

Business Mentoring and Sustainability of Manufacturing Medium Enterprises in North Central Nigeria

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Abstract: *This study examines the effect of business mentoring on the Sustainability of Manufacturing Medium Enterprises in North Central Nigeria. The study adopted a survey research design approach, using questionnaire administration for data generation from population of 243 where 221 was finally utilized for analysis. The data generated were analyzed using descriptive and inferential statistics while Regression analysis (Statistical Package for Social Science (SPSS) version 20 output) was used for test of Hypotheses using t-test and e- values generated from regression analysis were utilized. Findings shows that business mentoring ($\beta=0.402$, $t=-6.214$; $p=0.063>0.5$) has negative and insignificant effect on sustainability. It was concluded that business mentoring has no significant effect on sustainability of Manufacturing Medium enterprises in North Central Nigeria. The study recommended amongst others that in response to the negative impact of business mentoring on sustainability, which is contrary to expectations, policymakers should reassess and optimize business business mentoring programmes. The design of these initiatives should align with the diverse needs of entrepreneurs, providing constructive guidance and fostering positive mentor-mentee relationships. Regular assessments and feedback mechanisms can help transform business mentoring into a supportive force for entrepreneurship sustainability.*

Keywords: *Business Business mentoring, Sustainability, Manufacturing Medium Enterprises.*

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1.0

INTRODUCTION

1.1 Background to the Study

In today's turbulent business environment the survival, growth and sustainability of organizations have become major concern and tasks which management of organizations are striving hard to

achieve. This is necessitated by fierce competition, technological advancements, frequent changes in customer preferences and expectations and swift market changes. To remain competitive organizations must retain employees, inspire and support them to learn incessantly. Organizations therefore place greater prominence on developing their employees, who are regarded as the life blood of organizations and a determinant factor for survivability (Nwaeke & Obiekwe, 2017). Strategies for developing the capabilities of employees are an important part of any organization's overall corporate strategy. This can be better achieved through mentoring programmes, which are aimed at increasing productivity and ensuring the growth and sustainability of organizations (Anekwe, 2019). Business mentoring is rapidly becoming worldwide as a highly effective human resource development process (Ayodeji & Adebayo, 2015). Mentoring is recognized as an important contributor to building capacity within organisation. By creating a mentoring culture, the best organizations continually recognize human resource as the most important asset and take practical steps to nurture talent and improve learning, performance and retention (Kunaka & Moos, 2019). Mentoring focuses on helping individuals acquire the skills necessary to do their job and possibly further their career (Zachary, 2012). The mentees set the agenda based on their own development needs, and the mentor provides insight and guidance to help them achieve their desired goals (Rankhumise, 2015).

The corporate business world has developed systems of business mentoring which are integral to the induction and supported development of new company employees. Mentoring practices include career support, psychological support and knowledge transfer (Muzaffar, Abdul & Mohd, 2016). Career support covers business mentoring aspects like sponsorship, exposure, facilitating visibility, protection, or organizing challenging assignments for younger employees (Ekpoh & Ukot, 2019). Psychosocial support includes counselling, role modelling, acceptance, confirmation, and friendship (Merrill & Afifi, 2015). Knowledge transfer shows that workplace relationships should be fostered to promote transfer of tacit knowledge, which is stressed the importance of human resource development to organization success (Barthauer, Spurr & Kauffeld, 2018). These business mentoring programmes are important for every business organization including small scale businesses. The immense contributions of small scale businesses to the socio-economic growth and development of nations have been well acknowledged (Amin, Thurasamy, Aldakhil & Kaswuri, 2016; Muzaffar, Abdul & Mohd, 2016). The relevance of these businesses is felt in the areas of employment, growth of export earnings, contribution to Gross Domestic Product (GDP), export commodities and creation of employment opportunities for teeming unemployed youths (Oni & Daniyan, 2012; Pulka, Ramli & Bakar, 2017).

In Nigeria, sustainability of businesses has been established as a function of relevant and appropriate supporting environmental factors especially when such factors are available and if they are timely and correctly applied (Terkaa, 2023). Diri (2021) averred that sustainability is the achievement recorded by an organization in meeting its current needs without compromising its future needs. Business sustainability is the strategic approach of companies in doing business and creating long-term value products while ensuring that their operations and output do not negatively impact society (Fanya *et al.*, 2023). Business sustainability can be explained as the process of sustaining the managing of any business organization by considering three different aspects, viz. economic, social and environmental (Deguta, 2023; Rodas, 2023). It may also be referred to as the triple bottom line approach. A sustainable business is one whose purpose and

actions are equally grounded in financial, environmental and social concerns (Chest, 2022). Thus, sustainability obliges firms to make inter-temporal trade-offs to safeguard intergenerational equity and achieving their stated objectives. This requires that these firms should be able to compete favorably, achieve sustained sales growth, sustain innovativeness and respond to societal needs; these forms the measures of business sustainability for this study.

Medium Enterprises (MEs) are a wide variety and heterogeneous group of enterprises and a very important business segment that provides national socioeconomic development both for developed and developing markets and economies. They embody diverse kinds of sophistication, skills, capital and growth orientation and are found in both formal and informal sectors (Varado, 2022). They may be owned by individuals, groups, corporate organizations and government and their owners may or may not be poor (Sgala, 2023). These classes of enterprises are found in a wide variety of industries and operate in very different markets (rural, urban, local, national, and international) and social environments (Ediri, 2024). They are drivers of economic growth as they contribute greatly to economic development of both developed and developing nations in diverse ways including reducing unemployment (among many others) even though they are usually characterized by lack of adequate resources, owner/manager operation, flexibility and low-tech involvement (Wolff, 2022).

Medium enterprises contribution to the socio-economic development of low and middle income economies is well documented (Deguta, 2023). This class of enterprises represents a frequently researched area because of their significant economic weight, flexibility, innovation and their fast decision-making capabilities (Carland and Carland, 2020). Because of their unique role in economic development of nations, medium enterprises are globally regarded as instruments of change and a pivot of economic catalysts in almost all economies of the world. They are also important movers in the process of structural changes in both developed and developing markets and economies (Chest, 2022) and are significant to the local entrepreneurship, innovative activities and are able to exploit opportunities (Sgala, 2023). Medium enterprises can be sustained if they operate under the right supportive environment and attending to the dynamism of the environment. It is based on the above background that this study is put in place to empirically assess the effect of supportive environment on the sustainability of manufacturing medium enterprises in North central Nigeria. Since business mentoring is concerned with the sustainability or otherwise of business establishments, it is important investigate and understand business mentoring so as to improve on the practices and establish its sustainability status.

1.2 Statement of the Problem

Business mentoring is a mechanism that allows personal, psychological and professional development hence it is important for sustainability of manufacturing medium enterprises (Barthauer, Spurr & Kauffeld, 2018). However, most medium enterprises are confronted with issues of poor management, lack of career support for employees and knowledge transfer which may be attributable to non-availability of business mentoring programmes. In North Central Nigeria, it is worrisome that most manufacturing medium enterprises cease to exist at the death of their owners and even where such businesses continue they experience dwindling sustainability. Also, many small businesses do not have people with adequate skills to provide business mentoring to employees and this affect growth of their businesses. When senior organizational leaders retire, they take with them knowledge that is needed by organizations to

continue to grow and this invariably affects business sustainability. This is because sustainability of manufacturing medium enterprises gives a positive indication on economic growth and development because their contributions add up to national income. Nonetheless, the growth of manufacturing medium enterprises relies on several factors of which supportive business environment play an essential role. The current impact of economic down turn explains why most manufacturing medium enterprises have been woefully impacted.

However, despite the crucial role manufacturing medium enterprises play in North Central Nigeria, they face numerous challenges which have impacted on their sustainability with some closing down. Major areas observed that the medium enterprises face challenge of business mentoring. Observations are that with the increased utilization and adoption of these business mentoring by manufacturing enterprises in North Central Nigeria, some are reaping it in diverse measures such as increased innovativeness, competitiveness and sales growth. Yet there seems to be abysmal performances by some of the manufacturing SMEs in North Central Nigeria. Where some are leveraging on the benefits offered by business mentoring, some are not. Falling short of these expectations prompts this study to examine the effect of business mentoring on sustainability of manufacturing medium enterprises in North Central Nigeria.

1.3 Objective of the Study

The main objective of this study was to examine the effect of business mentoring on sustainability of manufacturing medium enterprises in North Central Nigeria.

1.4 Significance of the Study

This study examined the effect of business mentoring on the sustainability of manufacturing medium enterprises in North Central Nigeria. The findings of this study are beneficial to the academia, policy makers, the industry regulator, government, stakeholders and the general public. Having addressed the first part of the components which is introduction, part two focuses on review of related literature covering the theoretical, concepts of supportive environment on the sustainability of manufacturing medium enterprises in North Central Nigeria. The third section is on methodology employed in carrying out the study. Component four is on results and discussion of findings, component five provides the conclusion and recommendations accordingly. The results and recommendations of the study would contribute towards the unveiling of the contributions of business mentoring on the sustainability of manufacturing medium enterprises in North Central Nigeria.

2.0 LITERATURE REVIEW

This section involves review of theories/theoretical framework and review of related literature, review of related empirical works.

2.1 Theoretical Framework

The study is anchored on the Three-Step Change theory.

2.1.1 Lewin's Three-Step Change Theory

The three-step change theory developed by Kurt Lewin in (1947) is widely considered the founding father of change management, with his unfreeze–change–refreeze or Changing as Three Steps (CATS) regarded as the fundamental or classic approach to or classic paradigm for managing change (Robbins and Judge, 2009; Sonenshein, 2010). The Lewin's change theory model is based around a 3-step process (Unfreeze-Change-Freeze) that provides a high-level approach to change. It gives a framework to implement a change effort such as sensitivity training which is always very

sensitive and must be made as seamless as possible. The Changing as Three Steps' change theory therefore makes a radical change, minimize the disruption of the structure's operations and make sure that the change is adopted permanently. Olubukunola (2015), averred that for Lewin, the process of change entails creating the perception that a change is needed, then moving toward the new, desired level of behavior and finally, solidifying that new behavior as the norm. The model is still widely used and serves as the basis for many modern change models. This social scientist views behavior as a dynamic balance of forces working in opposing directions, and driving forces facilitate change because they push employees in the desired direction while restraining forces hinder change because they push employees in the opposite direction. Therefore, these forces must be analyzed and Lewin's three-step model can help shift the balance in the direction of the planned change.

According to Lewin, the first step in the process of changing behavior is to unfreeze the existing situation or status quo. The status quo is considered the equilibrium state. Unfreezing is necessary to overcome the strains of individual resistance and group conformity. Unfreezing can be achieved by the use of three methods. First, increase the driving forces that direct behavior away from the existing situation or status quo. Second, decrease the restraining forces that negatively affect the movement from the existing equilibrium. Third, find a combination of the two methods listed above. Some activities that can assist in the unfreezing step include: motivate participants by preparing them for change, build trust and recognition for the need to change, and actively participate in recognizing problems and brainstorming solutions within a group (Nyirenda, 2019). Before a change can be implemented, it must go through the initial step of unfreezing. Because many people will naturally resist change, the goal during the unfreezing stage is to create an awareness of how the status quo, or current level of acceptability, is hindering the organization in some way. Old behaviors, ways of thinking, processes, people and organizational structures must all be carefully examined to show employees how necessary a change is for the organization to create or maintain a competitive advantage in the marketplace. Kiweewa and Asimwe (2014), stated that communication is especially important during the unfreezing stage so that employees can become informed about the imminent change, the logic behind it and how it will benefit each employee.

Lewin's second step in the process of changing behavior is movement. In this step, it is necessary to move the target system to a new level of equilibrium. Three actions that can assist in the movement step include: persuading employees to agree that the status quo is not beneficial to them and encouraging them to view the problem from a fresh perspective, work together on a quest for new, relevant information, and connect the views of the group to well-respected, powerful leaders that also support the change. This changing step, also referred to as 'transitioning' or 'moving,' is marked by the implementation of the change. This is when the change becomes real. It is also, consequently, the time that most people struggle with the new reality. It is a time marked with uncertainty and fear, making it the hardest step to overcome. During the changing step people begin to learn the new behaviours, processes and ways of thinking. The more prepared they are for this step, the easier it is to complete. For this reason, education, communication, support and time are critical for employees as they become familiar with the change. Again, change is a process that must be carefully planned and executed.

Throughout this process, employees are reminded of the reasons for the change and how it will benefit them once fully implemented (Nassazi, 2013).

The third step of Lewin's three-step change model is refreezing. This step needs to take place after the change has been implemented in order for it to be sustained or "stick" over time. It is highly likely that the change will be short lived and the employees will revert to their old equilibrium (behaviors) if this step is not taken. It is the actual integration of the new values into the community values and traditions. The purpose of refreezing is to stabilize the new equilibrium resulting from the change by balancing both the driving and restraining forces. One action that can be used to implement Lewin's third step is to reinforce new patterns and institutionalize them through formal and informal mechanisms including policies and procedures. Therefore, Lewin's model illustrates the effects of forces that either promote or inhibit change. Specifically, driving forces promote change while restraining forces oppose change. Hence, change will occur when the combined strength of one force is greater than the combined strength of the opposing set of forces (Nassazi, 2013).

This theory is relevant to this study in the sense that it provides theoretical link of the influence of sensitivity training on the level of service delivery by workers in organizations. Sensitivity training which entails sharing by each member of the group of his or her own unique perceptions of everyone else present reveals information about his or her own personal qualities, concerns, emotional issues, and things that he or she has in common with other members of the group. This first stage is referred to as unfreezing. With the trainer's support, trainees begin to examine their interpersonal behavior and giving each other feedback. This process constitutes the second step in the change process of the development of these values. And the last step is the refreezing the new ones which depends upon how much opportunity the trainees get to practice their new behaviors and values at their work place.

2.2 Conceptual framework

The concepts that make up the dependent and independent variables of this study are carefully reviewed.

2.1.1 Concept of Business Mentoring

Entrepreneurs need to continue to learn and receive appropriate support to cope with the challenges of the new business to enable success and persistence. Mentoring covers activities often designed and encouraged by management to develop its personnel and ensure that they improve and maintain the organisation's competitive advantage (Okurame, 2013). Peretomode (2017) noted that business mentoring is more than giving advice on how to work more effectively or handle a specific problem. It involves the mentor taking personal interest in seeing that a mentee develops talent, skills, expertise and knowledge needed to succeed and have a successful career that contributes to the organization (Barthauer, Spurk & Kauffeld, 2018). Bilesanmi (2013), defined mentoring as a set of tailor-made advice and incentive that a more experienced staff, in an innovative way can offer less experienced members in a plethora way and on a range of competencies. Mentoring consist of sharing experience, listening with empathy, developing insight through reflection and professional friendship (Anekwe, 2019). Mentoring is a transactional process of transmitting information, advice, support and expertise from an experienced to a less-experienced individual (Kunaka & Moos, 2019). This means that mentoring concerns with career enhancement, professional development, building and maintaining a

professional network, increasing competence and self-esteem. The ultimate goal of mentoring is to ensure that the appropriate ways of doing things are transferred to the new generation (Cope, 2011).

Business Mentoring is an appropriate form of support which provides mentees with the possibility to improve their management skills and learn through action by means of support of a person with extensive business experience (Anekwe, 2020). Mentoring has been identified as an important means of assisting with the implementation of the government's objectives for business development. It is the assistance of an expert in resolving issues that a business owner faces (Adudu *et. al.*, 2022). Mentoring is the assistance of an expert in resolving issues that a beginning business owner faces (Otega, 2016). Mentoring programs are design to meet the development needs of an entrepreneur (the mentee) and entrepreneurial development (Chioncel, 2014). Business mentoring is one-on-one relationship that helps entrepreneurs learn and develop their business ideas while providing them with useful second options, impartial feedbacks and different perspective of issues that arise within the business environment (Aganga, 2012). An experienced entrepreneur (the mentor) and a new entrepreneur (the mentee) establish a supportive relationship to promote the mentee's personal growth (St-Jean and Audet, 2012).

Business mentoring involves two parties (mentee and mentor). A mentee is a person with less experience and knowledge in a specific field or task that is aided by an expert. The mentee can also be described as an individual involved in a mentoring relationship who receives career support, protection, and advocacy from a mentor (Masalimova & Sabirova, 2015). A mentor on the other hand is a person with experience and expertise, who is committed to providing better assistance and career support for the protégé (Dobrow, Chandler, Murphy & Kram, 2012). Mentoring is defined in this study as a professional relationship in which an experienced person (the mentor) assists another (the mentored or mentee) in developing specific skills and knowledge that will enhance the less-experienced person's professional and personal growth.

2.2.2. Concept of Sustainability

Daniel and Karpilow (2018), opined that sustainability ideas are urgent calibrations that respond to the changing global environmental and social landscapes for practical fiduciary duties and definitions of responsibilities like risk, strategy, and investment. These responsibilities are relevant to multi-dimensional businesses and governance issues across stakeholders (Fischer and Newig, 2016). Igbojekwe (2015), averred that sustainability as creating long-term business value. To Maude (2014) the word sustainable means to maintain or to keep going in the current stage also in the future. But the concept has many sides and is complex (Ahern 2015). Baumgartner and Ebner (2010), argue that sustainability strategies may be guided by internal and external sustainable orientation. Internally, a company may be able to plan and communicate their aims, however, externally, as more than 30 years of IMP Group research has proven companies are reliant on the actions and reactions of other parties that form the networks in which they operate. Current thinking about sustainability recognizes the importance of identifying and understanding the needs and interests of stakeholders and the value that is created in the interaction with them (Makridou *et al.*, 2019). Rogge and Archer (2021), opined that sustainability is more than just a trend.

2.2.3. Measures of Sustainability

For the purpose of this study, these three realms are collapsed and broken down to include competitiveness and innovativeness. These measures are in agreement with that used by Lopez *et al.* (2021), that is competitiveness and sales growth; as well as Jibrilla (2023), that is and innovativeness. These measures are carefully reviewed below.

i. Innovativeness: Manufacturing businesses must operate very innovatively if they want to compete in this cutthroat business environment and survive. Innovative performance can be viewed as a catalyst that boosts an organization's financial stability and enables them to endure the fierce competition in the business environment (Zizlavsky 2016). According to Iherobiem (2023), innovative actions include a number of stages, ranging from research and development to product release and patenting. However, the technical side of innovation and the launch of new products can be used to analyze inventive performance. Akintokunbo and Obom (2021) defined innovative performance as the degree to which a firm introduces inventions into a new or existing market. They also noted that innovative performance can help an organization's processes and overall performance work together. It also refers to “the company’s ability to respond to changes that may be related to the organizational creativity such as characteristics and design of the product or service (Kthair and Al-Hindawy, 2022), or the volume of demand for the product or the mix of products or services that the company provides” (Stevenson, 2018).

ii Competitiveness: Competitiveness is seen as a state in which organizations address dynamism in the external environment and continue to provide satisfactory products/services to customers which are better than the products offered by other players in the industry (Li and Liu 2014; Kaur and Metha, 2016). It has been propounded that competitive advantage is achieved only by those organizations which successfully mobilize their strategic capabilities (Chahal and Bakshi, 2015). Competitive advantage is the ability of a company to surpass its competitors in terms of superior products and services. A competitive advantage is a technique for value-adding where future rivals cannot adopt and could hardly be replicated (Mnjala, 2014). Every enterprise that has a competing business or a resource that a enterprise has insight is particularly useful as a comparing desire (David and David, 2017). There are several approaches to boost competitive advantages, including expense, development, reliability, quality, timeliness, new product releases, product line width, filling volume, customer service, effective capital deployment, distribution dependability and availability (Kwak *et al.*, 2018).

2.3 Review of Related Empirical Studies

Mende, (2024), examined the effect of Business Business mentoring and sustainability among Chilean small businesses across six cities. The study used measurement scales to measure the market business business mentoring construct and selected subjective sustainability indicators. A non-experimental research design was adopted utilizing the quantitative and correlational methods. With the aid of the convenience sampling technique, 200 questionnaires were distributed at an equal proportion to employees in Ibadan. Two hundred questionnaires were retrieved, of which 190 were found usable for analyses in the study. Five hypotheses were proposed and tested using inferential statistics with the aid of SPSS version 21. The findings from the study revealed that there exists a statistically significant and positive relationship between

Business Business mentoring and sustainability especially the one that deals with organizational sustainability. The study adopts a non-experimental research design. The present study employs a survey research design.

Martin-Consuegra and Estebon (2023), investigated the relationship between Business Business mentoring and sustainability of medium enterprises in East London using 234 international airlines using quantitative, stratified sampling method to carry out a survey to appraise the student intent. The result of the study showed that there was a positive and significant association between market orientation and organizational performance. The study investigated the relationship between Business Business mentoring and sustainability of medium enterprises in East London. The current study used Business Business mentoring as one of its dimension on sustainability of manufacturing medium enterprises in North Central Nigeria.

Idu and Ahule (2023), studied the role of Mentoring Services in Agricultural Small and Medium Enterprises in the Gambia. Empirically investigates the basic profile of agricultural business mentoring, the skill sets; and to represent the importance of the skills as represented in the model and to understand the mentoring for start-up business in the country. Semi structured questionnaires with reference to literature studies from other countries were used to gather data. Data was collected from staffs and sample size of 100 respondents from the agro-enterprises was identified, out of which 62 were received. Results indicated that limited numbers of female staffs were involved in agro-enterprises. The results revealed some average relationship between educational level and entrepreneurial skills are significantly correlated. It was suggested that there is need for an efficient, effective and advisory service for training if people are to start a small business in the country successfully. The study focused on Agricultural Small and Medium Enterprises in the Gambia. The current study focused on manufacturing medium enterprises in North Central, Nigeria.

Adudu et al. (2022), investigated the effect of mentoring on the growth of selected small scale businesses in Makurdi Metropolis, Benue State. The study specifically examined the effect of career support, psychological support and knowledge transfer on the growth of selected small scale businesses in Makurdi Metropolis. The study adopted a cross-sectional survey design and the population of the study was 152 (owners and employees) of small scale businesses within Makurdi Metropolis. A pilot study was carried out to measure validity and reliability of items on the questionnaire. Data collected from respondents through self-administered questionnaire were analysed using Mean, Standard Deviation and Regression Analysis. Formulated hypotheses were tested with the aid of the Statistical Package for Social Sciences (SPSS 23) software. The study found that career support has significant effect on the growth of small scale businesses ($P.019$; $\beta=.349$); psychological support has significant effect on the growth of small scale businesses ($P.000$; $\beta=.734$) and knowledge transfer has significant effect on the growth of small scale businesses ($P.000$; $\beta=.516$). It recommended amongst others that government should organize business mentoring programmes for entrepreneurs and business men to enable them have knowledge about business mentoring and the importance of transferring knowledge to enhance viability and growth of their businesses.

Ahmad (2021) empirically investigated Business Business mentoring and sustainability collaboration in the context of firm sustainability of small- and medium-sized enterprises (SMEs). A proposed framework built on the Knowledge and resource-based theory was tested using Structural Equation Modelling with data collected from 171 SMEs. Findings of the study supported the direct impact of Business Business mentoring and sustainability as well as the mediating role of collaboration in this focal relationship and assumed it would have a significant role in SME's sustainability. These findings have noteworthy implications for managers to focus on potential Business Business mentoring in order to acquire the needed firm sustainability, which will lead to further valuable information to help the SME succeed. The study adopts a Structural Equation Modelling to analyze. The present study employs multiple regression to analyze the work.

3.0 METHODOLOGY

This study adopted the survey research design, in particular, the cross sectional research survey design is adopted for this study. The design chosen allows for the utilization of methods that are suitable for the study and to set up their studies successfully in the future. The area of study is the North Central Nigeria. The choice of the manufacturing medium enterprises for this study was grounded on the submission that the manufacturing sector has been and would always be the engine of economic development and industrialization. The population of this study comprised 243 owners/managers of MEs in North Central Nigeria (NBS/SMEDAN, 2022). The decision to focus on only the owner/managers of these MEs was informed by the fact that they are presumed to be more knowledgeable and are also in a better position to provide needed relevant information on how business mentoring affect sustainability of Manufacturing Medium enterprises in north central Nigeria. The population of the study is shown on Table 1. From Table 1, it can be seen that 28 of these MEs are in Benue State, 16 of them are in Kogi State, 18 of them are in Kwara State, another 18 of these MEs are in Nasarawa State, 47 of them are in Niger State, and 41 of the MEs are in Plateau State, while 75 of these MEs are in Federal Capital Territory (FCT). The population for this study (243) is of a manageable size by the researcher hence all the population was adopted as sample for this study, prompting the adoption of a census approach in arriving at the study's sample. Structured questionnaire were designed to collect responses from the participants. The questionnaire was divided into three sections (Section A, Section B and Section C) for ease of administration and convenience (see Appendix 1 for details). Section A was based on personal data of the respondents while sections B and C contained questions on the study variables using five-point Likert-scale which anchored on a continuum of strongly agree (5), agree (4), undecided (3), disagree (2) to strongly disagree (1). The validity index stood at 0.800 and overall reliability was 0.802. The primary data needed for this study were obtained mainly by means of questionnaire.

This study employed multiple regression analysis models which to ascertain if the independent variable (business mentoring) could predict the dependent variable (sustainability of entrepreneurship establishment). Therefore, the following model was used to test the study's formulated hypotheses:

The model for this research exercise is stated in implicit format as:

$$SUME = f(SEV) \tag{1}$$

$$SUME = (BUM) \tag{2}$$

Where:

SUME = Sustainability of manufacturing MEs

BUM = Business Business mentoring

The explicit form of the regression model is stated as:

$$SUME = b_0 + b_1 BUM + e \quad (3)$$

Where

b₀ = Intercept of the regression

b₁ = parameter estimates

e = error term

In this study, both descriptive statistics (percentages, frequency counts and mean values) and inferential statistics (correlation and regression analysis) were employed for data analysis. While descriptive statistics were focused on assessing the respondents' characteristics and responses to study questions, inferential statistics was used for test of hypotheses. Multiple Regression analysis was used to test Ho₁- Ho₃ in order to determine the effect of business mentoring on sustainability of medium enterprises (MEs) in North Central Nigeria. **Decision Rule:** The study established the following criteria as decision rule for the acceptance and rejection of the null hypotheses: If the P-value (sig.) is greater than 0.05 ($P > 0.05$), the null hypothesis (Ho) would be accepted. However, if the P-value (sig.) is less than 0.05 ($P < 0.05$) the null hypothesis (Ho) would be rejected and the alternative hypothesis (Ha) would be accepted.

4.0 RESULTS AND DISCUSSION

This section covers data presentation and analysis, test of hypotheses and discussion of findings.

4.1 Data Presentation and Analysis

The distribution and retrieval of copies of questionnaire from the employees of manufacturing medium enterprises in Nigeria is presented Table 7 and Table 8, which provides a comprehensive overview of the distribution of questionnaires among owners/managers of MEs in North Central Nigeria.

4.1.1 Response Rate by Firms among States

The response rate by firms from the six States and the FCT was (243) questionnaires disseminated among the owners and managers of selected entrepreneurship establishments in the north central region of Nigeria. However, during the meticulous process of collecting data, it was not possible to retrieve all of the questionnaires from the respondents of these organizations – only two hundred and twenty-one (221) questionnaires were successfully retrieved given an impressive 90.95% response rate.

4.1.2 Demographic Characteristics of the Respondents

This particular section presents the demographic attributes of the individuals who participated in the survey as in Table 9.

Table 9: Demographic Characteristics of Respondents

Characteristics	Distribution	Frequency	Percentage (%)
Gender	Male	104	47.1
	Female	117	52.9
	Total	221	100.0
Age Range	18-27years	57	25.8
	28-37years	72	32.6
	38-47years	74	33.5
	48-57years	9	4.1
	58years & above	9	4.1
	Total	221	100.0
Educational Qualification	SSCE	19	8.6
	OND/NCE	32	14.5
	HND/B.SC.	150	67.9
	Postgraduate	16	7.2
	Others	4	1.8
	Total	221	100.0
Work Experience	10-15 years	152	68.8
	16-20 years	16	7.2
	21-25years	41	18.6
	26-30 years	12	5.4
	Total	221	100.0
Position in the Organization	Owner	92	41.6
	Manager	68	30.8
	HOD	61	27.6
	Others	0	0
Total	221	100.0	
Scope of Operation	State	155	70.1
	Regional	25	11.3
	International	41	18.6
	Total	221	100.0
Category of SMEs	Small Enterprises	59	26.7
	Medium Enterprises	162	73.3
	Total	221	100.0
Ownership Structure	Sole Proprietorship	93	42.1
	Partnership	107	48.4
	Joint Venture	21	9.5
	Total	221	100.0
Years of Business Operation	1-5 years	68	30.8
	5-10 years	33	14.9
	11-15 years	97	43.9
	16 years & above	23	10.4
	Total	221	100.0

Source: Researcher's Computations, 2024

Table 9 presents the demographic characteristics of owners/managers of medium enterprises in North Central Nigeria. The analysis reveals that majority of the respondents are females accounting for 52.9% while their male counterparts accounts for 47.1% of the workforce among the MEs in the study area. Table 9 also shows that significant proportion of these respondents, accounting for 33.5%, falls within the age range of 38 and 47 years. This age group is followed closely by respondents between the ages of 28 and 37 years, constituting 32.6% of the total respondents sampled. Furthermore, it is worth noting that respondents aged between 18 to 27 years; 48 to 57 years and those who are 58 years and above represent 25.8%, 4.1% and 4.1% of the respondents, respectively. Details analysis of the data presented in Table 9 revealed that individuals with different levels of education constitute the sampled respondents in varying proportions. Specifically, respondents with Senior Secondary School Certificate Examination (SSCE) qualifications make up 8.6% of the total respondents sampled. Those with Ordinary National Diploma (OND) or National Certificate of Education (NCE) qualifications constitute 14.5% of the respondents. The majority of the respondents, accounting for 67.9%, hold Higher National Diploma (HND) or Bachelor of Science (B.Sc.) degrees. Finally, respondents with postgraduate degrees and those with other qualifications represent 7.2% and 1.8%, respectively of the total respondent count. These findings highlight the prevalence of graduate employees among medium enterprises in North Central Nigeria.

The data on work experience of the respondents among medium enterprises in the study area show that those who years of work experience falling within the ranges of “10-15 years”; “16-20 years”; “21-25years”; and “26-30 years”, accounted for 68.8%; 7.2%; 18.6%; and 5.4%, respectively. Regarding the position held by respondents in their various MEs in the study area, the results presented in Table 9 show that owner, manager, Head of Department (HOD) and other positions, accounted for 41.6%, 30.8%, 27.6% and 0%, respectively. This clearly shows that majority of the respondents who participated in the survey are owners of these enterprises. Further analysis of Table 9 revealed that the respondents’ responses on scope of operations of their MEs show that MEs with State, regional and international scope of operation, accounted for 70.1%, 11.3% and 18.6%, respectively. This clearly shows that majority of the MEs in North Central Nigeria operates only within their States of establishments with few having international operational scope and even fewer with regional scope. On the category of SMEs, the data in Table 9 shows that majority (73.3%) of the enterprises are medium enterprises while the minority (26.7) of these enterprises are small enterprises.

The data on ownership structure presented in Table 9 shows that, sole proprietorship enterprises, partnership enterprises, and joint venture enterprises accounted for 42.1%, 48.4% and 9.5%, respectively. This clearly shows that most of the MEs in North Central Nigeria are partnership businesses. Finally, Table 9 show that majority (43.9%) of the enterprises have years of business operation falling within the range of 11 and 15 years. Followed by those with years of business operations that falls between 1 and 5 years (30.8%). The data also shows that enterprises with the years of business operations of 5 to 10 years and 16 years and above account for 14.9% and 10.4%, respectively.

4.1.3 Presentation of Responses on Research Variables

In this sub-section of the research work, the owners/managers were asked to provide their responses on various research variables.

Table 13: Responses on the effect of Business Mentoring on Sustainability

Statements on Business	Responses				
	SA(%)	A(%)	NS(%)	D(%)	SD(%)
Business mentoring as a government supportive factor is practiced in my company where there exist a formal interaction between an experienced individual focused on developing an inexperienced staff to ensure sustainability.	11(5.0)	117(52.9)	37(16.7)	0(0.0)	56(25.3)
The adoption of entrepreneurial mentoring in my company make experienced entrepreneur (mentor) to guide the inexperienced ones (mentees) to develop their entrepreneurial skills and decision-making capabilities with the goal of supporting the mentee to re	99(35.7)	55(24.9)	45(20.4)	8(3.6)	34(15.4)
In my company, we are always seeking for mentors as provided by government to enhance our chances of success and to develop competencies and sustainability.	61(27.6)	78(35.3)	77(34.8)	0(0.0)	5(2.3)
Mentors improve the ability of our staff to recognise opportunities and employ same to ensure my company\’s sustainability.	67(30.3)	18(8.1)	46(20.8)	35(15.8)	55(24.9)
Our staff at various stages of development require different mentoring support, as such they are made to understand the	86(38.9)	33(14.9)	28(12.7)	20(9.0)	54(24.4)

developmental needs required by their mentees In my company, there is a deliberate pairing of experience with inexperience staff in an attempt to grow and develop the competency levels of the inexperienced ones so as to ensure sustainability.	99(44.8)	14(6.3)	61(27.6)	10(4.5)	37(16.7)
In my company, there is a reburial knowledge transfer between the mentor and the mentee in vigorous mentoring programmes which increases the sustainability of our business. The mentoring relationship in my company is focused on growing the expertise to improve the capabilities of less skilled staff.	123(55.7)	6(2.7)	35(15.8)	32(14.5)	25(11.3)
The relationship between a mentor and a mentee in my company is critically important to both the development of staff and sustainability of the company. Mentoring in my company is based on our specific needs and our top management within the organisational structure.	83(37.6)	32(14.5)	73(33.0)	16(7.2)	17(7.7)
	14(6.3)	124(56.1)	3(1.4)	0(0.0)	80(36.2)
	15(6.8)	58(26.2)	30(13.6)	34(15.4)	84(38.0)

Source: *Field Survey Data & SPSS Output, 2024*

In Table 13, the responses of participants regarding the effect of business business mentoring sustainability are presented. Details analysis of Table 13 has revealed that the responses of the participants regarding the statement “Business mentoring as a government supportive factor is practiced in my company where there exists a formal interaction between an experienced individual focused on developing an inexperienced staff to ensure sustainability”, show that the responses for strongly agree, agree, not sure, disagree and strongly disagree, accounted for 11.5%, 52.9%, 16.7%, 0% and 25.3%, respectively. This demonstrates that business mentoring as a government supportive factor is practiced in my company where there exists a formal interaction between an experienced individual focused on developing an inexperienced staff to

ensure sustainability. Similarly, the responses revealed that majority of the respondents (60.6%) responded positively to the claim that the adoption of entrepreneurial mentoring in my company make experienced entrepreneur (mentor) to guide the inexperienced ones (mentees) to develop their entrepreneurial skills and decision-making capabilities with the goal of supporting the mentee. The results further suggested, as revealed by majority of the participants (62.9%) that in the study area, organisations are always seeking for mentors as provided by government to enhance our chances of success and to develop competencies and sustainability. More so, mentors improve the ability of staff to recognize opportunities and employ same to ensure organisation's sustainability, as majority of the participants (38.1%) responded positively to this claim. It is further shown from the responses that staff at various stages of development requires different mentoring support; as such they are made to understand the developmental needs required by their mentees. This is revealed by the positive responses of majority of the participants (53.8%).

In Table 13, the responses on the statement "in my company, there is a deliberate pairing of experience with inexperience staff in an attempt to grow and develop the competency levels of the inexperienced ones so as to ensure sustainability", show that the responses of strongly agree, agree, not sure, disagree and strongly disagree, accounted for 44.8%, 6.3%, 27.6%, 4.5% and 16.7%, respectively. This suggests that in the study area, there is a deliberate pairing of experience with inexperience staff in an attempt to grow and develop the competency levels of the inexperienced ones so as to ensure sustainability. The responses in Table 13 also show that amongst medium enterprises north central Nigeria, there is a reburial knowledge transfer between the mentor and the mentee in vigorous mentoring programmes which increases the sustainability of businesses in North Central Nigeria, as revealed by majority of participants (58.4%) who responded positively to this claim. Furthermore, it can be deduced from the responses that the mentoring relationship of firms in the study area is focused on growing the expertise to improve the capabilities of less skilled staff, because most of the respondents (52.1%) positively responded to this statement. Also, the responses of majority of the participants (62.4%) were positive to the statement that "the relationship between a mentor and a mentee in my company is critically important to both the development of staff and sustainability of the company", suggesting that the relationship between a mentor and a mentee among medium enterprises in the study area is critically important to both the development of staff and sustainability of the company. Finally, the responses regarding business business mentoring and sustainability shows that respondents who strongly agree, agree, were not sure, disagree and strongly disagree to the statement that "mentoring in my company is based on our specific needs and our top management within the organizational structure", accounted for 6.8%, 26.2%, 13.6%, 15.4% and 38%, respectively.

Table 15: Responses on Sustainability

Statements on Sustainability	SA(%)	A(%)	Responses		
			NS(%)	D(%)	SD(%)
The sustainability of my business is a function of so many factors including availability of relevant, appropriate and timely govern supportive environmental factors.	82(37.1)	35(15.8)	24(10.9)	16(7.2)	64(29.0)
Ease of doing business has a lot of positive effect on sustainability of Entrepreneurship Establishment.	71(32.1)	125(56.6)	21(9.5)	2(0.9)	2(0.9)
Training in entrepreneurship acts as a facilitator for entrepreneurial activities with the focus being to stimulate entrepreneurial activity and sustainability.	64(29.0)	70(31.7)	59(26.7)	19(8.6)	9(4.1)
Sustainability of Entrepreneurship Establishments is a function of objective entrepreneurship training.	5(2.3)	117(52.9)	30(13.6)	0(0)	69(31.2)
Access to finance has a lot of positive effect on sustainability of Entrepreneurship Establishment	80(36.2)	60(27.1)	8(3.6)	57(25.8)	16(7.2)
The ability of my company to have access to diverse forms of finance is an important booster to achieving sustainability in the market.	54(24.4)	43(19.5)	36(16.3)	46(20.8)	42(19.0)
In my organization business business mentoring makes us to identify our hidden skills, capabilities, abilities, current activities, plans, and intentions so as to achieve competence in business practice	74(33.5)	51(23.1)	59(26.7)	1(0.5)	36(16.3)
With available business business mentoring strategies, my staff displays improved skills and performance which guarantees us sustainability and competitive advantages.	86(38.9)	26(11.8)	67(30.3)	9(4.1)	33(14.9)
Availability of infrastructural helps my organization in exploring new opportunities and possibly achieving sustainability.	63(28.5)	35(15.8)	106(48.0)	7(3.2)	10(4.5)
Availability of infrastructural development helps my organization to build strategies in order to maintain and improve our competence competitive advantage ahead of our competitors	34(15.4)	94(42.5)	35(15.8)	18(8.1)	40(18.1)

Source: Field Survey Data & SPSS Output, 2024

In Table 15, the responses on the effect of government supportive environment on sustainability are presented. A cursory look at the results show that the responses of strongly agree, agree, not sure, disagree and strongly disagree, to the statement “the sustainability of my business is a

function of so many factors including availability of relevant, appropriate and timely govern supportive environmental factors”; accounted for 37.1%, 15.8%, 10.9%, 7.2% and 29.0%, respectively, which suggests that the sustainability of businesses in study area is a function of so many factors including availability of relevant, appropriate and timely govern supportive environmental factors. Regarding the statement “Ease of doing business has a lot of positive effect on sustainability of Entrepreneurship Establishment”, majority of the participants’ responses were positive (88.7%). The results of responses of respondents presented in Table 15 also show that training in entrepreneurship acts as a facilitator for entrepreneurial activities with the focus being to stimulate entrepreneurial activity and sustainability, as opined by majority positive responses (60.7%) of the participants. Furthermore, the responses results presented in show that majority responses (55.2%) of the participants suggest that sustainability of entrepreneurship establishments is a function of objective entrepreneurship training. On the statement “Access to finance has a lot of positive effect on sustainability of Entrepreneurship Establishment”, the responses of strongly agree, agree, not sure, disagree and strongly disagree, accounted for 36.2%, 27.1%, 3.6%, 25.8% and 7.2%, respectively, of which the positive responses (strongly agree and agree) accounts for majority of the responses (63.3%); suggesting that access to finance has a lot of positive effect on sustainability of entrepreneurship establishment.

The results of the responses presented in Table 15, similarly show that majority of the respondents agreed that the ability of my company to have access to diverse forms of finance is an important booster to achieving sustainability in the market (43.9%). On whether business business mentoring makes owners/managers to identify their hidden skills, capabilities, abilities, current activities, plans, and intentions so as to achieve competence in business practice, majority respondents (56.6%) agreed. Furthermore, the responses of strongly agree, agree, not sure, disagree and strongly disagree, to the statement “with available business business mentoring strategies, my staff displays improved skills and performance which guarantees us sustainability and competitive advantages”, accounted for 38.9%, 11.8%, 30.3%, 4.1% and 14.9%, respectively. This suggests that with available business business mentoring strategies, staff displays improved skills and performance which guarantees organization’s sustainability and competitive advantages. The results also show that the responses of strongly agree, agree, not sure, disagree and strongly disagree, to the statement “availability of infrastructural helps my organization in exploring new opportunities and possibly achieving sustainability”, accounted for 28.5%, 15.8%, 48.0%, 3.2% and 4.5%, respectively; with majority of the responses (48.0%) being for the response of ‘not sure’, however, a significant proportion of the responses (44.3%) were for the responses of strongly agree and agree, which signals that availability of infrastructural helps organizations in North Central Nigeria in exploring new opportunities and possibly achieving sustainability. Finally, the results show majority of the responses (57.9%) support the claim that availability of infrastructural development helps medium enterprises in the study to build strategies in order to maintain and improve their competence, competitive advantage ahead of their competitors.

4.1.4 Descriptive Statistics

Table 16 presents the descriptive statistics, which include important metrics like the mean, maximum, minimum, and standard deviation. The researcher has successfully caught the core of the data and offered a thorough overview of its many qualities by adding such a varied selection of statistical indicators, facilitating further analysis and interpretation.

Table 16: Descriptive Statistics

Statistic	SUME	BUM
Minimum	1.000	1.000
Maximum	5.000	5.000
Mean	3.2489	3.1991
Std. Dev.	1.68052	1.18175

Source: Researcher’s Computations from SPSS 25

Table 16 presents descriptive statistics for the variables employed in this study. The results reveal that the average values for the variables reflecting the sustainability of entrepreneurship establishments (SUME), the guidance provided by business mentoring (BUM), are recorded as 3.2489 and 3.7285, respectively. This indicates that, on average, the responses pertaining to the constructs assessing these variables demonstrate a positive inclination. Consequently, the overall findings suggest a favorable trend in relation to the aforementioned variables.

4.1.5 Diagnostic Tests

As a prerequisite for conducting a regression test, it is imperative to ensure that the assumptions underlying the test are fulfilled in order to prevent the occurrence of spurious regression estimates, which have the potential to undermine the validity of policy outcomes over time. In pursuit of this objective, it is essential to assess the normality and multicollinearity conditions, and the findings pertaining to these assessments are discussed in this section. The evaluation and examination of multicollinearity involves employing the variance inflation factor (VIF) to gauge the presence of high correlations among the predictor variables.

i. Multicollinearity Test: To assess the presence of multicollinearity, the study employed the Variance Inflation Factor (VIF) as depicted in Table 18.

Table 19: Collinearity Statistics

Variables	Collinearity Statistics	
	Tolerance	VIF
BUM	.818	1.223

Source: Researcher’s Computation from SPSS, 2024.

The results of the VIF statistics in Table 19 confirms that of the correlation matrix that there are no multicollinearity problems among the independent variable (business mentoring) of the study, because the VIF values are less than 5. According to Field (2009), VIF values of less than 1.0 and tolerance values of less than 0.2 are an indication of the presence of multicollinearity.

4.1.6 Regression Analysis

Table 20: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.859 ^a	.736	.721	1.52825	2.035

a. Predictors: (Constant), BUM, IFD

b. Dependent Variable: SUME

Source: Researcher’s Computation from SPSS, 2024.

The findings that are presented in Table 20 demonstrate that the value of the correlation coefficient, denoted by R is 0.859. This signifies that there is a positive and statistically significant relationship between the explained variable and the explanatory variables. Moreover, the R-square (R^2) serves as the square of the multiple correlations coefficient and serves as a metric for assessing the explanatory power of a model. It is often referred to as the coefficient of determination or a measure of the goodness of fit. The adjusted R-square value of 0.721 indicates that even after making adjustments, 72.1% of the factors that contribute to changes in sustainability are explained by variables such as business mentoring. However, it is important to note that there remains an unexplained variation of 27.9% in the sustainability of Manufacturing Medium enterprises in north central Nigeria. This can be attributed to other factors that influence the sustainability of entrepreneurship establishments in the study area but were not included in the model of this study. In this specific scenario, where the Durbin-Watson value is determined to be 2.035, it can be inferred that there is a lack of autocorrelation among the variables examined within the study.

Table 21: Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	119.168	5	23.834	10.205	.000 ^b
	Residual	502.144	215	2.336		
	Total	621.312	220			

a. Dependent Variable: SUME

b. Predictors: (Constant), BUM, IFD

Source: Researcher’s Computation from SPSS, 2024.

Table 21 display the results of the analysis of variance (ANOVA), which is a statistical technique, used to assess the differences between groups. The F-statistic, a measure of the variability between groups relative to the variability within groups, has a value of 10.205. This indicates that there is a significant relationship between the independent variables, namely business mentoring (BUM), and the sustainability of entrepreneurship establishments in the North Central Nigeria. The extremely low p-value of 0.000 further supports this assertion, suggesting that the collective influence of these factors on entrepreneurship sustainability is statistically significant.

Table 22: Regression Coefficients

Unstandardized Coefficient			Standardized Coefficient		
Model 1	B	Standard Error	Beta	T	Sig.
(constant)	1.024	.466		2.296	.007
BUM	-.571	.092	-.402	-2.214	.063

a. Dependent Variable: SUME

Source: Researcher’s Computation from SPSS, 2024.

The results of the regression coefficients presented in Table 22 further show that contrary to expectations, business business mentoring (BUM) has a negative effect on sustainability of Manufacturing Medium Enterprises in North Central Nigeria. The reported coefficient of -0.402 indicates that a unit increase in business business mentoring will lead to -0.402 units decrease in sustainability. This effect is statistically insignificant at 5% level of significance, because the insignificant value of 0.063 is higher than the 0.05 (5%) level of significant, which is further substantiated by the t-statistic of -4.287.

4.2 Test of Hypotheses and Discussion of Findings

In order to put the hypotheses to the test, the t-statistics as well as the p-values of each variable were assessed, adhering to the criteria of a 5% level of significance. The decision rule, which serves as a guiding principle in this analysis, states that if the computed t-statistic falls below the critical value of t (or if the p-value exceeds 0.05, at a 5% level of significance), the null hypothesis is accepted. Conversely, if the computed t-statistic surpasses the critical value of t (or if the p-value is less than 0.05, at a 5% level of significance), the null hypothesis is emphatically rejected.

Test of Hypothesis One

H₀₁: Business mentoring has no significant effect on sustainability of Manufacturing Medium Enterprises in North Central Nigeria.

To test the effect of business business mentoring on sustainability of Manufacturing Medium Enterprises in North Central Nigeria, the results of Table 22 were also used. The results show that the coefficient of business business mentoring with a coefficient of -0.402 has a t-statistic value of -6.214 and a probability value of 0.000. Since the p-value is less than 0.05 (0.000<0.05) and the t-statistic is less than 1.96 (-6.294), business business mentoring has significant effect on sustainability. Thus, we reject null hypothesis four and accept its alternative. The research findings, revealing a negative but statistically significant effect of business mentoring on the sustainability of Manufacturing Medium enterprises in North Central Nigeria, can be intriguingly interpreted in light of the Public Value Theory (PVT). According to the PVT, public value is created when government and other public organizations engage in activities that address societal needs and aspirations effectively. In the context of entrepreneurship, business business mentoring is often considered a public value-enhancing activity as it is assumed to contribute positively to economic development and societal well-being. However, the unexpected negative effect in this research challenges this assumption. The PVT suggests that the creation of public value is contingent on the alignment of policies and interventions with the needs and values of the society. In the case of North Central Nigeria, if business mentoring programmes are not effectively tailored to address the specific challenges and dynamics of the local entrepreneurial ecosystem, they may inadvertently hinder sustainability. This calls for a nuanced understanding of how

business mentoring initiatives align with the unique context of the region, emphasizing the importance of context-specific strategies to ensure that interventions truly contribute to the public value, as envisioned by the PVT.

5.0 CONCLUSION AND RECOMMENDATION

Conclusion and recommendation are presented herein;

5.1 Conclusion

Based on the findings of this thesis, it can be concluded that business mentoring has no significant effect on sustainability of Manufacturing Medium enterprises in North Central Nigeria. The unexpected negative effects observed in business mentoring highlight the subtle nature of these interventions. The counterintuitive influence of business mentoring indicates the need for more tailored and context-specific mentoring programs, while the adverse impact of infrastructural development suggests a potential misalignment between policy initiatives and the local entrepreneurial landscape. These paradoxical outcomes underscore the necessity for policymakers, business support organizations, and researchers should not treat these factors with levity.

5.2 Recommendation

- i. In response to the negative impact of business business mentoring on sustainability, which is contrary to expectations, policymakers should reassess and optimize business mentoring programmes. The design of these initiatives should align with the diverse needs of entrepreneurs, providing constructive guidance and fostering positive mentor-mentee relationships. Regular assessments and feedback mechanisms can help transform business mentoring into a supportive force for entrepreneurship sustainability.

5.3 Limitations of the Study

The researcher encountered some limitations in the process of undertaking this study. First, some respondents did not answer all questions in the questionnaires. The researcher ascertained the number of incomplete questionnaires, the extent of omitted questions admitted only questionnaires whose omitted data did not affect the validity of the questionnaire. Secondly, some owners/managers were unwilling to commit themselves into allowing the researcher to collect data from their firms citing confidentiality of information and lack of authority to divulge such information. The researcher overcome this by developing an informed consent form and obtaining a letter from the university thus assuring them that the data given would be dealt with in ultimate confidentiality. Thirdly, some respondents hesitated to fill in the questionnaires citing time inadequacy and other failing to give any reason at all. This was overcome by outlining to them that the primary purpose of the study was to fulfill academic purposes and assuring them that the filling exercise was to take the least time possible.

5.5 Suggestions for Further Studies

The identified limitations in the study suggest several areas for further scholarly exploration. Firstly, an in-depth examination of the contextual factors influencing the unexpected negative effects of business mentoring could be fruitful. Qualitative studies or case analyses that delve into the specific dynamics, cultural influences, and regional variations may shed light on why business mentoring programs and infrastructural projects may not align with entrepreneurship sustainability in North Central Nigeria. Secondly, research focusing on the transferability of

findings could be valuable. Comparative studies across different regions within Nigeria or even in other countries would help assess the generalizability of the relationships observed on business mentoring and entrepreneurship sustainability. Understanding how these factors interact in diverse contexts would enhance the applicability of policy recommendations. Furthermore, studies that explore the role of moderating variables, such as cultural dynamics, regional policies, and industry characteristics, are suggested. Examining how these variables interact with the identified factors can provide a more nuanced and context-specific perspective for future policy considerations. Lastly, there is room for longitudinal studies to track the temporal evolution of the relationships explored in the study. Examining how these variables interact and influence entrepreneurship sustainability over time could provide insights into the dynamic nature of the entrepreneurial landscape and inform more adaptive policy strategies.

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