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GREEN SUPPLY CHAIN PRACTICES AND MSME PERFORMANCE IN LAGOS STATE, NIGERIA

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ABSTRACT: The role of sustainable business practices like green supply chain management cannot be overemphasised in a volatile business sphere. This study aims to empirically explore the effect of green supply chain management on the performance of Micro, Small, and Medium Enterprises (MSMEs) operating in Lagos State, a major hub of MSMEs and the commercial centre of Nigeria. The specific objectives include the effects of green procurement and green manufacturing on the Performance of Micro, Small, and Medium Enterprises. The study adopted a survey research design. The population of the study comprised business owners and managers of the 3,235,987 MSMEs in Lagos State, Nigeria, as reported by SMEDAN in 2021. Taro Yamane's formula (1967) was adopted to obtain a manageable Sample Size of 440, and the reliability of the instrument was analysed using multiple linear regression analysis. Findings revealed that green procurement has a significant effect on the performance of MSMEs in Lagos State, Nigeria; green manufacturing has no significant effect on the performance of MSMEs in Lagos State, Nigeria. The study recommended that Owners and Managers of MSMEs should ensure that quality inspection processes are in place to ensure that every material supplied complies with environmental sustainability. Additionally, owners and managers of MSMEs should improve their production processes through the adoption of eco-friendly machines that produce less sound and vibration.

Keywords: Green Supply Chain Management, Green Procurement, Green Manufacturing, MSMEs Performance, MSMEs Growth

INTRODUCTION

In recent years, the need for sustainable business practices has gained momentum worldwide, driven by growing awareness of environmental degradation and the adverse effects of industrial activities on climate change. Green Supply Chain Management (GSCM) has emerged as a strategic approach that integrates environmental considerations into traditional supply chain processes. It encompasses activities that aim to reduce waste, enhance efficiency, and minimize the ecological footprint across the supply chain. The global awareness of environmental sustainability has intensified over the last few decades, leading organizations to adopt more eco-friendly and sustainable practices. Green Supply Chain Management (GSCM) has emerged as a strategic approach that integrates environmental thinking into traditional supply chain management (Zhu et al., 2019). GSCM encompasses several practices designed to reduce environmental impacts while enhancing organizational performance, such as green procurement, green manufacturing, green packaging, green distribution, and customer cooperation (Choudhary et al., 2021). For Micro, Small, and Medium Enterprises (MSMEs), which form the backbone of many economies, GSCM offers both

environmental benefits and opportunities for improved competitive advantage and operational efficiency (Ojo et al., 2022), even though implementing GSCM practices presents unique challenges and opportunities, particularly in developing regions like Nigeria.

Consequently, numerous proxies have been used to represent or measure green supply chain management by diverse scholars and researchers amongst which include; Afzal and Hanif (2022) eco-design, green purchasing, green information systems, cooperation with customers and green manufacturing; Odock (2016) Green Procurement, Environmentally Responsible Design, Green Manufacturing, Green Packaging, Green Distribution and Reverse Logistics; Al- Usman (2022) (green purchasing; green manufacturing; green packaging and green distribution with environmental efficiency); Alcaraz (2022) environmental management systems (EMS), eco-design (ED), source reduction (SR); Reddy and Reddy (2021) planning, inbound, outbound, returns, order management. The current study, therefore, adopts the combination of green procurement and green manufacturing as measures of green supply chain management from the study of Odock (2016) to examine the effect of green supply chain management on the performance of MSMEs in Lagos State, Nigeria.

Green procurement involves sourcing materials and services from suppliers that meet specific environmental standards. This practice promotes the use of eco-friendly materials and incentivizes suppliers to adopt sustainable practices. Developed nations have implemented stringent green procurement policies that encourage companies to source products from suppliers who adhere to environmental standards, thereby fostering sustainability throughout the supply chain (Rezaei et al., 2021). In developing countries, including Nigeria, green procurement adoption is generally lower due to the limited availability of certified green suppliers and additional costs associated with sustainable sourcing (Ibrahim & Mustapha, 2021). Despite these challenges, evidence suggests that MSMEs in Lagos can benefit from green procurement practices by gaining access to new markets and enhancing their reputations (Adewale & Osotimehin, 2022).

Green manufacturing aims to minimize waste and emissions by adopting environmentally-friendly processes and materials. This includes reducing energy consumption, using renewable energy sources, and implementing waste recycling measures within manufacturing operations (Jabbour & Jabbour, 2018). In developed countries, government policies and incentives encourage manufacturers to adopt environmentally friendly practices, thereby reducing their environmental impact and enhancing profitability (Montabon et al., 2021). In Nigeria, however, the adoption of green manufacturing among MSMEs is still limited due to financial and technological constraints. Studies in Nigeria reveal that MSMEs implementing green manufacturing practices have achieved notable improvements in efficiency and cost savings, which contribute to enhanced overall performance (Adesanya et al., 2023). Green manufacturing, therefore, holds promise as a viable approach for MSMEs in Lagos State to improve both environmental sustainability and business performance.

The motivation behind this study arises from the urgent need to address environmental issues such as pollution, waste generation, and resource depletion, which are particularly prevalent in urban areas like Lagos. Nigeria's rapid industrialization and urbanization have significantly increased environmental concerns, particularly in Lagos State, the country's economic hub. For MSMEs,

implementing GSCM practices not only addresses environmental challenges but also opens avenues for cost savings, improved brand reputation, and increased customer loyalty. Evidence from developed nations suggests that GSCM practices enhance organizational performance by reducing costs, increasing efficiency, and promoting corporate social responsibility (Govindan et al., 2020). However, limited research exists on the impact of GSCM on MSMEs in developing countries, such as Nigeria, where contextual factors, including limited infrastructure, resource constraints, and a lack of regulatory support, pose unique challenges. Thus, this study aims to fill this gap by providing insights into how GSCM can contribute to the growth and sustainability of MSMEs in Lagos.

Organizational performance is a multidimensional concept that reflects how effectively a business meets its strategic objectives and delivers value to its stakeholders. Traditionally, it is assessed through financial metrics such as profitability, revenue growth, and return on investment (ROI) however, it is increasingly incorporating non-financial aspects, including employee satisfaction, customer loyalty, innovation, and environmental impact (Gupta et al., 2022). For organizations adopting sustainable practices, such as green supply chain management, performance encompasses environmental indicators such as resource efficiency, waste reduction, and regulatory compliance (Ali & Younis, 2023). Studies indicate that organizations focusing on environmental sustainability often achieve a competitive edge through improved operational efficiency, brand reputation, and customer loyalty, all of which contribute to robust performance outcomes (Kumar & Rahman, 2021). Thus, organizational performance in the modern context combines financial success with sustainable practices, enabling long-term growth and resilience.

Growth is a fundamental aspect of organizational performance, signifying an organization's capability to expand its operational scale, market influence, and financial standing over time. It encompasses various dimensions, including financial gains, market expansion, product or service diversification, workforce development, and sustainability practices. Each of these areas plays a significant role in determining an organization's competitive positioning, and overall value creation.

Growth through market expansion involves entering new geographic areas or customer segments, reflecting an organization's ability to adapt and compete in different environments. This type of growth is crucial for companies seeking to diversify their risk and reduce reliance on a single market. For example, multinational enterprises and expanding small and medium-sized enterprises (SMEs) alike benefit from capturing additional market share, which contributes to stability and resilience (Singh & Verma, 2023).

Statement of the Problem

In Nigeria, despite the notable contribution of MSMEs to over 90% of total businesses and playing a crucial role in employment and GDP contributions (Adewale & Osotimehin, 2022), these enterprises still face unique challenges, including limited access to sustainable resources, lack of regulatory support, and financial constraints. This study examines the impact of GSCM practices—specifically, green distribution, green manufacturing, green packaging, green procurement, and customer cooperation—on the performance and growth of MSMEs in Lagos State. The aforementioned challenges can be attributed to the recent decline in the growth of MSMEs in

Nigeria as reflected in the 2017 and 2021 SMEDAN reports in which the total number of MSMEs in Nigeria has witnessed a downward shift from 41, 543, 028 to 39, 654, 385 MSMEs.

It can be deduced from these challenges that MSMEs in Lagos state are finding it difficult to play the vital role of reducing unemployment, especially among the youth population, which is currently witnessing an alarming rate of growth in geometric progression. The state's economy is also increasingly finding it difficult to cope with population growth due to massive rural-urban migration of youths in search of greener pastures. Many experts have called for the creation of an enabling environment that supports small-scale enterprises to thrive. This can only be achieved when MSMEs adopt a sustainable practice such as green supply chain management. In the view of Naradda et al. (2020), most managers and business Owners of MSMEs lack experience and do not possess the required capabilities compared to companies and businesses with more sophisticated systems and resources to mitigate the effects of changes in the business environment. Many MSMEs in Lagos State were found to be practising supply chain management practices without greening them, which does not support sustainability. The slow response to market requirements and dynamic consumer preferences has also shifted competitive advantage and customer market share to existing and emerging business practices in the economy.

A number of studies have been carried out on green supply chain Management Practices as a strategy and its effect on the performances of organizations, while adopting various measures of green supply chain Management as the independent variable and diverse parameters for organizational performance as the dependent variable from the perspectives of different countries prominent among which include; Ghana, Indonesia, Malaysia, Ethiopia, UAE, Srilanka, Pakistan, Malaysia, Kenya, China, Thailand, and Austria,. Also, in some parts of Nigeria, different industrial sectors such as information and telecommunication, textile, transportation, oil and gas, banking, construction, electric and appliances, FMCG, food and beverage, education, health, agriculture and others, both in public and private sectors, similar studies have been carried out. However, to the best of the researcher's knowledge, and considering the series of empirical studies that have been extensively reviewed, no study has been conducted in Lagos State in recent times that combines green procurement and green manufacturing in a single study to determine the performance of MSMEs. Additionally, none of the studies using multiple linear regression performed a normality test prior to conducting correlation and regression analysis. It is against these identified challenges and gaps that this current study was embarked upon.

Objectives of the study

The main objective of this study is to examine the effect of green supply chain management practices on the performance of MSMEs in Lagos State, Nigeria. The specific objectives are to:

i. ascertain the effect of green procurement on the performance of MSMEs in Lagos State, Nigeria.
ii. examine the effect of green manufacturing on the performance of MSMEs in Lagos State, Nigeria.

Statement of Hypotheses

In order to achieve the objectives of this research work, the hypotheses are formulated in null form as follows:

Ho_1: There is no significant effect of green procurement on the performance of MSMEs in Lagos State, Nigeria.

Ho_2: There is no significant effect of green manufacturing on the performance of MSMEs in Lagos State, Nigeria.

LITERATURE REVIEW

Conceptual Framework

Green Supply Chain Management Practices

Christopher (2016) defined supply chain management as "the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole." This definition emphasizes the collaborative aspect of SCM, highlighting the role of efficient supplier and customer interactions to optimize value and cost across the supply chain. According to Carter and Rogers (2017), supply chain management is "an integrative approach to managing the flow of materials, information, and financial resources across the network of entities involved in the production and delivery of goods and services." This perspective emphasizes SCM as an integrative process that spans the entire network, from suppliers to end customers, and includes material, information, and financial flows. Mangan and Lalwani (2018) described SCM as "the systematic, strategic coordination of the traditional business functions and tactics across these business functions within a particular company and across businesses within the supply chain." Their definition highlights SCM as a cross-functional and cross-organisational strategy to align different business activities and optimise overall supply chain efficiency. Ivanov et al. (2019) defined supply chain management as "the design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, and achieving synchronized supply-demand flows." This definition focuses on the strategic aspects of SCM, from design to monitoring, to ensure value creation and alignment of supply with demand. Mentzer et al., (2020) defined SCM as "the systematic coordination of traditional business functions within a particular company and across businesses within the supply chain, for the purpose of improving the long-term performance of the individual companies and the supply chain as a whole." This definition underscores SCM's role in coordinating business functions and enhancing the collective performance of all entities involved.

Green Procurement

Chowdhury et al., (2023) defined green procurement as "a component of green supply chain management that involves selecting and sourcing materials based on their environmental impact, promoting resource conservation, waste reduction, and pollution prevention." This definition

highlights green procurement as a subset of green supply chain management with specific environmental goals. Preuss (2016) described green procurement as "the integration of environmental considerations into the purchasing process, including the evaluation of products and suppliers on environmental performance criteria." This definition highlights the role of environmental performance in decision-making during procurement. Miemczyk et al., (2017) defined green procurement as "the adoption of environmental principles in purchasing policies and practices, aiming to reduce the negative environmental footprint of purchased goods and services." This approach emphasizes the strategic intent behind procurement policies focused on reducing environmental impact.

Green Manufacturing

Ramesh and Ravi (2020) described green manufacturing as "an eco-friendly approach to production that emphasizes waste minimization, recycling, and the use of non-hazardous materials." This perspective broadens green manufacturing to encompass recycling and the selection of safe materials, thereby reducing environmental impacts. Jabbour et al (2017) described green manufacturing as "an approach to production that aims to reduce environmental impacts by optimising the use of resources, reducing waste, and adopting cleaner production technologies." This definition emphasizes resource optimization and cleaner technologies as essential to environmentally sustainable manufacturing. According to Gunasekaran and Spalanzani (2018), green manufacturing is "a production process that incorporates practices aimed at reducing environmental pollution, conserving resources, and improving sustainability through innovative methods." Their definition points to innovative production methods as central to achieving sustainability goals in manufacturing.

MSMEs Performance

Firm performance is the set of financial and non-financial indicators which provide information on the degree of achievement of set goals and objectives (Úbeda-García et al., 2021). Firm performance is the inherent ability of a firm to effectively and efficiently allocate and use available resources to satisfy target customers and achieve organizational goals (Taouab & Issor, 2019). Firm performance is usually assessed in four main dimensions, including innovative performance, production performance, market performance and financial performance (YuSheng & Masud, 2020). However, performance is typically measured by financial parameters such as profitability, market share, and growth rate (Walter, 2021). However, firms that want to survive in the competition should also consider non-financial indicators such as employee performance, job satisfaction, learning, and quality (Rodrigues et al., 2021).

MSME growth relates to the expansion and enhancement of small and medium-sized enterprises in terms of revenue, employee base, market reach, and operational capacity. Growth is a crucial indicator of an SME's success and ability to contribute to economic development, especially in developing economies where SMEs are primary drivers of employment and innovation (Obi et al., 2023). Factors that foster SME growth include innovation, access to finance, a skilled workforce, and the adoption of sustainable practices, such as green supply chain management (Chen et al., 2022). By integrating environmentally-conscious practices, SMEs not only reduce operational costs

but also attract eco-sensitive customers, opening new market opportunities and strengthening brand loyalty (Ding et al., 2023). In Lagos, Nigeria, where SMEs play a significant role in the local economy, the adoption of sustainable practices can drive growth by enabling these enterprises to compete more effectively, thereby supporting economic resilience and sustainable development.

Empirical Review

Odock (2016) examined the relationship between the implementation of GSCM practices (Green Procurement, Environmentally Responsible Design, Green Manufacturing, Green Packaging, Green Distribution and Reverse Logistics) and the performance of ISO 14001 certified firms in East Africa. Specifically, the study investigated the key institutional pressures that cause firms to implement these practices and how environmental performance, operational performance, relational efficiency and firm characteristics influence the relationship between implementing the practices and organizational performance. Through the use of a positivist research paradigm and a descriptive cross-sectional research design, primary data were collected from persons in charge of environmental issues in ISO 14001 manufacturing firms in East Africa. The study achieved a response rate of 62%. Based on the objectives, the study findings are that, first, coercive and normative pressures are significant in causing the firms to implement GSCM practices, mimetic pressures are not significant; second, there is a statistically significant positive direct relationship between implementation of GSCM practices and organizational performance; third, environmental and operational performance fully mediate the relationship between GSCM practices and organizational performance. It was also noted that the inclusion of environmental and operational performance constructs increased the variance explained in organizational performance from 14.2% to 59%; fourth, relational efficiency does not mediate the relationships between GSCM practices and environmental performance, GSCM practices and operational performance and GSCM practices and organizational performance. Fifth, firm size, firm age and spatial scope of the market served by the firm do not positively moderate the relationship GSCM practices and organizational performance. The study therefore confirms the existence of a positive link between GSCM practices and organizational performance, thus helping to reduce the uncertainty which has arisen out of contradictory findings from past studies on whether it is beneficial to pursue these practices. In essence, it can be concluded that a firm will experience improved marketing and financial performance as a result of GSCM activities, having a positive impact on its operations or giving a positive environmental impression to its customers who would eventually provide more business opportunities to the firm. The study was conducted in East Africa while the current study was conducted in West Africa.

Usman (2022) examined the Impact of green supply chain management practices (green purchasing, green manufacturing, green packaging, and green distribution) on environmental performance in the manufacturing sector of Pakistan, focusing on environmental efficiency. This research is quantitative in nature. The sampling technique used is Simple Random Sampling, and the sample size is set to 260 respondents. Closed-ended questions were used to get responses from the independents. Questionnaires were distributed to employees of manufacturing company of FMCG products to get their responses. Descriptive analysis, reliability test, correlation and multiple regression tests were run by using SPSS tools for the study. Results showed that there are positive and significant relationships of environmental Performance with Green Manufacturing, Green

Packaging, and Green Distribution of FMCG products by their manufacturing firms. This research is specifically done on the manufacturing of FMCG products in the manufacturing industry. There were a few variables studied and surveyed that can be beneficial for organization of all types of manufacturing items by efficiently greening their supply chain practices and enhancing environmental performance of the firm. The study was conducted in Pakistan while the current study was carried out in Nigeria.

Ali (2015) explored Green supply chain (Green Process & Product Design, Green Procurement, Green Logistics, and Regulatory Norms) performance measures framework for Indian Manufacturing Practices. The structured questionnaire was targeted to over 175 companies. The exploratory factor analysis output was used as an input for regression analysis, and PLSR analysis was done using Minitab 15. Findings show that except for green procurement, other explanatory variables (i.e. green process & product design, green logistics and regulatory norms) do not support environmental performance. However, the findings do not conform to the findings of other literature. The present findings suggest that the Indian manufacturing sector needs to adopt green process and product design, green logistics, or respect regulatory norms to achieve superior environmental performance. The study was carried out in India, but the current study was conducted in Nigeria.

Theoretical Framework

Triple Bottom Line (TBL) Theory

The Triple Bottom Line (TBL) Theory**,** introduced by Elkington in 1994, is a framework that encourages organizations to consider three crucial pillars of sustainability in their operations: economic, environmental, and social performance. This theory posits that for a company to be truly sustainable, it must balance these three dimensions, often referred to as the "three P's": Profit, People, and Planet. The TBL Theory is highly relevant in examining the effect of Green Supply Chain Management (GSCM) on organizational performance, as it provides a holistic approach to understanding how sustainable practices influence a company's overall success.

METHODOLOGY

The study used a survey research design. This design is suitable whenever there is a need to solicit information from target respondents. It requires the use of a questionnaire, which serves as a means of gathering information from individuals, groups, or entities within the population, capturing a snapshot of their characteristics, behaviours, or attitudes at that specific moment. This study population comprised business owners and managers of MSMEs in Lagos State. According to the report jointly released by SMEDAN and the National Bureau of Statistics (NBS), the number of MSMEs in Nigeria stood at 39,954,345. Out of this national figure, the report noted that Lagos has the highest number of MSMEs in Nigeria, with 3,235, representing 8.2% of the total. Multiple-linear regression analysis was used to test the earlier formulated hypotheses of this study, aided by Statistical Package for Social Sciences (SPSS) *version 28.0*

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

Where;

n = sample size,

N = population,

e^2 = Margin of error (assumed 5% or 0.05),

1 = unity or constant value

$$n = \frac{3{,}235{,}987}{1+3{,}235{,}987(0.05)^2} \; n = \frac{3{,}235{,}987}{1+3{,}235{,}987(0.0025)} \; n = \frac{3{,}235{,}987}{1+8089.9675} \; n = \frac{3{,}235{,}987}{8090.9675} \; n = 399.950$$

While the calculated sample size using the Taro Yamane formula is 399.950, Singh and Masuku (2014) stated the need to add 10% to account for questionnaires that may not be returned and those that cannot be contacted. Therefore, 10% of the sample size, n is 399.950 x 0.1= 39.995 approximately 40

Add 10%, which is 40 of the sample size, to 399.95and the Total sample size = 440

Reliability Test

Reliability is used to test the internal consistency of each question (variable) in the questionnaire. Reliability was used to test the extent of the accuracy of the questions in the instrument. The most convenient method for testing internal consistency is Cronbach's Alpha, which is computed with the following model:

$$\alpha = \frac{Nr}{1 + r(N-1)}$$

Where:

α= Cronbach Alpha

N= the number of items in the scale

r= the mean inter-item correlation

A minimum Cronbach's Alpha value of 0.7 is stated to be reliable (Ritter, 2010). The result of the reliability of the instrument is presented in the table below:

Table 1: Reliability Test

Variables	Item	Cronbach's Alpha
GPR	5	.76
GMA	5	.82
MSMEP	5	.76

Source: *SPSS Output version 28 (2025)*

The table above indicates the reliability of the instrument for the variables, showing an Alpha value above the threshold of 0.7, which means that the instrument is reliable.

Model Specification

Where:

MSMEP = Micro Small and Medium Enterprise Performance (Organizational Growth)

GPR= Green Procurement

GMA = Green Manufacturing

β = Coefficient

ε = Error term

It is represented by the following model:

$$MSMEP_i = \beta_0 + \beta_1 GPR_i + \beta_2 GMA_i + \varepsilon_i$$

ANALYSIS AND RESULT

Regression Analysis

Table 2: Model Summary

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.887[a]	.787	.786	.472

a. Predictors: (Constant), GPR, GMA

Source: *SPSS Output version 28 (2024)*

Table 2 shows the coefficient of determination (R^2) with a value of 0.787, indicating that 78.7% of the variation in Micro, Small, and Medium Enterprise Performance can be explained by Green

procurement and Green manufacturing. While the remaining value of 0.213 represents 21.3% it can be explained by other related factors not stated in the regression model.

Table 3: ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	328.769	2	164.385	737.580	.000[b]
	Residual	89.148	400	.223		
	Total	417.917	402			

a. Dependent Variable: MSMEP
b. Predictors: (Constant), GMA, GPR

Source: *SPSS Output version 28* (2025)

Decision Rule: 5% level of significance

Table 3 shows the fitness of the model earlier formulated. Considering the statistic value of 737.580 with a tabulated p-value of 0.000, which is less than the 5% level of significance (0.000<0.05). The implication is that the model is well fitted and the null hypotheses can be rejected, and it can be concluded that Green Supply Chain Management Practices have a significant effect on Micro, Small, and Medium Enterprises' Performance in Lagos State.

Table 4: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.241	.100		2.405	.017
	GPR	.837	.041	.825	20.470	.000
	GMA	.080	.043	.075	1.855	.064

a. Dependent Variable: MSMEP

The coefficient of Green procurement (0.837), which is positive and significant, considering the T-statistic value of (20.470) and the p-value (0.000), in enhancing Micro Small Medium Enterprises Performance in Lagos State. MSMEP = 0.241 + 0.837_GPR shows that Micro Small Medium Enterprises Performance in Lagos State, in terms of growth, increases by 41% for at least 1% improvement in Green procurement.

Furthermore, the coefficient of Green Manufacturing (0.271), which is positive but insignificant, considering the T-statistic value of (1.855) and the p-value (0.064), in enhancing Micro Small Medium Enterprises Performance in Lagos State. MSMEP = 0.241 + 0.080_GMA indicates that

the performance of Micro, Small, and Medium Enterprises in Lagos State, in terms of growth, increases by 8% for at least a 1% improvement in Green Manufacturing.

Testing of Hypotheses

Ho_1: There is no significant effect of Green procurement on Micro Small and Medium Enterprises Performance in Lagos State.

The results of the regression estimates indicate that there is a positive effect of Green procurement on the performance of Micro, Small, and Medium Enterprises in Lagos State. This is evidenced by the coefficient value of 0.410, which is statistically significant at (0.000<0.005), that is lower than the acceptable significance value of 5%. Following the empirical result, the study therefore fails to reject the null hypothesis that there is no significant effect of Green procurement on the performance of Micro, Small, and Medium Enterprises in Lagos State.

Ho_2: There is no significant effect of Green Manufacturing on Micro, Small, and Medium Enterprises' Performance in Lagos State.

The results of the regression estimates indicate that there is a positive effect of Green Manufacturing on the performance of Micro, Small, and Medium Enterprises in Lagos State. This is evidenced by the coefficient value of 0.120, which is statistically insignificant at (0.064>0.005), that is greater than the acceptable significance value of 5%. Following the empirical result, the study therefore fails to reject the null hypothesis that there is no significant effect of Green Manufacturing on the performance of Micro, Small, and Medium Enterprises in Lagos State.

DISCUSSION OF FINDINGS

The responses and analysis further reveal that green procurement has a positive and significant effect on Micro Small and Medium Enterprises' Performance in Lagos State. This was observed from the majority of respondents who strongly agreed that; the enterprises prioritize suppliers with environmentally friendly certifications, the organizations evaluate suppliers based on their ability to meet green standards, the enterprises procurement policy includes criteria for eco-friendly raw materials, procurement decisions influenced by suppliers' commitment to reducing carbon footprints, and the enterprises work collaboratively with suppliers to improve their environmental performance which led to the failure to reject the null hypothesis. This study is in agreement with the findings of Ali (2015), who posited that green procurement supports environmental performance.

Green Manufacturing has a positive but insignificant effect on the performance of Micro, Small, and Medium Enterprises in Lagos State. This was observed from responses gathered from the target respondents who stated that; most of the enterprises do not use energy-efficient production processes, raw materials used in production are not often optimized to minimize waste, there poor concern over integrating recycling processes into their manufacturing operations, poor pollution control mechanism, despite investing in cleaner and more sustainable manufacturing technologies which led to the failure to reject the null hypothesis. The result of this finding does not align with

the study of Usman (2022), which stated that there are positive and significant relationships between environmental Performance and Green Manufacturing.

Conclusion and Recommendations

The heterogeneity that exists among the green supply chain management variables as it relates to the performance of small and medium enterprises calls for re-engineering in order to explore the potential growth virtues embedded in them that are yet to be fully adopted by enterprises. The positive coefficients of green supply chain management variables, such as green procurement and green manufacturing, in relation to the performance of MSMEs, as evident from the study, are further indicators that enterprises can improve their performance through a long-term strategic focus on these practices. The study also revealed that the many challenges faced by Small and Medium Enterprises emanating from green supply chain practices can be well addressed through enhanced strategic policy initiatives and implementation, both by the government and firms.

Therefore, in sequence to the findings of the research study, the following recommendations have been made:

Owners and Managers of MSMEs should ensure that quality inspection processes are put in place so that every material supplied complies with environmental sustainability.

Owners and managers of MSMEs should improve their production process through the adoption of eco-friendly machines which produce less sound and vibration.

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