hughes, Hodgkinson, Chang, & Chang, 2022), and Risk Theory of Profit (Dangana, 2022; Garba, Salleh, Hafiz, Nasidi, & Bakar, 2022; Guda, 2013) are some of the examples of such theories. The Risk Theory of Profit underpins this study as it provides a connection between insurance literacy and sustainable performance in SMEs. The Theory asserts that risk is a crucial aspect of business operations, and those who undertake it are entitled to a distinct reward, known as profit. An entrepreneur does not take a risk unless he intends to be paid more than the actuarial value of the risk (van der Heide, 2023), that is, risks that can be measured.

The Risk Theory guides our understanding of how the risk-taker always weighs the potential rewards (profit) before making investment decisions to pursue sustainable performance. According to the Theory, an entrepreneur could reduce risk by insuring it (Doh, Tashman, & Benischke, 2019). Before utilising insurance products, however, investors must possess the necessary insurance literacy (Weedige et al., 2019). Additionally, insurance cannot reduce ownership costs; only a sale can do this. Hawley believed an entrepreneur had to incur risks to qualify for greater advantages (profit) (Dangana, 2022). However, if he purchases insurance to cover the risk, he will no longer qualify as an entrepreneur and would not be paid. As a result, it is possible to conclude that the profit stems from the uninsured risk (Gehrke, 2019) and that an entrepreneur's reward amount is unknown until the product is sold (Scholz, 2015).

Hypotheses

Knowledge is an intangible asset of a firm which necessitates competitive advantage. Insurance is a fundamental factor in an individual's financial planning.

Evidence shows that low insurance uptake in most third-world countries results from poor risk management and mitigation strategies (Kilonzo, 2019) due to illiteracy. According to Kumar et al., (2015), individuals enriched with insurance knowledge can make informed financial decisions and risk management which contributes to economic sustainability. Conversely, inadequate insurance literacy frequently causes economic and societal issues. Complex solutions are needed for many of the biggest global problems. Bernheim and Garret (2003) believed that insurance knowledge can lead to sound financial decision, manage debt and improve savings thereby contributing to economic success. Thus, organisations and individuals can make better decisions about their risk and exposure by understanding insurance (Riikkinen, Saarijärvi, Sarlin, & Lähteenmäki, 2018). However, the level of insurance uptake among SMEs in Nigeria is unimpressive. Nigeria's overall insurance penetration rate according to (Ehiogu & Eze, (2018) is under 1%.

Consequently, the paper hypothesised that:

H_{1a} : Insurance knowledge significantly affects the economic sustainability of SMEs.

H_{1b} : Insurance knowledge significantly affects the social sustainability of SMEs.

SMEs typically earn less than larger organisations and are more subject to shocks and unforeseen events. As a result, they require more insurance for their sustenance and survival than other companies (Musah & Duker, 2020). It is argued that understanding insurance through its products and services can enable SMEs to create a sustainable business organisation. Insurance is a crucial foundation for economic activity by addressing various SMEs' risks. Alipour (2012) argued, it can have a relationship with the concepts of value creation and profitability of firms, and as a result, insurance knowledge can play an essential role in increasing the value and improving the sustainable performance of SMEs.

Understanding insurance and developing strategies for sustainable performance will allow businesses to take advantage of new growth prospects. Kanojia (2014) believed that sustainable business acts in all stakeholders' best interests, maintains the enterprise's sustainability, and is integrated into the social, economic, and environmental framework. SMEs must explore the link between risks and sustainability, and how insurance can mitigate established and new risks like climate change and natural disasters.

Consequently, the paper hypothesised that:

H_{2a} : Understanding insurance significantly affects the economic sustainability of SMEs

H_{2b} : Understanding insurance significantly affects the social sustainability of SMEs

Perceived benefits are beliefs about the positive outcomes of behaviour in response to a perceived threat (Liu, Brock, Shi, Chu, & Tseng, 2013). They are a group of advantages derived from utilising sought-after services. Naturally, firms purchase insurance because they perceive its benefit and the need to protect their investment and stay long in business. This view is supported by Putri, Indrawati, and Dwi (2017), that customers will experience both hedonic (emotion-related) and utilitarian values when utilising a good or service (Narahdita, Aisjah, & Kusniyah, 2020). While some variables, like insurance, are considered essential by larger organisations, SMEs typically do not consider them and view insurance as an unnecessary expense. However, Baporikar (2021) contend that this misconception needs to be altered, though, as insurance is crucial for the successful continuation of any organisation. Unexpected events and circumstances can affect businesses, and in such a condition, insurance may be the only line of defense for an SME.

Thus, the study hypothesized:

H$_{3a}$: Perceived benefit significantly affects economic sustainability of SMEs

H$_{3b}$: Perceived benefit significantly affects social sustainability of SMEs

Framework

Figure 1 illustrates the current study's research framework and the hypothesised relationships. The framework was developed to explore how the predictors (insurance knowledge, understanding of insurance and perceived benefit) affect SMEs' sustainable performance (economic and social sustainability).
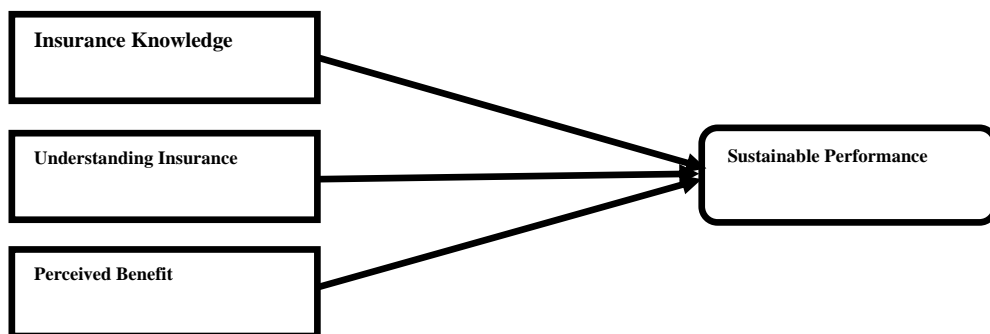

Figure 1: Research Framework

METHODOLOGY

In keeping with earlier studies in the field, the study used a quantitative method (Bartholomae, Russell, Braun, & McCoy, 2016; Musah & Duker, 2020), a simple random sampling technique was utilised to gather cross-sectional data from SMEs operating in Nigeria. According to Mackenzie and Knipe (2006), cross-sectional and quantitative research best evaluate the relationships between constructs. Constructs-item ratios were used to calculate the sample size as recommended (Hair, Hult, Ringle, & Sarstedt, 2017). For the analysis of data, structural equation modelling (SEM-AMOS) was used. The technique allowed for the study of structural relationship between variables and latent constructs (Awan, 2017). The method is preferred by researchers due to its robustness and the ability to perform multiple operations in one analysis. A sufficient sample size should be used in any research employing structural equation modelling (SEM), which should be five times (a minimum) or ten times (a maximum) the number of construct elements being examined. Furthermore, Hair et al. (2018) suggested ratios of 15:1 or 20:1. As a result, the study population comprised 73,081 SMEs registered with the Small and Medium Enterprise Development Agency of Nigeria (SMEDAN).

A sample of 465 SME owners from all categories was analyzed using AMOS software, with a response rate of 78.3%, while confirmatory factor analysis and structural equation modeling were performed. Furthermore, items of the instrument of data collection were adapted from different sources. Insurance knowledge items were adapted from Tennyson (2011), while items for understanding insurance were adapted from (Allodi, 2020). A scale by Bosmans and Baumgartner (2005) was used to measure perceived benefits, and questions about economic and social sustainability were modified from earlier research (Gericke, Boeve-de Pauw, Berglund, & Olsson, 2019; Nor-Aishah, Ahmad, & Thurasamy, 2020; Ye & Kulathunga, 2019).

Measurement Variables

The variables used in this study were adapted from previous literature as presented in Table 1.

Table 1: Measurement of Variables

Construct	Statement	Source(s)
Insurance Knowledge (IK)	The main purpose of insurance is to reduce financial risk It is often a good idea to buy an insurance policy. An annuity offers the same type of protection as an investment-based insurance policy. The insured are protected against the insurer's company bankruptcies.	Tennyson (2011)
Understanding Insurance (UI)	I can understand, analyse, manage, and communicate insurance matters	E Allodi (2020)

	I can understand and make use of insurance concepts I can easily interpret and use insurance-related information. I can make effective decisions across various financial contexts to improve risk protection.	
Perceived Benefit (PB)	When evaluating insurance, I relied on my feelings and expectation of its benefit. I thought my feelings were necessary for my evaluation of the insurance policy. I always try to discover whether my feelings or expected benefits influenced my choice of insurance patronage.	Bosmans and Baumgartner (2005)
Economic Sustainability (ES)	Business firms need to distribute goods and services fairly among people worldwide. Our company has improved its market share Our company has improved its position in the marketplace. Our company has increased its profits. Our company has increased its return on investments	Gericke et al. (2019) Nor-Aishah et al. (2020) Ye and Kulathunga (2019)
Social Sustainability (SS)	Companies need to act responsibly towards their employees, customers and suppliers Our company has improved or enhanced the overall stakeholder welfare Our company has improved the occupational health and safety of employees. Our company has improved the awareness and protection of the claims and rights of the community served Our company has improved customer satisfaction. Our company rapidly responds to customers' complaints.	Gericke et al. (2019) Nor-Aishah et al. (2020) Ye and Kulathunga (2019)

RESULTS AND DISCUSSION

Table 2 presents the demographic characteristics of the respondents, featuring their age, gender, and years of experience.

Table 2: Demographic Characteristics

Profile	Frequency (N=364)	Percentage %	Cumulative %
Gender			
Male	212	58.2	58.2
Female	152	41.8	100.0
Age			
18-25	68	19.0	19

26-35	133	36.0	55
36-45	76	21.0	76
46-Above	87	24.0	100.0
Education Level			
Primary	174	47.8	47.8
Secondary	138	37.9	85.7
Tertiary	42	11.5	97.2
Others	10	2.8	100.0
Years of Existence			
0-2	102	28.0	28.0
3-5	142	39.0	67.0
6-10	41	11.3	78.3
10_Above	79	21.7	100.0
Nature of Business			
Education	13	3.6	3.6
Manufacturing	155	42.6	46.2
Accommodation and Food Services	34	9.3	55.5
Wholesale Retail	36	9.9	65.4
Human Health and Social Work	22	6.0	71.4
Others	104	28.6	100.0

The study conducted a preliminary analysis and found no missing data or outliers in the dataset, while normality was achieved as recommended (Hair, Anderson, Babin, & Black, 2010; Tabachnick & Fidell, 2013). The Kaiser-Meyer-Olkin (KMO) and Bartlett sphericity tests must be met for Exploratory Factor Analysis (EFA) to pass its feasibility test. The Kaiser-Meyer-Olkin (KMO) test determines whether the data set can be used for factor analysis. It is generally accepted that samples with KMO values above 0.5 are sufficient for factor analysis, while samples with KMO values below 0.5 are insufficient (Garba, Salleh, Hafiz, Nasidi, et al., 2022). The KMO and Bartlett's test results indicated that the sample satisfied the minimum threshold, as presented in Table 3.

Table 3: Result of KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.962
Bartlett's Test of Sphericity	Approx. Chi-Square	10990.290
	Df	465
	Sig.	.000

As demonstrated in Table 3 the Kaiser-Meyer-Olkin value of 0.962 was higher than the required threshold of 0.60. As a result, for the factor analysis to be regarded as valid, the significant value of Bartlett's Test of Sphericity must also be lower than 0.05 (Hair et al., 2019). As shown in the Table, Bartlett's test significance value was 0.000, less than the required significance value of 0.05. An

approximate KMO score of less than 1.0 and Bartlett's test significance value close to 0.0 showed that the data was suitable for factor analysis (Awang, Afthanorhan, & Asri, 2015).

Using Cronbach's alpha, the study evaluated the reliability of the research instrument. An instrument's reliability is its capacity to deliver the same output over time consistently (Haktanir, Seki, & Dilmaç, 2022; Nasidi, Ahmad, & Dahiru, 2022). It determines whether estimating techniques agree significantly with the same theoretical structures (Hair. et al., 2010). Table 4 presents the result of the reliability analysis for the constructs.

Table 4: Reliability Analysis

Construct	Cronbach's Alpha	Items
Insurance Knowledge	.916	6
Understanding Insurance	.920	5
Perceived Benefit	.918	7
Economic Sustainability	.915	6
Social Sustainability	.912	7

The reliability test results using Cronbach's Alpha coefficient are shown in Table 4, and they were above the recommended cutoff point of 0.7 (Nasidi, bin Ahmad, Garba, Hassan, & Gamji, 2021). The insurance knowledge had a Cronbach's alpha value of 0.916 (6 items), understanding insurance 0.920 (5 items), perceived benefit 0.918 (7 items), economic sustainability 0.915 (6 items) and social sustainability 0.912 (7 items), respectively.

In the Structural Equation Model analysis, EFA extracts the principal factors (Gerbing & Hamilton, 1996), while CFA validates the model's factor structure (Van Prooijen & Van Der Kloot, 2001). The study used Confirmatory Factor Analysis (CFA) to assess the model fit. Absolute Fit, Incremental Fit and Parsimonious Fit were examined Throughout the measurement and structural model evaluation processes. The study used the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) to assess the goodness of fit, which were greater than 0.9. The Root Mean Square Error of Approximation (RMSEA) was less than.08, and the Chi-square/degree of freedom of 5.0 or 3.0 was also used (Bentler & Bonett, 1980; Miles & Shevlin, 2007). After confirming the construct CFA, a pooled CFA was performed. The pooled CFA's construct validity showed that the general model fit had been evaluated. The results of CFI = 0.921, TLI = 0.909, RMSEA = 0.075, and Chisq/df = 3.058 satisfied the threshold (Awang et al., 2015).

The constructs' Average Variance Extracted (AVE) and Composite Reliability (CR) were calculated for discriminant and convergent validity. As shown in Table 5, the AVE ranged from 0.510 to 0.688, indicating that all values exceeded the required 0.50 threshold (Hair, Black, Babin, & Anderson, 2019). The result established that the convergent validity of the measurement model had been satisfied. The paper compared the square root of the AVE (on the diagonal in Table 4 below) to all inter-factor correlations to demonstrate the discriminant validity.

Discriminant validity is established if the estimated correlations are less than 0.85 (Kline, 2005). The composite reliability (CR) for each construct was determined. Every CR result above the minimum cutoff of 0.70 indicated that the constructs attained composite reliability.

Table 5: Convergent and Discriminant Validity

Constructs	CR	AVE	IK	UI	PB	ES	SS
Insurance Knowledge	0.897	0.688	**0.829**				
Understanding Insurance	0.805	0.510	0.416	**0.714**			
Perceived Benefit	0.750	0.504	0.223	0.525	**0.710**		
Economic Sustainability	0.908	0.624	0.456	0.640	0.630	**0.790**	
Social Sustainability	0.908	0.663	0.148	0.305	0.139	0.130	**0.814**

The Maximum Likelihood Estimator (MLE) in structural equation modelling is adequately robust to kurtosis violations of multivariate normality in a large sample size with a kurtosis Critical Region less than 7.0 (Hair et al., 2010). The data is normal if the skewness and kurtosis are between -2 and +2 and -7 and +7. According to the instrument's normality test results, all items had skewness values between -.980 and 1.171 and kurtosis values between -0.769 and 1.115. Since the skewness values were within the range of absolute values of 1.5, the assumption of normalcy for the field data was satisfied (Tabachnick & Fidell, 2013).

The Chi-square/degree of freedom, the Root Mean Square Error of Approximation (RMSEA), the Tucker-Lewis Index (TLI), and the Comparative Fit Index (Bentler, 1990) were used to assess the structural model's goodness of fit (Tennant & Pallant, 2012). The evaluation of the goodness of fit of the standardised and unstandardised structural equation models in Figures 2 and 3 showed that the suggested structural model met the required goodness of fitness (Chisq/df = 2.046 < 3.0, RMSEA = 0.072 < 0.08, CFI = 0.927 > 0.90, and TLI = 0.914 > 0.9).

The standardised result and squared multiple correlations (R^2) of the structural model revealed that the insurance literacy constructs (insurance knowledge, understanding insurance, and perceived benefit) accounted for 0.52, or 52%, of the economic sustainability construct in Nigeria. It follows that other factors not examined in this research accounted for the dependent variables 48% variation. Furthermore, the insurance literacy constructs (insurance knowledge, understanding of insurance, and perceived benefit) explained 10% of the variation in social sustainability. The findings showed a substantial association between the dimensions of insurance literacy in this study and a weak relationship with social sustainability.
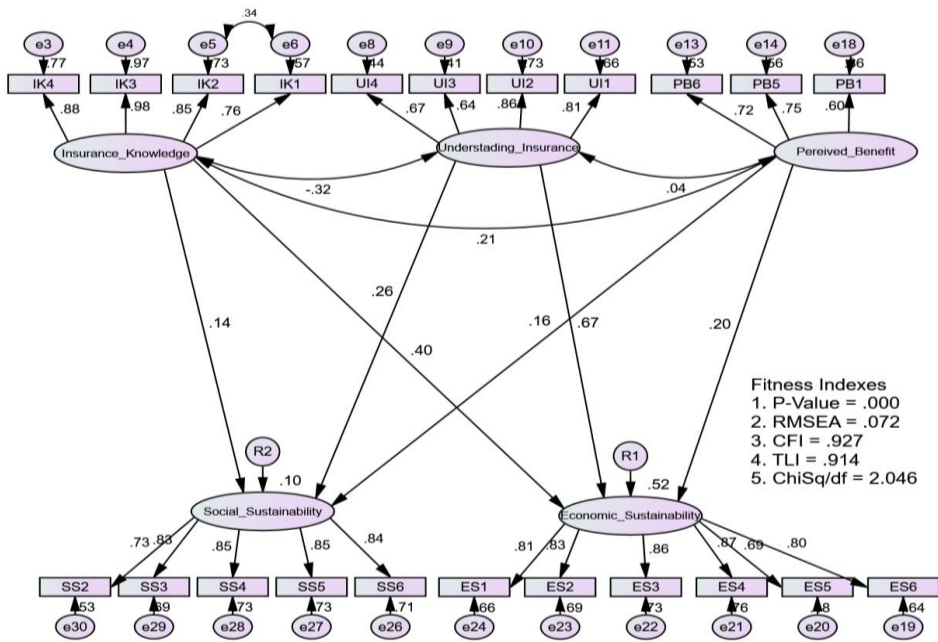
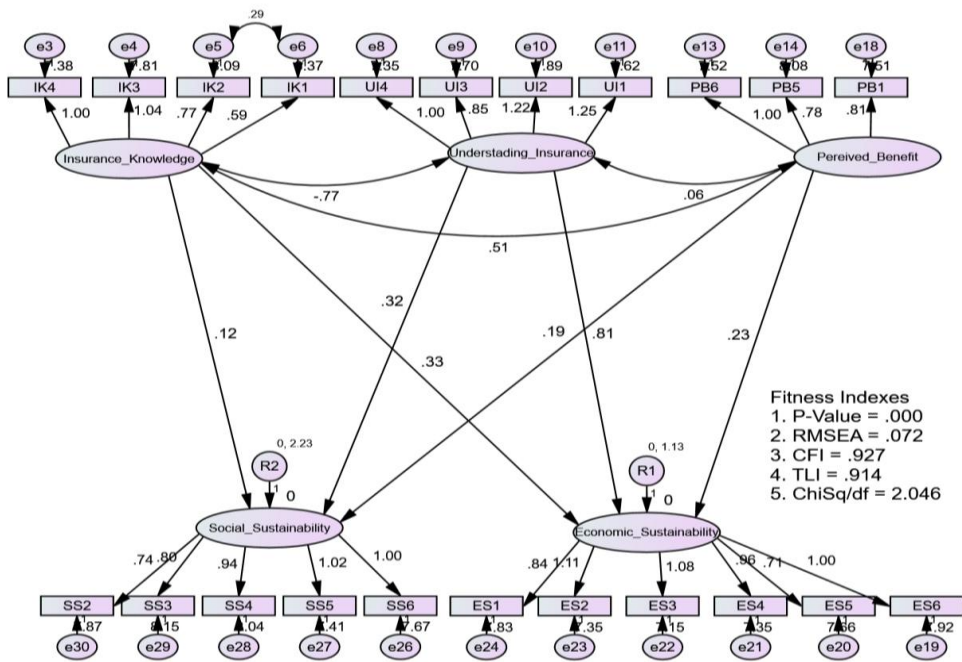**Figure 2: Standardised Path Coefficient**

Figure 3: Unstandardised Path Coefficient

The regression path coefficients depicted the exogenous constructs' impact on the relevant endogenous construct in Figure 3. The single-headed arrow denotes the causal relationships. Table 6 showed the hypothesised association between insurance knowledge and economic sustainability, which is significant at 1%. The t-score of 3.402, the P-value of 0.000, and the unstandardised regression weights of 0.330 demonstrated that insurance knowledge significantly and positively impacted economic sustainability. Thus, the result implied support for the hypothesis (H_{1a}).

Table 6: Regression Weights

Hypothesised Paths			Estimate (Beta Values)	SE.	CR.	P	Remark
Economic Sus.	<---	Insurance Knowledge	.330	.097	3.402	***	Supported
Social Sus.	<---	Insurance Knowledge	.120	.071	1.690	0.091	Not Supported
Economic Sus.	<---	Understanding Ins.	.810	.073	11.096	***	Supported
Social Sus.	<---	Understanding Ins.	.320	.052	6.153	***	Supported
Economic Sus.	<---	Pereived_Benefit	.234	.060	3.888	***	Supported
Social Sus.	<---	Pereived_Benefit	.190	.075	2.533	0.011	Supported

Note: *p<0.05, **p<0.01, ***p<0.001

The hypothesised relationship between insurance knowledge and social sustainability, as shown in Figure 3 and Table 5, was insignificant at 5%. The path coefficient (unstandardised regression weights) $\beta = 0.120$, t-score = 1.69 and P-value of 0.091 signified that insurance knowledge had a positively insignificant effect on social sustainability in Nigeria. Thus, implying hypothesis (H_{1b}) was rejected. Furthermore, the path between understanding insurance and economic sustainability (Figure 3 and Table 6) was significant at 1%. The unstandardised regression weights, i.e., $\beta = 0.810$, t-score = 11.09 and P-value of 0.000, signified that understanding insurance significantly and positively impacted economic sustainability in Nigeria. Thus, the result implied support for the hypothesis (H_{2a}).

On the other hand, the path between understanding insurance and social sustainability was also found to be positively significant ($\beta = 0.320$, t-score = 6.153 and P-value = 0.000) at 1%. Thus, hypothesis H_{2b} was supported. Further, from Figure 3 and Table 6, the unstandardised regression weight for the path between perceived benefit and economic and social sustainability were found to be positive and significant ($\beta = 0.234$, t-score = 3.888 and P-value = 0.000) and ($\beta = 0.190$, t-score = 2.533 and P-value = 0.011) at 1% and 5%, respectively. Consequently, hypotheses 3 (H_{3a} and H_{3b}) were supported.

DISCUSSION

This study aimed to examine insurance literacy's influence on SMEs' sustainable performance. Using the structural equation model, we examined the direct effect of insurance knowledge, understanding insurance and perceived benefits on economic and social sustainability. This research highlighted the importance of insurance literacy in predicting sustainable performance in SMEs, highlighting the need for better understanding of insurance knowledge, understanding, and perceived benefits. The results implied that SMEs with greater insurance literacy can benefit from more business stability, lower risk, enhanced company performance, and contributed to the economy's and society's sustainability. We can deduce several conclusions from these findings.

The results showed that insurance knowledge ($\beta = 0.810$, t-score = 11.09 and P-value of 0.000) positively impacted economic and social sustainability. However, the impact on social sustainability was insignificant ($\beta = 0.120$, t-score = 1.69 and P-value of 0.091). Consistent with this, Sabana (2014) posited that insurance literacy positively affected performance. Therefore, increased insurance knowledge encouraged SME adoption, lowering the risks of high economic costs associated with business interruption and failure, higher unemployment, and lost productivity.

The results also demonstrated that insurance knowledge had an insignificant effect on social sustainability. Better insurance awareness might raise demand for it, providing SMEs with additional safety. However, many Nigerian SMEs found it difficult to protect their businesses with insurance due to the complexity of the insurance system, the high cost of insurance premiums, and a lack of knowledge about available insurance products. As a result, it impacted SMEs' social sustainability, limiting their capacity to increase employment and economic output.

The study also revealed that Nigerian SMEs' understanding of insurance significantly impacted economic sustainability (0.810, t-score = 11.09 and P-value of 0.000) and social sustainability ($\beta = 0.320$, t-score = 6.153 and P-value = 0.000). Businesses that strove for sustainability safeguarded their operations against financial losses by using insurance. According to Musah and Duker (2020), SMEs may not be mainly driven to purchase insurance since they cannot understand how it may be utilised to manage risk. When a crisis strikes, SMEs' businesses may be on the verge of failure due to a lack of insurance coverage, putting their odds of sustainability at risk.

The study also found that perceived benefit was a criterion for determining economic and social sustainability ($\beta = 0.234$, t-score = 3.888 and P-value = 0.000) and ($\beta = 0.190$, t-score = 2.533 and P-value = 0.011). According to Cucinelli et al. (2021), SMEs with a better understanding of insurance are more likely to buy insurance based on its purported benefits and improve their capacity to reduce personal and business risks. SMEs' low demand for insurance goods may result from a lack of understanding of insurance ideas and products. Consequently, they face permanent or temporary shutdowns that directly affect the country's GDP, raise the unemployment level, and create more economic challenges.

Implications

This study has described the structural relationships among insurance knowledge, understanding of insurance, perceived benefit and sustainable performance of SMEs in Nigeria. In consonant with Garba, Salleh, Hafiz, and Bakar (2022), the present study found that insurance literacy promoted the sustainable performance of SMEs through the combined effects of insurance knowledge, understanding of insurance and perceived benefit on economic and social sustainability of SMEs. This result indicated the importance of insurance literacy in promoting sustainability in SMEs and expands our understanding of insurance literacy (Anthony Eniola & Entebang, 2016).

The lack of literature linking insurance literacy and sustainable performance created a vacuum, bridged by examining the structural relationship between insurance literacy and its connection with the sustainability of SMEs. Furthermore, most past literature on SMEs' sustainability uses different tools for analysing the relationship (Ajemunigbohun, Banjo, & Saka, 2022; Weedige et al., 2019; Ye & Kulathunga, 2019).

Limitations and Future Studies

The study's findings have limited generalizability as only registered SMEs were considered, not the entire population of Nigerian SMEs. The study utilized primary data from registered SMEs in Nigeria, excluding unregistered, MSMEs, and registered MSMEs, using a cross-sectional design. Further studies should therefore include unregistered SMEs, MSMEs and registered MSMEs in the country. Future studies should expand sample size, adopt longitudinal designs, study insurance literacy differences among demographic groups, growth over time, and obstacles to improvement for comprehensive evaluation of sustainable performance. Future research could use surveys or interviews to assess insurance literacy among SMEs, examining its relationship with financial health, risk management, and recovery from losses.

CONCLUSION

The study enhances the understanding of SMEs' sustainable performance and insurance literacy due to increasing consumer demand for sustainability as an essential business concern. It explored the impact of insurance literacy on Nigerian SMEs' sustainable performance, using insurance knowledge, understanding, and perceived benefits as predictors and social and economic sustainability as proxies to sustainable performance. Four significant hypotheses were identified, but the relationship between insurance knowledge and social sustainability was found to be insignificant. The study provides a practical guide to SME owners on the importance of insurance literacy to the sustainable performance of their businesses.

SMEs are growth engines, promoting stability and economic growth. Boosting literacy levels among SME owners can promote sustainability and enhance Nigeria's overall economic activities.

CONFLICT OF INTEREST

The authors affirm that they do not have any competing interests.

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