

Perceptions of Female Micro Business Owner Managers in The Agribusiness Sector Based in the North Central Region of Nigeria on The Effectiveness of Government-Sponsored Training Interventions.

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ABSTRACT

This study focused on evaluating the perceptual changes in female micro-owner managers' internal capabilities after attending a Nigerian Government -sponsored training intervention program. To achieve this, the study explored the experiences of women entrepreneurs in Nigeria's agricultural sector by adopting a qualitative approach. A pilot study involving three facilitators to understand the Nigerian government's objectives for intervention programs and two female micro-owner-managers to explore the women's perspectives. The main study interviewed eight female Agric-business owners who shared their experiences of participating in a Government-led training initiative.

The thematic data analysis conducted in this study identified a positive outcome for female micro-owner managers after attending and participating in a training intervention scheme. This included improving these women's level of motivation, increasing their propensity to take risks, and being more proactive, through enhancing their self-efficacy and entrepreneurial capabilities. The study's findings recommend that policymakers prioritize financial inclusion by providing intervention funds specifically for women in the Nigerian agricultural sector. This involves streamlining existing bureaucratic processes to ensure that female entrepreneurs who meet the various requirements can access the necessary funds without any gender discrimination. There is also a need for greater transparency and accountability in financial allocation processes to reduce the perceived levels of corruption.

Keywords: Training intervention programme, female micro-owner managers, internal capabilities, managerial and entrepreneurial capabilities.

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by a specific reference in the text. No part of this thesis has been submitted as part of any academic award. The thesis has not been presented to any other educational institution in the United Kingdom or overseas. Any views expressed in this thesis are those of the author and do not represent those of the University of Gloucestershire.

Signed

Date

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Chapter One

Introduction

1.1. Introduction

This Chapter presents the research on the effectiveness of training intervention programmes offered to female micro-owner managers based on their experiences. The chapter will set out the context of the study in section 1.2, a definition of terms in section 1.3, the purpose of the study in section 1.4, and then the research problem in section 1.5. Leading from this, the chapter will highlight the current research gap in section 1.6. The research aim, objectives, and research questions are covered in section 1.7, with the justification of the project being presented in section 1.8. Finally, the structure of the study is presented in section 1.9, which explains the content and essence of each chapter.

1.2. Context of the Research

Government-sponsored intervention programmes for micro-businesses in Nigeria initially commenced with providing mostly financial grants. However, recent studies (e.g., Peter et al., 2018; Usman & Tahir, 2018) have highlighted the failure of this type of financial intervention strategy. The failure can be attributed to weak managerial skills in micro-businesses, low quality of the product, along with inadequate market information, which has led to a redesign of these intervention schemes. At the same time, Government-sponsored training intervention programmes for the agricultural sector were launched, designed to serve multiple purposes, including specific support for women entrepreneurs to set up their micro-Agric businesses. This initiative included empowering women with product and financial incentives to set up their Agric micro-enterprises, to encourage female micro-owner managers to turn their informal business activities to become more regulated businesses, and finally, to meet the government's economic diversification objectives (Tonuchi & Onyebuchi, 2019). To achieve these outcomes, the training intervention schemes were specifically tailored for the women in the agricultural sector, designed to deliver modules such as agricultural business management and the use of improved seedlings. This was to address the reported ineffective record-keeping, inadequate market information, and access to financial resources identified in existing literature (McKenzie & Woodruff, 2017; Joseph et al., 2021; Matthew et al., 2020; Waziri et al., 2020).

This study evaluated the effect of training initiatives on female micro-owner managers' internal capabilities to ascertain what competencies and knowledge were essential to the creation and expansion of micro-enterprises. From a resource-based theoretical perspective, the study also explored skill sets needed to enhance business performance.

1.3. Definition of Terms

Examined from the resource-based theoretical perspective, internal capabilities of female micro-owner managers' characteristics and abilities in this study are defined as intangible traits or skills. These abilities are seen as essential components and dynamic capabilities needed by the entrepreneur, which can influence the creation and expansion of a business (Kevill et al., 2017). As a concept, this study sees these internal capabilities as essential traits that can be informed and influenced by training intervention programmes, and these are identified in this study as motivation, propensity to take risks, proactiveness, ability to network, knowledge transfer, and resilience.

From a theoretical perspective, the female micro-owner managers' propensity to take risks and their proactiveness are considered as entrepreneurial capabilities, and are concepts related to entrepreneurial orientation (Covin & Wales, 2019). Entrepreneurial orientation was demonstrated in the female micro-owner managers' ability and willingness to take a risk starting their micro-Agric businesses, and the proactiveness exhibited in their various entrepreneurial activities. In contrast, managerial capabilities are seen as business practice competencies, such as record-keeping, financial and resource management, and access to market information (McKenzie & Woodruff, 2017).

1.4. Purpose of the Research

In emerging economies and markets, the informal business sector consists of micro-enterprises, which account for about 90% of the total number of businesses and employment opportunities. In Nigeria, the number of micro-enterprises accounts for 60% of all jobs in the country (Etim & Daramola, 2020). Micro-enterprises have also been identified as predominantly owned by women who often lack the necessary managerial and entrepreneurial capabilities and skills (Gherhes et al., 2016). This type of enterprise tends to be characterised by low income and often involves self-employed individuals, with most businesses not registered for tax purposes (Rosaldo, 2021). To address this, different training initiatives have been offered to educate these entrepreneurs on accessing markets, gaining the necessary financial management skills,

accessing support, and network opportunities (Zin & Ibrahim, 2020). While financial intervention programmes have dominated the literature in Nigeria (e.g., Adamgbe et al., 2020; Adegoke et al., 2022), studies into training intervention programmes are limited. Furthermore, existing studies into the content and effectiveness of these training initiatives (e.g., Adeyanju et al., 2021; Jenyo et al., 2024) have only investigated the theme from a quantitative perspective. This research, therefore, intends to address the methodological limitations in micro-enterprise studies to understand the experiences and effectiveness of training initiatives on Nigerian female micro-owner managers.

1.5. Research Gap

This study will evaluate the influence of training intervention programmes on female micro-owner managers' internal capabilities in establishing and growing their micro-enterprises. Existing literature indicates limited research in Nigeria on this theme, potentially because micro businesses are grouped together with small and medium enterprises, forming a single entity. However, there is an increasing need to study micro-enterprises independently due to this type of business's contribution to the country's revenue, employment opportunities, and certain unique challenges. Most micro-enterprises are seen as being managed by women who have relatively low productivity and finances (Tonuchi et al., 2020). Etim and Daramola (2020) argued that micro-enterprises tend to pay below minimum wage and do not provide their employees with opportunities to move into more formal employment. While some studies (e.g., Barron, 2020) have indicated that training intervention initiatives can improve the formalised status of micro-enterprises, Moore (2023) contended that this may be ineffective, as most businesses in Sub-Saharan Africa registered as taxpayers provide little or no revenue. These limitations raise concerns about the potential effectiveness of training intervention schemes, which are designed to address unemployment, enable the female owners to become financially independent, and generate business growth and revenue.

Literature on training intervention schemes (e.g., Chinen et al., 2017; Grimm & Paffhausen, 2015; McKenzie & Woodruff, 2017) have indicated that there is no consensus on the debate about the effectiveness of this form of provision. However, training intervention initiatives have been credited for improving self-employment, especially amongst women (Chinen et al., 2017). However, the effectiveness of this form of intervention needs to be evaluated to mitigate the managerial and entrepreneurial challenges that female micro-owner managers face. Literature on intervention programmes in Nigeria (e.g., Adamgbe et al., 2020; Adegoke et al.,

2022; Jenyo et al., 2024) have focused primarily on financial intervention programmes, which have not been considered successful for several reasons, including corruption and politicization of the actual overall intervention process. What is missing, however, is an understanding of the experiences of female entrepreneurs in providing and enhancing their entrepreneurial competencies and skills.

1.6. Research Problem

The research gap discussed in section 1.2 above has presented the focus of the study. Existing literature on training intervention programmes (e.g., Chinen et al., 2017; Grimm & Paffhausen, 2015) have focused on how this initiative has improved job creation. However, although self-employment has been noted to have been enhanced following attendance and participation in training activities, there remains a question as to the effectiveness of these training sessions on female micro-owner managers' internal capabilities. This is important as increasingly, studies (e.g., Shetty et al., 2024; Tang et al., 2023; Wijewardena et al., 2008) have identified the role of owner-managers' characteristics, such as their willingness or propensity to take calculated risks, the degree of proactiveness, and motivation to start up and then grow the business. While studies on training intervention schemes (e.g., Adeyanju et al., 2021; Jenyo et al., 2024) have reviewed the effect of these training programmes on women and the youth in the Nigerian agricultural sector, the effectiveness of these initiatives on female micro-owner managers' internal capabilities, such as motivation, the ability to network, willingness to share knowledge, and the level of resilience exhibited in crises, has yet to be investigated.

Adeyeye et al. (2019) studied the motivation of an entrepreneur and concluded that most micro-owner managers tend to start-up their business out of necessity, which can adversely affect the long-term growth of the business. However, Adeyeye et al. (2019) also argued that opportunity-driven micro-enterprises tend to be successful. It is, therefore, imperative to understand female micro-owner managers' motivation for starting their Agri-business after attending a training initiative, and what resources and knowledge they require. Training intervention programmes have been criticized due to limited participant support, such as mentoring after the sessions. To address this, networking opportunities have been recommended to develop owner-managers' business capabilities, including access to resources and the ability to share their knowledge (Sendawula et al., 2023). However, the effectiveness of training intervention schemes to promote and enable networking opportunities for these female farmers in Nigeria has yet to be studied. Knowledge transfer has been identified as a significant theme needed in micro-enterprises, especially for the Agric-business sector, particularly as the industry can be fraught

with economic and ecological challenges. While peer-to-peer networking has been recommended by Chaudhuri et al. (2021), there is limited research conducted on these capabilities from a Nigerian context, which this study intends to address.

1.7. Research Aim and Objectives

Following the research problem identified in section 1.3, this study intends to *evaluate the perceptual changes to female micro-owner managers' internal capabilities after attending a Nigerian government-sponsored training intervention programme.*

The following objectives will be addressed to achieve this aim.

- To critically identify in the existing literature, as to the extent to which government training intervention programmes can change micro-owner managers' internal capabilities.
- To critically assess and evaluate how training interventions have influenced Nasarawa State female micro-owner managers.
- To critically analyse and evaluate from the findings, how female micro-owner managers' internal capabilities have been enhanced following attending a training intervention programme provided by the Nigerian government in Nasarawa State.
- To critically analyse and evaluate from the findings, how Nigerian training intervention programmes have influenced female micro-owner managers' entrepreneurial and managerial capabilities in Nasarawa state.
- To recommend practical implications to policymakers on improving training intervention programs and access to government-sponsored financial intervention.

Based on the objectives and the problem statement, the search questions for this study were developed. The overarching research question for this study was to understand *how government-sponsored training intervention programmes influenced the perceptual changes to female micro-owner managers' internal capabilities after attending a Nigerian government-sponsored training intervention programme.* Furthermore, three sub-questions were guided and informed by the current academic debate, which will be presented in Chapter Two.

Research Question One: How have Government-led training intervention programmes influenced women in the Nigerian agricultural sector?

Research Question Two: How has attending Government-led training programme improved female micro-owner managers' internal capabilities?

Research Question Three: How has participation in Government-sponsored training interventions improved female micro-owner managers' managerial and entrepreneurial skills?

1.8. Justification for the Research

This research intends to contribute to the existing literature on micro-enterprises and female entrepreneurs in the Nigerian agricultural sector. The study will establish that the existing training intervention programmes can enhance female micro-owner managers' internal capabilities and skills, to set up and grow their micro-business. To achieve this, this study will first address the existing gap in methodology when understanding the perceived effectiveness of training intervention schemes on female entrepreneurs by adopting a qualitative approach. The concept of perceived effectiveness refers to the female micro-owner managers' understanding and perception of the effectiveness of the training initiative attended and how the lessons learned have influenced their existing or new Agric-business. This qualitative strategy will provide a different perspective on intervention studies compared to those by Adeyanju et al. (2021) and Jenyo et al. (2024).

While training intervention initiatives have been researched, the influence of this form of initiative has overlooked the internal capabilities and skills of female micro-owner managers. Although existing literature (e.g., Noerlina et al., 2023) have evaluated the internal capabilities and skills from an organizational perspective, there are limited studies which have assessed the internal attributes at an individual level in a micro-enterprise. The evaluation of internal capabilities also justifies using a qualitative approach, as the goal of the project is to gain an in-depth understanding of female micro-owner managers' experiences when attending and participating in a training session and how their capabilities are perceived to have improved at the end of the programme. This evaluation of the perceived effectiveness will serve three purposes: to inform future Government policy by identifying areas of inadequacy in the existing scheme and content, to determine whether the initiative aligns with the Nigerian government's objective of poverty alleviation, women empowerment, job creation, and providing access to finance (Joseph et al., 2021; Matthew et al., 2020; Waziri et al., 2020).

1.9. Business and Theoretical Contributions

This professional doctorate has identified two contributions that of business and theoretical. The business contribution is focused on informing training providers, policymakers, and, finally, female micro-owner managers. For training providers, there is a need to improve the training methodology by adopting a more participatory approach to the existing training intervention program design and delivery, as identified by Alif et al. (2024), but from a Nigerian perspective. The implication for policymakers is centred on improving access to finance and

information on potential financial intervention, while ensuring that access to funds is based on merit. For female micro-owner managers, the study has identified the need to seek training programmes that enhance their intrinsic motivation and self-efficacy and improve entrepreneurial and managerial capabilities.

From a theoretical perspective, the first contribution addresses the methodological gap and previous reliance on quantitative research by offering a qualitative insight into the learning experiences of female micro-owner managers when undertaking and participating in a Nigerian Government-led initiative to promote Agric-based micro-businesses. Studies (e.g., Adeyanju et al., 2021) investigated the effect of training intervention programmes in the Nigerian agricultural sector using quantitative research methods and how characteristics such as age, level of education, marital status, and employment type influence participation in training programmes. However, these studies had not provided a rich insight into the perceptual changes experienced by women who had attended training initiatives. By utilizing a qualitative approach, this study explored the women's experiences and gathered responses that could not have been generated from a quantitative perspective. The second theoretical contribution adds to the existing literature on self-efficacy and entrepreneurial orientation theories from a Nigerian female micro-owner managers and training intervention programmes perspectives.

1.10. Thesis Structure

This study is structured into six chapters, beginning with this introductory chapter, which outlines the project's justification, aim, objectives, research questions, and existing gap.

Chapter Two will present the current academic debate focused on several themes to address the first objective: *to critically identify in the existing literature, the extent to which Government training intervention programmes can change micro-owner managers' internal capabilities.*

The literature review will provide a general background to the central theme of micro, small, and medium-sized businesses before focusing specifically on micro-enterprises. The chapter will then review the current academic debate as to the usage of training intervention schemes as a concept, the effectiveness of this training initiative in micro-enterprises, the influence of this programme on accessing and managing finance, before focusing on female micro-owner managers' internal capabilities. Finally, a conceptual framework detailing the research gaps will be presented in Figure 2.2. The Chapter will conclude that there are limited studies on the

effectiveness and identify the benefits of training intervention schemes on female entrepreneurs in the Nigerian agricultural sector.

Chapter Three will justify the ontological and epistemological perspectives that informed the research. The chapter will present the interpretivist approach adopted in the study to collect the data. The pilot study, which consisted of five participants, three training facilitators, and two owner managers, will be presented along with the lessons learnt from this phase. The main study and the strategy will then be set out, including how the eight semi-structured interviews with female owner managers were conducted. Finally, the data analysis strategy, limitations of the study, and the ethics of the project will be presented.

The third objective of this study *is to critically analyse and evaluate from the findings how micro-owner managers' internal capabilities have been enhanced following attending a training intervention programme provided by the Nigerian Government in Nasarawa State*, which will be addressed in **Chapter Four**. The findings in this study will reveal that training intervention programmes do not enhance female micro-owner managers' access to finance despite meeting the formalization requirements set out by the Nigerian Government. This study, however, will contend that this form of training initiative can enhance female micro-owner managers' internal capabilities, including promoting self-motivation, enabling knowledge transfer, building resilience, encouraging proactiveness, and having the willingness or propensity to take risks. Furthermore, the findings will reveal that training initiatives can influence female micro-owner managers to empower them to become financially independent. The women's managerial and entrepreneurial capabilities would also be shown to have been enhanced, especially in accurate record-keeping, which will have a positive effect on financial and resource management. However, some capabilities were still at a basic level, including the use of social media.

Chapter Five will discuss the findings and highlight the theoretical underpinnings that supported and justified the study. Self-efficacy and individual entrepreneurial orientation will be identified as key determinants of the effectiveness of training intervention to enhance internal capabilities. This chapter also establishes a link between self-efficacy and motivation and will highlight the distinction from existing research (e.g., Shetty et al., 2024) by presenting the research from a Nigerian female entrepreneur and an Agric-micro enterprise context.

Chapter Six concludes and encapsulates the study. This chapter will provide an overview of the study, reiterating the research aim, objectives, and questions. Conclusions generated from the findings and discussion chapters are also presented, which informed the contribution to business practice, followed by theoretical and academic perspectives. The study will support the view of Chinen et al. (2017) that training intervention initiatives can improve self-employment for women entrepreneurs. This outcome aligns with the findings of Waziri et al. (2020) who contended that training initiatives can enhance women's empowerment and financial independence. Furthermore, this study will conclude that there is a need for additional content in the existing training intervention programmes and recommends extensive collaboration with Farmers' Associations, improving the business practice modules, and including a reflective learning component to track female micro-owners' skills development. This chapter will finally present the study's limitations and recommendations for participatory action research to be conducted in the future. The chapter concludes with a personal reflection on the doctoral journey.

Chapter Two

Literature Review

2.1. Introduction

In Nigeria, micro, small, and medium enterprises (MSMEs) are often grouped as a single category, resulting in limited research focusing on micro enterprises. However, there is a growing need to examine micro enterprises separately, particularly in the agricultural sector, due to the Nigerian Government's emphasis on agricultural diversification and job creation through micro, small and medium businesses. Existing studies on MSMEs provide valuable insights, however, micro enterprises face unique challenges that require a unique approach. This chapter reviews relevant literature on MSMEs while establishing a focused discussion on micro enterprises, highlighting the gaps in research and the need for targeted interventions. Drawing on Grimm and Paffhausen's (2015) systematic review of interventions for micro and small entrepreneurs, as well as Chinen et al.'s (2017) review of programmes for women entrepreneurs and McKenzie and Woodruff's (2017) study on business practices in small firms in developing economies, this review identifies key areas for training intervention programmes. The constructs of employment, self-employment, marketing capabilities, record-keeping, financial management, and resource management highlighted in these studies serve as a foundation for data collection in this study. The discussion explores micro enterprises, perspectives on training intervention programmes, and their effect on female micro-owner managers, particularly in the agricultural sector. Additionally, the chapter presents a theoretical framework to contextualize the study's findings.

This literature review explores existing research on the effectiveness of training intervention programmes in enhancing female micro-owner managers' internal capabilities, managerial and entrepreneurial competencies. It examined how such interventions contribute to financial access, improving internal capabilities, motivation, proactiveness, propensity to take risk, networking ability, knowledge transfer, resilience, as well as managerial and entrepreneurial capabilities amongst female micro-owner managers. Additionally, the review explores how training interventions influence record-keeping practices, financial and resource management, access to local markets, self-employment, financial independence, and empowerment.

This chapter is structured into several key sections to provide a detailed review of key areas in the research. The first section explores the general concept of micro-enterprises and the importance of training interventions. The subsequent sections examine the effectiveness of training programmes and their influence on various aspects of a woman's entrepreneurship capacity, including access to finance, internal capabilities, motivation, risk-taking capability, and networking skills. The review then explored the role of training interventions in facilitating knowledge transfer, building women's resilience in the agricultural sector, financial management, and access to local markets. Finally, the chapter concludes with a discussion of theoretical perspectives that underpin the study, providing a framework for understanding how training interventions contribute to the empowerment and financial independence of female micro-owner managers in the agricultural sector.

Drawing insights from existing literature, this review identifies key trends, challenges, and gaps in research on micro-enterprises, including methodological gaps. This literature review also highlights the need for more targeted and effective intervention programmes to support female micro-owner managers in creating and expanding micro-enterprises in Nigeria and the robust use of methodology in addressing existing gaps in literature.

2.2. Background of the Study

Micro, small, and medium enterprises (MSMEs) have been identified as fundamental to global economies in employment generation, poverty alleviation, and improving the living standards of the people, especially in developing countries (Endris & Kassegn, 2022). However, these enterprises have been challenged by several limitations resulting from their size, capacity, and access to finance (Eggers, 2020). Whilst there has been a focus on financial interventions from Governments globally, various studies (e.g., Rankhumise and Letsoalo, 2019) have identified the importance of Government support in training micro, small, and medium enterprise business owners on financial management, managerial skills, and access to market information. These characteristics have been identified in existing literature as areas of weakness in MSMEs and the determinants of survival of these enterprises. While Government-sponsored training intervention programmes have become the norm across the globe, including developing countries such as Nigeria, there are gaps in existing literature on the effectiveness of these intervention initiatives, especially training schemes on micro business performance (Dela Cruz et al., 2023; Grimm & Paffhausen, 2015).

Government-sponsored intervention initiatives for MSMEs in Nigeria have mainly been focused on financial grants, but studies (e.g., Peter et al., 2018; Usman & Tahir, 2018) have highlighted the failure of these financial intervention schemes due to various reasons. These have included weak managerial skills, low product quality, and inadequate market information, which has led to the introduction of training intervention programmes to improve the survival rate of MSME enterprises.

From a global perspective, MSMEs tend to face certain challenges that can affect their growth and survival due to the limitations of resources and immaturity in the business environment (Eggers, 2020). To address this, Government-sponsored intervention programmes have often been tailored towards providing the support that MSMEs require, which is in the form of information dissemination, skills promotion, and financial grants (Melese, 2018). These intervention initiatives tend to take different forms depending on the economic needs of the country and the developmental level of the enterprise.

From the context of the study, in Nigeria, Government intervention projects began as early as the 1960s with diverse programmes such as the industrial development centres and agencies to assist small-scale businesses (Maishanu & Siti-Nabiha, 2020). Most of the Nigerian Government intervention programmes have been in the form of financial grants, such as the introduction of the Small and Medium Industries Equity Investment Scheme (SMIEIS) set up by the Central Bank of Nigeria in collaboration with commercial banks, which contribute 10 percent of their equity towards this scheme (Onyeje et al., 2022). Other intervention programmes include the National Economic Reconstruction Fund (NERFUND), along with the Family Economic Advancement Programme (FEAP), Micro, Small, and Medium Scale Development Fund (MSMSDF), and (YOUWIN) Youth Enterprise with Innovation in Nigeria (Adebayo et al., 2020). Some of these intervention schemes were sector-specific and disbursed by institutions established solely to finance MSMEs in sectors such as agriculture, manufacturing, and export. These institutions included the Bank of Industry (BOI), the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB), and microfinance banks. These institutions targeted businesses in rural areas and were established to provide easy access to finance for farmers and cooperatives (Agbim, 2020).

In addition to financial institutions, agencies such as the National Directorate of Employment (NDE), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), and Entrepreneurship Development Centres have been established to support the growth of

MSMEs. Although access to finance has been identified as a dominant challenge faced by MSMEs in Nigeria, Adegoke et al. (2022) noted that the issues faced by small and medium businesses extend beyond lack of access to finance to unfriendly business environment, limited access to technology, and lack of managerial skills. These challenges also apply to micro enterprises, as micro enterprises are mostly owned and managed by an individual who may not run a formalized business. The introduction of financial intervention programmes, as discussed in Joseph et al. (2021) and Adegoke et al.(2022), has emphasized the need for improved managerial skills in micro, small, and medium enterprises, thereby necessitating the need for training intervention programmes.

Training and development for MSMEs have been attributed to improved product quality, reduced production cost and enhanced competitive advantage (Ikupolati, 2019). The study by Ikupolati (2019) is important as it identified the importance of training and development for SMEs, however, it was focused on the construction sector and does not reflect on micro enterprises which is common with most studies in Nigeria that either group research in MSMEs as an entity or focus on SMEs thereby omitting micro enterprises. As a result, minimal studies have focused on micro-enterprises and the effectiveness of Government training intervention initiatives on micro businesses in Nigeria. This is problematic, as micro businesses make up a vast number of businesses grouped as MSMEs, this area has, however, been understudied in existing literature (Gherghes et al., 2016) This view was echoed by Meressa (2020) in a study of the growth of micro and small enterprises in Ethiopia, which confirmed that more studies were needed on micro-enterprise growth.

Reviewing the existing literature on Government-sponsored intervention programmes in Nigeria highlighted two areas for consideration: a limitation in the effective actualization of the objectives of Government intervention and the grouping of MSMEs as a single entity, which precludes an effective evaluation of training intervention programmes on micro enterprises. This limitation had necessitated opinions such as that by Anochie et al. (2015) and Taiwo et al. (2022) who argued that there is a need to distinguish between entrepreneurial and non-entrepreneurial businesses, as this will determine the kind and level of support each business requires if these businesses are to meet the Nigerian Government's objectives of employment generation and poverty alleviation. This perception by Anochie et al.(2015) reinforces the research problem and the need to evaluate training intervention programmes targeted at micro enterprises.

Limitations faced by MSMEs in developing countries, particularly Nigeria, are attributed to socio-economic and political facets. Maunganidze (2013) and Ekwochi et al. (2019) stated that Government intervention programmes are not viable because Government agencies created to support these intervention programmes are poorly funded and intervention programmes are politically motivated. Although conducted in Zimbabwe, the research also addresses challenges prevalent in Government-sponsored intervention programmes in Nigeria, which are usually terminated upon a change in political power. However, Adeusi and Aluko (2014) and Akyuz and Isaac (2020) argued that Government intervention projects have a significant and positive effect on small-scale businesses in Kogi, a state in Nigeria, and account for 63 percent of the improvement in small-scale businesses, while 37 percent was attributed to other factors. The study by Adeusi and Aluko (2014), however, only focused on financial and infrastructural support from the Government, but implied that Government intervention schemes alone do not determine MSME business growth. The implication that other factors were responsible for improvements in small-scale businesses other than Government intervention initiatives reinforces the need to determine the effectiveness of Government-sponsored training intervention programmes in Nigeria.

In a study researching Government intervention schemes in developing countries, Grimm and Paffhausen (2015) argued that training can enhance entrepreneurship skills and motivate potential entrepreneurs to reconsider their existing business models and re-engineer their business processes. Therefore, it is possible to conclude that training interventions in Nigeria are designed to address the limitations in owner-managers' internal capabilities and improve MSMEs' product quality and packaging to meet international standards through economic diversification (Odunukan et al., 2022).

In defining micro, small, and medium enterprises, it has been determined that geographical and national disparities distinguish the classification of these enterprises (Dissanayake et al., 2019). However, these businesses are categorized by certain characteristics that differentiate them from large enterprises, such as size, number of employees, and market share, which are usually lower than those of larger enterprises. In addition, Garcia-Martinez et al. (2023) opine that MSMEs are also identified by the restrictions faced in accessing finance as well as limitations in other areas such as innovation, network, and internationalisation. These limitations prove to be common in MSMEs across countries and different sectors of economies. The earliest attempt to define MSMEs was proposed in both the Bolton Report (1971) and with Mahad et al. (2023), who defined employment as the main criterion for identifying MSMEs. This criterion was also

set by the European Commission (2011) and discussed in Sefiani et al. (2018) as the main criterion for identifying MSMEs. This is particularly so in Nigeria, where the Government seeks to tackle unemployment (Ajuwon et al., 2017). However, this perspective has been challenged on the basis that other characteristics can influence some of the criteria for evaluating MSMEs. Studies (e.g., Hatten, 2011; Ahmad et al., 2018) contended that geographical factors can affect the terminology used in addressing MSMEs. In Nigeria, for instance, a micro-enterprise is a business that has less than 10 employees in South Africa, and less than 5 in Nigeria (Ajuwon et al., 2017). Poole (2018) criticised these differences in defining MSMEs across countries and asserted that they create challenges in assessing the accuracy of recommended intervention programmes and to objectively evaluate the efficacy of implemented strategies. As a result, Poole (2018) observed that policymakers were then compelled to implement measures that often rely on unverified data, leaving them vulnerable to the influence of diverse vested interests and differing viewpoints. This study agrees with the views of Poole (2018), as the findings show that intervention programmes in Nigeria are adapted from other countries and were influenced by several stakeholders, making implementation and evaluation difficult. Although studies (e.g., Ajuwon et al., 2017; Mahad et al., 2023; Sefiani et al., 2018) agree on employment as the ideal criterion for measuring MSMEs. In Nigeria, MSMEs have been defined by three characteristics: annual turnover, assets, and number of employees (Agajelu & Obiakor, 2021; Onukwuli et al., 2014). Despite this, number of employees and annual turnover are still the major criteria used in identifying MSMEs in Nigeria (SMEDAN, 2017). In contrast, in Australia, for example, small businesses are measured predominantly by turnover as this is the basis for calculating tax rebates and qualifying for Government financial assistance (Dwivedi & Pawsey, 2023; Xiang & Worthington, 2017).

The MSME sector in Nigeria has been credited with creating 86.3 percent of the country's jobs in 2017 (SMEDAN, 2017). These findings from SMEDAN's (2017) report correspond with existing literature (e.g., Oteniya et al., 2019) reviewed on the position of MSMEs and their impact on the country's gross domestic product. The challenges faced by MSMEs in Nigeria, which were identified in the SMEDAN (2017) survey report, also correspond with those identified in existing literature. These challenges include access to finance and poor public services, conflicts in Government policies, poor business development services, inadequate market information, multiple tax systems, and outdated technology. These challenges justify the recommendations consistent in existing literature on MSMEs' in Nigeria for more

Government intervention policies to boost MSMEs' business growth. The recommendation for Government intervention in MSMEs' development shows the important role that the Government plays in the growth of enterprises in Nigeria. However, these studies are focused on the organisational level rather than the individual level and have not studied the role of micro business owner managers in boosting business growth in Nigeria.

Literature on MSMEs in Nigeria (e.g., Agajelu & Obiakor, 2021; Ayozie et al., 2013; Uchegbulam & Akinyele, 2015) were predominantly focused on the manufacturing sector, thereby creating a discrepancy in the definition of MSMEs. MSMEs were defined as any manufacturing plant employing fewer than five hundred workers, a definition which is limited by sector. This discrepancy in definition can be identified as a limitation in measuring the performance of MSMEs' in Nigeria. This definition omitted businesses in other sectors such as agriculture which has been identified by the SMEDAN's (2017) report and does not cover other business sector such as the hospitality industry tagged as the service industry in the SMEDAN report which has experienced more growth than the manufacturing sector.

Existing literature (e.g., Waziri et al., 2020; Joseph et al., 2021) on Government-sponsored intervention initiatives targeted at the MSME sector in Nigeria were focused on poverty alleviation and access to finance. However, Government intervention programmes and policies for MSMEs vary across countries as there are distinctions between intervention programmes in developed and developing countries. Nevertheless, the underlying objective is the need for Government to support MSMEs' business growth. For instance, a longitudinal study of over 2000 SMEs in Australia showed that Government intervention schemes were primarily financial and targeted at aspects of businesses such as export. These intervention programmes were found to improve business performance and aid businesses in assessing non-governmental financing (Xiang & Worthington, 2017; Dwivedi & Pawsey, 2023). Studies in developing countries (e.g. Melese, 2018; Onukwuli et al., 2014; Sibanda et al., 2018), however, reveal the enormous gap between intervention schemes in developed and developing countries. Some intervention programmes in developing countries were established to raise awareness on entrepreneurship and export (e.g., Melese, 2018; Sibanda et al., 2018), while others (e.g., Shibia & Barako, 2017; Usman & Tahir, 2018) were targeted at creating trade-free zones and providing financial grants to MSMEs. These distinctions emphasize that Governments' objectives for MSMEs differ across countries. In the United Kingdom, for instance, the Government mainly addressed market failure in intervention policies and initiatives, thereby

requiring small enterprises to be more strategic in utilizing available resources to gain access to finance (Calabrese et al., 2022)

Existing literature (e.g., Fowowe, 2017; Jenyo et al., 2024; Ugwu et al., 2017; Ugwu-oju et al., 2020) also established that finance is an integral part of MSMEs' business success across developed and developing countries. However, sustained business performance requires more than finance. A study by Adeyeye et al. (2019) highlighted that small enterprises in developed countries were opportunity-based, growth-oriented businesses and therefore, able to access external funding after participating in Government interventions. This is, however, not the experience of small enterprises in developing countries, most of which are necessity-based enterprises set up by individuals due to lack of employment and with little or no knowledge of business management skills. Inadequate knowledge has therefore, created a major need for entrepreneurial training, which can improve owner-managers' business skills. In their cross-sectional study on the determinants of MSMEs' growth in Kenya, Shibia and Barako (2017) stated that entrepreneurial education was a limitation to MSMEs' business growth. While in Nigeria, management skill was found to be deficient and posed a major limitation to MSMEs' business performance in a study conducted by Ibrahim and Shariff (2016) in three northern states in Nigeria, Usman and Tahir (2018) in Maiduguri and by SMEDAN (2017) across the country. Despite these findings, there is a gap in the existing literature on the effectiveness of training intervention programmes on MSMEs' business performance in developing countries, especially Nigeria. Thus, this study needs to assess the efficacy of existing training intervention programmes on micro-enterprises in Nigeria. To establish the relevance of this study, a literature review on Micro enterprises, training interventions, the effect of training interventions on micro enterprises, the attendant impact on micro enterprises' access to finance, and the theoretical underpinnings of micro enterprise research was conducted.

2.3. Micro Enterprises

This study accepts the definition by Gherhes et al. (2016), which states that a micro-enterprise is a business managed by the owner with underdeveloped capabilities in critical business areas. This describes most micro enterprises in Nigeria, which comprise the informal sector (Etim & Daramola, 2020). Most small business research (e.g., Meressa, 2020) have studied micro and small enterprises as an entity, while others (e.g., Zin & Ibrahim, 2020) classify them as small and medium enterprises. However, Samujh (2011) stated that micro enterprises are considered the major form of businesses, run by owner-managers who may lack formal education and rely

on community-based networks. Therefore, these businesses would require training, market, financial and network support to survive (Zin & Ibrahim, 2020). Micro enterprises tend to make up the informal sector of most developing economies and account for about 90% of businesses in these countries as well as for most informal employment particularly in Nigeria where the informal sector is credited for 60% of employment (Etim & Daramola, 2020). The informal sector is considered to be made up of low income and self-organised employment with most businesses not registered for tax purposes (Rosaldo, 2021). Although, the informal sector have been attributed with providing employment opportunities. However, wages are below or at minimum wage and most employees in developing countries mostly remain in the informal sector as opportunities for formal employment may be farfetched (Etim & Daramola, 2020).

The contributions of micro enterprises to the economy have led to several Government intervention programmes, particularly in Nigeria, with the intent to move micro businesses to the formal sector through company and tax registrations. However, Moore (2023), in a contrary view, stated that most micro enterprises in Sub-Saharan Africa registered as taxpayers provide little or no revenue. In their study evaluating the informal sector in Nigeria, Tonuchi et al. (2020) stated that the informal sector is dominated by women and is characterised by low productivity, which defeats every Government policy to improve the sector. This perspective was supported by Quak and Barenboim (2022) in their research on women entrepreneurship and the informal sector in Mozambique. Their study concentrated on training interventions aimed at economically disadvantaged women, who own micro enterprises in the informal sector, thereby corroborating the view by Tonuchi et al. (2020) that women own most micro enterprises. Findings from Adeyeye et al. (2019) state that the type of businesses in the informal sector was more necessity-driven and recommended Government policies that encourage opportunity-driven entrepreneurship. On the other hand, the Nigerian Government introduced training intervention programmes to improve micro-owner managers' management skills and provide business support to upskill necessity-driven entrepreneurs to become opportunity-driven entrepreneurs.

2.4. Training Intervention Programmes

Studies into the effectiveness of training intervention programmes (e.g., Adeyanju et al., 2021; Chinen et al., 2017; Dladla & Mutambara, 2018; Mukata et al., 2018; Mayuran, 2016; Okoli & Anugwu, 2022) have gained increased importance in SME literature. Much of this renewed interest has focused on youth and women as the major beneficiaries of this form of training,

which is meant to provide business development, access to finance, market information, and mentoring services (Mukata et al., 2018). As a concept, training interventions have been seen as being politically popular and a more recognizable assistance for micro-enterprises, which may be less prone to financial corruption (McKenzie, 2020). In illustrating this, Chinen et al. (2017) reviewed studies on Government-funded training intervention programmes focused on women attendees. The study of Chinen et al. (2017) concluded that this form of initiative can increase self-employment in developing countries. However, it produced mixed results regarding the business's profitability after the training was completed. Other studies that have focused on women participating in training intervention programmes have included Dladla and Mutambara (2018), who concluded that these training and support intervention programmes offered to SMEs in the Pretoria region of South Africa were overall beneficial for these women. However, Dladla and Mutambara (2018) identified that although these training intervention programmes improved the participants' business and management skills, there was limited support for these individuals at the end of the initiative, which would have been beneficial for them. This could have included mentorship programmes to support these learners, an initiative supported by Brooks et al. (2020) who, in a Kenyan-based study, showed that micro-enterprise owner managers who were mentored had increased their profitability. Furthermore, micro-enterprise studies, including Sendawula et al. (2023), identified the importance of providing supportive networking opportunities beyond the training intervention programme to develop owner-managers' business capabilities, including access to resources and market information. Offering networking expertise can provide potential opportunities for collaboration and innovation to improve business performance. However, existing literature on training intervention and its influence on micro business performance in Nigeria has seen limited research as to the potential benefits, and the existing studies, the majority of which have mainly been focused on the financial performance of the business (Jenyo et al., 2024; Joseph et al., 2021).

Of these studies (e.g., McKenzie & Puerto, 2021), the focus has been predominantly on the reported improvements in business performance. McKenzie and Puerto (2021) contended that those enterprises whose owners attended training programmes were more likely to be in business after three years, earn more profits, and generate higher sales compared to those that had not participated. Adeyanju et al. (2021) focused on the influence of this form of training initiative within the Nigerian agricultural sector and concluded that the participation improved overall business performance. However, while the study by Adeyanju et al. (2021) provides

valuable insights, it assesses the success of training initiatives solely based on the income generated by attendees. This approach overlooks a more comprehensive evaluation of the training programme's broader impact and fails to account for the fact that many micro-enterprises do not maintain accurate sales or income records due to limited financial management and record-keeping skills (Malaury et al., 2021). This brings into question whether existing studies, such as Adeyanju et al. (2021), have accurately reported on the benefits of this form of training programme in a developing country where the participants may have limited or no formal education (Samujh, 2011; Zin & Ibrahim, 2020).

The perceived lack or limited formal education amongst micro-managers can prove to be an obstacle and challenge when addressing business performance, which has led to the recommendations for various entrepreneurial training interventions studies (e.g., Cuervo et al., 2007; Oseni, 2017) to increase entrepreneurial knowledge, thereby improving business performance. Training intervention initiatives have begun to be identified as a potential strategic tool for improving the capabilities of micro-owner managers while eradicating poverty in developing countries. These outcomes have been supported by various studies which have focused on emerging economies (e.g. Adeyanju et al., 2021; Anekwe et al., 2018; Ogundele et al., 2012; Yami et al., 2019) who have identified a significant relationship between entrepreneurial training and empowerment, stating that this initiative can promote self-reliance in micro-owner managers while enhancing various business qualities and skills. However, there has been limited research specifically assessing the effectiveness of this type of training for micro-businesses, despite evidence suggesting its potential to enhance micro-owner-managers' business management skills (Dladla & Mutambara, 2018).

Other studies, including Brooks et al. (2020) and Chinen et al. (2017), have highlighted the benefits of business training intervention programmes from a women entrepreneurs' perspective in Kenya and other low-income countries, including Nigeria. While there have been studies based in Nigeria, such as Adeosun and Shittu (2021), Adeyanju et al. (2021) and Bello et al. (2021), these projects have focused on intervention training for youth entrepreneurs. Other studies, such as Emeh (2021), Ibitunde et al. (2021), Jimmy and Olsson (2023), and Omotesho et al. (2021), have focused on women empowerment by identifying certain challenges faced by women in the agricultural sector. These studies reveal that after attending this form of training initiative, Nigerian women engaged in agricultural-related businesses, including livestock farming, were better informed, but also revealed that compared to their male counterparts, these women still had limited access to land, labour, and finance. This view

was supported by Pierotti et al. (2022) and, in contextualising the ramifications of this finding, Pierotti et al. (2022) concurred that women who managed agricultural businesses tended to have lower productivity, which could be attributed to a lack of access to training and limited agricultural education, which culminates in limited entrepreneurial knowledge. To conclude, Pierotti et al. (2022) noted that apart from gender disparity, women entrepreneurs' businesses were predominantly home-based micro-enterprises and faced societal biases that had culminated in restricted access to business networks, resources, and opportunities essential for business growth (Emeh, 2021). This outcome is somewhat paradoxical, as Government initiatives aimed at enhancing food production and agricultural investment have led to various training programmes combined with subsidized incentives and financial access to promote self-employment among micro-business owners. However, despite these efforts, women entrepreneurs still face exclusion (Adamgbe et al., 2020). This has been recognised in recent Government financial initiatives, whereby the Central Bank of Nigeria has provided more accessible funds to increase agricultural productivity; however, as noted by Adamgbe et al.(2020), there has been limited evidence on the effectiveness of these initiatives on female micro-owner managers in the Nigerian agricultural sector.

2.4.1. Agricultural Training Programmes in Nigeria

The Nigerian Government's focus on economic diversification from an oil-based economy to an agricultural and service-based market, as evidenced in Tonuchi and Onyebuchi (2019), has prompted the establishment of several training programmes targeted at the agricultural sector. Training schemes tailored towards increasing entrepreneurship in the agricultural sector, tagged as *Agripreneurship*, such as the Youth Commercial Agriculture Development Programme (YCAD), Youth Employment in Agriculture Programme (YEAP), and Livelihood Improvement Family Enterprises (LIFE) Programme (Adeyanju et al., 2021). While some of these training schemes were targeted at the youth, women were also given priority, however, effective evaluation of the influence of these training initiatives on attendees has been limited. To encourage farm owner managers to grow their Agribusinesses after attending training sessions, the Nigerian Government had provided access to financial intervention through the Anchor Borrowers Programme, a financial scheme designed to provide farm owner managers with access to finance through membership in farmers' associations (CBN, 2021; Attamah et al., 2025). The objectives for instituting the Agricultural training programmes and Anchor Borrowers fund are employment creation, poverty alleviation, capacity building through training intervention programmes, improved access to finance, and formalizing micro-Agric

businesses. It is worth noting that the Anchor Borrowers programme has been in existence since 2015, however, studies (e.g., Coker et al., 2018) have criticised the initiative for having unclear evaluation processes. This has led to adjustments in the funding process, linking it to agricultural training initiatives to raise awareness as well as to streamline the funding process. Attendees of training intervention schemes are encouraged to join Farmers Associations and register their businesses to gain access to funding. However, existing studies on training intervention schemes (Adeyanju et al., 2021; Jenyo et al., 2024) have not evaluated female micro-owner perception of training attended based on the objectives of employment creation, empowerment/poverty alleviation, and capacity building.

2.4.2. Effectiveness of Training Intervention Programmes on Micro Enterprises

The goal of micro-enterprises is to generate an income, remain competitive, identify new business opportunities to attain sustainable growth, and improve the performance of the business. To achieve this, the micro-enterprise needs the owner to recognize and understand external and internal influences of the business, making Government-sponsored training intervention initiatives essential in informing and assisting the businesses (Sefiani et al., 2018). Therefore, these intervention programmes are often devised to educate or train these micro-owner managers to possess the required capabilities to improve business performance. In a systematic review of the effectiveness of non-formal training initiatives in sub-Saharan Africa, Leger et al. (2025) argued that non-formal training should be contextualised to the participants' region and needs, and that characteristics such as entrepreneurship culture, social networks, motivation and finance should be considered in training initiative design and delivery. However, while this is important, relatively little research has been conducted on the effectiveness of this training provision designed for micro-enterprise businesses, especially amongst women (McKenzie, 2020). To address this identified gap, some studies (e.g., McKenzie & Woodruff, 2017) have focused on specific areas as to how business training can assist micro-businesses, including around marketing, record-keeping, financial planning, and stock control. This has led McKenzie and Woodruff (2017) to conclude that these initiatives may be seen to improve business practices because of the focus on sales growth. A meta-analysis study conducted by Cho and Honorati (2014) and echoed by Brixiová et al. (2020) showed that training intervention programmes can have positive outcomes on existing entrepreneurs, and though, for women micro-business owners, financial initiatives such as access to resources and funds combined with training would be beneficial, access to these resources is mostly fraught with challenges. This outcome indicates that when linked to

financial resources, training initiatives can increase revenue and sales amongst African female micro-owner managers (Chinen et al., 2017). The findings of Chinen et.al (2017) revealed that this form of entrepreneurial training focused on women potentially influences earnings and employment opportunities. However, there were significant barriers, such as time constraints due to family responsibilities, which had prevented these entrepreneurs from participating in these initiatives. The outcomes of these studies (Chinen et al., 2017; Cho & Honorati, 2014; McKenzie & Woodruff, 2017) illustrate the effectiveness of training initiatives on these female run micro-enterprises as to their growth and job creation capabilities, which for Brixiová et al. (2020) is still problematic, as there remains a gender divide as to the effectiveness of this form of training, by highlighting that men gain more from receiving financial literacy training and are overall, better educated than women. Interestingly, Brixiová et al. (2020) identified that, irrespective of these limitations, women entrepreneurs still generate sales but would benefit more from this form of training and access to external resources.

2.4.3. Training Intervention Programmes and Access to Finance

Inadequate access to finance and credit facilities has been criticised as a key constraint in female owner managers' business performance in developing countries such as India (Wellalage & Locke, 2017). This view was supported by Msomi and Olarewaju (2021), who argued in a study on the viability of SMEs, that both SME owner-managers and the Government had a role to play in reviewing financial opportunities and ensuring access to finance. Based on the challenges of effectively executing financial interventions programmes, a combination of training and financial intervention programmes has been identified to have a significant influence on micro, small and medium business performance in developing countries (Cho & Honorati, 2014; Brixiová et al., 2020). This view was confirmed by Chinen et al. (2017), who stated that a combination of training and financial intervention programmes developed specifically for female micro-owner managers can increase self-employment by 73 percent and business performance by 7 percent. However, the benefits of this form of initiative have been limited by several attributes, such as inadequate evaluation measures by the facilitators to assess the effectiveness of the training initiative (Chinen et al., 2017)

In a systematic literature review, Nolan and Garavan (2016) identified articles focused on the training of different individuals connected with MSMEs; employees, non-owners, and owner-managers referred to as entrepreneurs. Nolan and Garavan (2016) confirm that the purpose of training intervention programmes for SMEs is to build capabilities that will influence business

success and enhance competitive advantage. However, the publication by Nolan and Garavan (2016) focused on human resource development in small and medium enterprises, and very little was published on female micro-owner managers' capabilities in micro enterprises. While existing studies (e.g., Chinen et al., 2017; Nolan & Garavan, 2016; Otoo & Mishra, 2018) have assessed the influence of training intervention initiatives on owners and employees within small and medium enterprises. Furthermore, Higgins et al. (2013), and Coetzer et al. (2023) highlighted the owner-manager's perspective of training intervention, which was focused on the owner-manager's authority to plan and execute training at an organisational level. However, to date, limited studies have focused on female micro-owner managers' perspectives on entrepreneurial training in Nigeria, prompting the need for this study to be conducted to determine whether internal capabilities can be enhanced by attending these programmes. In evaluating owner-managers' mindset and business performance, Wijewardena et al. (2008) and Tang et al. (2023) identified a positive influence on business performance, which supports the study of training intervention programmes as an effective means to improve owner-managers' managerial skills and mindset (Grimm & Paffhausen, 2015; Shetty et al., 2024). This need to improve owner-managers' capabilities is important as 51 percent of micro-enterprise owner-managers in Nigeria are uneducated (SMEDAN, 2017).

2.4.4. Training Intervention and Female Micro-Owner Managers' Internal Capabilities

Increasingly, studies (e.g., de Lange et al., 2025) are recognising the importance of studying individual attributes that contribute to the success of farmers. Although the study by de Lange et al. (2025) was focused on leadership and behavioural competencies of a commercial farmer, it justifies this study's emphasis on internal capabilities. This study's focus on female micro-owner managers' internal capabilities aligns with the dynamic capabilities debate, which contextualises the effect of owner-managers' capabilities on micro-enterprises (Kevill et al., 2017). Kevill et al. (2017) identified the abilities of individual micro-owner managers as a fundamental component of an enterprise's dynamic capability. This is significant from the perspective of this study as Kevill et al. (2017) emphasized the importance of owner-managers' self-efficacy, where their skills, knowledge, and confidence can positively influence the micro enterprises' performance. By examining the role of self-efficacy, which is the belief in an individual's ability to achieve business goals, Kevill et al. (2017) demonstrated that an owner-manager's confidence and decision-making skills are essential for business growth. Zahra (2021) supported this perspective on the importance of self-efficacy, emphasizing that

entrepreneurial resourcefulness, particularly in resource management decision-making, is crucial for startup businesses. Furthermore, Zahra (2021) argued that while business startups often face constraints due to limited access to finance and other resources, these can be offset by the effective use of social networks. The ability of owner-managers to engage with and utilize these networks resourcefully can provide significant advantages, which include access to market information, funding, suppliers, and buyers. Focusing on intangible resources from a resource-based viewpoint, Hafiz et al. (2022) highlighted the importance of owner managers' "tacit knowledge, intrinsic motivation, ability to work and learn" amongst other characteristics as significant and unique internal capabilities. Hafiz et al. (2022) in their study on small firm growth also critically reviewed other theories, including knowledge-based view, dynamic capability theory, upper echelon, and resource dependence theory, and concluded that knowledge-based view and dynamic capabilities theory aligned together with the resource-based view and were relevant to individual attributes. The findings from Hafiz et al. (2022) highlighted that managerial skills and capabilities are vital for the growth of a business and show that training intervention programmes can potentially enhance these skill sets.

Noerlina et al.'s (2023) study on a business's internal capabilities identified important attributes such as networking, knowledge transfer, and marketing resources as vital to an organisation. However, it did not recognise these attributes as owner-managers' capabilities. Furthermore, Noerlina et al. (2023) argued that a business's primary source of competence is based on its capabilities, which contrasts with Zahra (2021), who emphasized that owner-managers' resourcefulness is a key characteristic from the resource-based view. Building on Kevill et al.'s (2017) premise of self-efficacy, Caliendo et al. (2023) confirmed that self-efficacy, as an internal capability, can positively influence business creation, job creation, entrepreneurial income, and innovation, particularly amongst female entrepreneurs. While Caliendo et al. (2023) distinguished between generalized and entrepreneurial self-efficacy, noting that the latter may be shaped by facets such as attitude toward entrepreneurship and the cultural or gender of the entrepreneur, the study ultimately established a link between self-efficacy and owner managers' ability to create businesses, as well as a positive influence between owner managers' self-efficacy, profits and sales in established businesses. This insight underscores the importance of assessing how training interventions shape female micro-owner managers' internal capabilities and identifying which capabilities are most affected, as there are limited studies in this area.

2.4.4.1. Training Intervention and Female Micro-Owner Managers' Motivation

In assessing female micro-owner managers' capabilities, the first capability to be considered is the motivation to start a business, which prompts the participants to attend training intervention programmes. Motivation in entrepreneurship has been grouped into opportunity-driven and necessity-driven motivation (Adeyeye et al., 2019). Although Adeyeye et al. (2019) focused on entrepreneurial motivation, the study was grounded in development theory and did not explore female micro-entrepreneurship influenced by training intervention programmes. Furthermore, necessity-driven entrepreneurship has been perceived to increase job creation and business activities, while opportunity-driven entrepreneurship is attributed to enhancing economic growth in a country (Huang et al., 2023). Women are often drawn into entrepreneurship for various reasons. Some women can be considered to have been “pulled” by motives such as family dynamics, which makes self-employment a convenient choice, while others are “pushed” into entrepreneurship due to socio-economic pressures, such as the need to provide for their families or overcome financial challenges (Lingappa & Rodrigues, 2023). The Push-Pull model discussed in Lingappa and Rodrigues (2023) supports the necessity and opportunity-driven entrepreneurship debate and explains why women who go into business by necessity can be argued to have been pushed, while those who choose entrepreneurship were pulled into creating and growing their business. Furthermore, Lingappa and Rodrigues (2023) argued that self-efficacy and opportunity can create wealth, encouraging opportunity-driven entrepreneurship. Meanwhile, necessity-driven entrepreneurship may not be considered positively, as a lack of other options might prompt it.

Micro enterprises created by women entrepreneurs may be driven by the need to be economically empowered, given the disenfranchisement they face (Ogbari et al., 2024; Okoi et al., 2022). The desire to take up empowerment opportunities presented by training intervention programmes may be the intrinsic motivation needed by female micro-owner managers to start up Agric businesses. To understand entrepreneurial motivation, Sayarh (2023) highlighted the significance of analysing the reasons individuals pursue entrepreneurship. The study by Sayarh (2023) distinguished between intrinsic motivation, driven by personal values, targets, and needs, and extrinsic motivation, influenced by expected rewards from business creation. Caliendo et al. (2023) established a connection between opportunity-driven entrepreneurs and intrinsic motivation, emphasizing that tasks like developing a business idea are driven by an entrepreneur's intrinsic motivation, as transforming knowledge into ideas brings a sense of fulfilment, therefore, intrinsic motivation may positively influence business

expansion. Furthermore, Caliendo et al. (2023) suggest that necessity-driven individuals are often extrinsically motivated, which may result in lower effort toward their business and a higher likelihood of abandoning it when presented with other opportunities.

On the other hand, Sayarh (2023) highlighted self-efficacy theory as a foundational concept in entrepreneurial motivation, suggesting that an individual's confidence in their ability to succeed significantly impacts their drive to engage in entrepreneurship. However, Huang et al. (2023) argued that entrepreneurship is influenced by dynamics beyond motivation. In a study on the national entrepreneurship system, Huang et al. (2023) identified entrepreneurship education and training as key elements shaping the motivation to engage in entrepreneurial activities at a national level. Additionally, "perceived ability, perceived opportunity, and fear of failure" were highlighted as critical attributes that influence an individual's entrepreneurial capability and willingness to start a business. The individual-level perspective by Huang et al. (2023) provides an additional lens on self-efficacy as it reflects perceived ability and opportunities available to the owner-manager. Self-efficacy can also be argued to be a determinant of the proactiveness shown in learning from training intervention programmes and creating businesses after attending intervention programmes.

2.4.4.2. Training Intervention Programmes and Proactiveness

The ability to identify a business area, explore and harness market information to grow a business is known as proactiveness (Cho & Lee, 2018; Onyenma & Hamilton, 2020). The initiative to identify new opportunities and explore new markets is also identified as entrepreneurial proactiveness. Huang et al. (2023) indicated that entrepreneurship is influenced by an individual's perception, among other attributes. The study by Cho and Lee (2018) analysed entrepreneurial orientation in association with entrepreneurial education and concluded that proactiveness is essential to business growth. Although it was considered innovative proactiveness in the study by Cho and Lee (2018), which was conducted in Korea, there was a strong indication that proactiveness and propensity to take risks were important characteristics in business performance. However, entrepreneurial education was found to have an insignificant influence on entrepreneurial orientation. This finding of Cho and Lee (2018) provided a need to identify how training intervention programmes influence proactiveness in female micro-owner managers.

Huang et al. (2023) argued that proactiveness is a determinant of a female micro-owner manager's ability to create and grow an Agric-business after attending a training intervention

programme. In the Nigerian context, Onyenma and Hamilton (2020) conducted a quantitative study from an organisational perspective, reviewing proactiveness in small and medium-sized enterprises. The findings from the study by Onyenma and Hamilton (2020) revealed that proactiveness positively influences customer satisfaction and SMEs' performance. However, this presents a need to evaluate proactiveness from a female micro-owner-manager's and micro-enterprise perspective

2.4.4.3. Training Intervention Programmes and Propensity to Take Risks

An owner-manager's propensity to take risks has been identified as a display of self-efficacy, including the ability to be self-motivated in knowledge acquisition and transfer (Duarte Alonso et al., 2019). As proposed by Lumpkin and Dess (1996), risk-taking is one of the key dimensions for entrepreneurial orientation and can be defined as the willingness to manage scarce resources, seeking new opportunities in the face of uncertainties by Martins and Perez (2025). Existing literature in risk-taking research (e.g., Brachert et al., 2020; Xie, 2021; Ismail, 2022; Yusoff et al., 2021) identified risk propensity as an attribute of owner-managers and entrepreneurs associated with uncertainty, and is considerably higher for new business owners. Yusoff et al. (2021) argued that Government financial support services improve risk-taking propensity and self-confidence for small and medium businesses. Although the study by Yusoff et al. (2021) was focused on a financial intervention programme provided by the Malaysian Government, there are similarities to the Nigerian micro business landscape with regards to the Malaysian Government's objectives to boost entrepreneurship through financial support services and other intervention programmes to enhance entrepreneurial capabilities of the citizens. Simiyu et al. (2016) studied training intervention initiatives for women in Kenya, reviewed the existing literature on risk-taking propensity, and defined the concept of propensity to take risk as the ability to make decisive business decisions. However, the study did not evaluate risk-taking propensity alone but was focused on the effect of entrepreneurial orientation on women-owned small businesses, thereby leaving a gap in the literature on the effectiveness of training intervention programmes on African women's risk-taking propensity after attending a Government-sponsored training. Unlike Simiyu et al. (2016), Brachert et al. (2020) argued that an individual's decision to be self-employed shows a high propensity for risk-taking.

In assessing risk propensity in developing countries, Danso et al. (2016) established that SME managers' affiliations with Government, business network, and community participation increased risk-taking propensities. While the study by Danso et al. (2016) did not focus on

women in micro-enterprises, the association between networking and increased propensity to take risks in entrepreneurs is relevant. Furthermore, Ismail (2022) linked propensity to take risks with networking and recommended training initiatives to enhance women entrepreneurs' risk propensity.

2.4.4.4. Training Intervention Programmes and the Female Micro-Owner Managers' Ability to Network

An entrepreneur's proactiveness in identifying new opportunities can be extended to include the ability to network. Networking has been considered to be important to entrepreneurship, as entrepreneurs have to seek market information using the limited resources at their disposal. Twum et al. (2021) contended that considers networks as a social capital resource and links individual entrepreneurial orientation dimensions of proactiveness, risk taking, and innovativeness with network ties, arguing that these have a positive influence on students' entrepreneurial intentions. This view by Twum et al. (2021), although focused on students, demonstrates how an individual's ability to proactively build networks can improve their capability to start and build an enterprise. Aladejebi (2020) identified two types of networking for entrepreneurs: contact networks, which comprise an entrepreneur's personal contacts, and alliance networks, which facilitate collaborative activities. For female micro-owner managers, networking can provide the market information they may not be privy to, especially in the agricultural sector. This view was supported by Ismail (2022) who argued that networking improves business performance by providing women entrepreneurs with access to relevant stakeholders for business support, finance, and knowledge transfer

Furthermore, Ademola et al. (2020) in a study advocating for increased social networking for female entrepreneurs stated that women entrepreneurs usually have small networks made up of family members and argued that training intervention programmes may be a solution to enable female micro-owner managers to develop their social network to access funding and other resources at an affordable cost in Nigeria. However, existing literature has not ascertained the level of influence that training intervention programmes have on female micro-owner managers' networking capabilities. Further analysis on social networks identified networking as a medium that supports learning and innovation (Abu Amodu & Aka Ama, 2016). This view was also shared by Sefiani et al. (2018), who discussed networking in SMEs in Tangier and revealed that networking is important to the success of SMEs as it enables access to information, financial resources such as trade credit, suppliers, and labour. Although the study

by Sefiani et al. (2018) was in the context of SMEs in Tangier, the findings can be applied to micro enterprises and the network link established by farmers through farmers' associations in Nigeria.

In their study, Abu Amodu and Aka Ama (2016) classified networking on individual and organisational levels, which aligns with Ademola et al.'s (2020) informal and formal networking. Studies on networking (e.g., Aladejebi, 2020; Sendawula et al., 2023; Cao & Weerawardena, 2023) have linked networking in small businesses to innovation and marketing. In a study on networking and innovation in Uganda, Sendawula et al. (2023) argued that networking builds trust and enhances knowledge sharing and business performance. This view is supported by Daigle and Heiss (2021), whose study on women farmers in the United States affirmed that women farmers utilised social media in information sharing, marketing, and networking with other farmers. Social media was considered by Daigle and Heiss (2021) as a means of empowerment for women who experience constraints in accessing education, resources, and professional networks. Analysing social networking in the agricultural sector also revealed that social networks have been connected with resilience and knowledge transfer to encourage collaboration in the use of new technology (Chaudhuri et al., 2021; Daigle & Heiss, 2021; Sarwar et al., 2021). This perspective by Chaudhuri et al. (2021) highlights innovation as the foundation for networking. However, the study by Chaudhuri et al. (2021) utilised participatory action research to study social networks' influence on agricultural irrigation practices in India. Furthermore, Chaudhuri et al. (2021) identified peer advising networking as the most effective for knowledge transfer in the agricultural sector in India. This opinion was supported by Ashfield et al. (2020), who stated that advisory services provided through peer-to-peer learning can positively influence knowledge transfer at the operational level of the enterprise. Applying this finding to the present study may involve evaluating the networks created by female micro-owner managers from attending training intervention programmes to ascertain the effectiveness of networks on female micro-owner managers' knowledge transfer, innovativeness, and business performance.

2.4.4.5. Knowledge Transfer from Training Intervention Programmes

The practice of transferring information or lessons learnt through training intervention programmes for farmers and those in the farming community can be termed as knowledge transfer (Ataei & Zamani, 2015; Tumwebaze et al., 2024). However, there has been limited research on knowledge transfer from training interventions in Nigeria. Of those existing studies, Efobi and Orkoh (2018) conducted a quasi-experimental project to understand the

influence of entrepreneurial training on SME growth and performance. The study by Efobi and Orkoh (2018) revealed that owner managers who attend training initiatives tend to train others, cascading the learning experience. Despite this positive finding by Efobi and Orkoh (2018), there are potential limitations for micro, small, and medium enterprises, which include inadequate entrepreneurial training and managerial skills (Genty, 2019). In contextualising this earlier, Efobi and Orkoh (2018) identified the importance and the connection between knowledge transfer and the growth of a business. Genty (2019) noted that for training to be effective, there were two knowledge transfer methods that needed to exist: the actual application of the lessons learned by the trainee and the ability to reinforce the learning through practicing the task. This view by Genty (2019) placed an emphasis on practice-based knowledge transfer, which can be applied to the agricultural sector. However, Ikuemonisan (2024) noted that knowledge transfer is one of the fundamental weaknesses of agricultural entrepreneurship in Nigeria due to potential gaps in knowledge and resource constraints, which lead to ineffective practice of the newly acquired skills. Ikuemonisan (2024) linked this knowledge gap and lack of opportunities to poor education in the Agric-business sector and inadequate support by the industry for entrepreneurs, particularly women. This view was also reflected by Ashfield et al. (2020), who, in a study of Northern Ireland farmers' participation in agricultural training, argued that these learners acquired essential knowledge about new technology solutions through their participation, thereby enabling them to manage the emerging complexities of modern farming practices. Ashfield et al. (2020) further contended that training is needed to address identified knowledge and skills gaps. However, time, cost, and relevance of these training provision forms were identified as potential constraints for effective knowledge transfer. In conducting a systematic review on knowledge transfer, codification, and knowledge management, Tumwebaze et al. (2024) contended that knowledge transfer could be viewed from both an organisational and individual perspective but needs to be ultimately designed around the learner's needs. To assist in this process of knowledge transfer, the theme of networking was identified as a key technique at both an organisational and individual level. Other attributes, such as motivation, individual perception, and absorptive capability, were also identified as significant facets associated with effective knowledge transfer at an individual entrepreneurial level. This view was supported by Duarte Alonso et al. (2019), who acknowledged the role of self-efficacy, motivation, propensity to take risks, and proactiveness in effective knowledge acquisition and transfer. Duarte Alonso et al.'s (2019) study highlights the interconnectedness of self-efficacy and entrepreneurial orientation, particularly risk-taking and proactiveness in knowledge transfer within micro enterprises.

However, the study by Duarte Alonso et al. (2019) did not address whether knowledge transfer can be enhanced through training intervention programmes. Although there are limited studies on the theme of knowledge transfer amongst female micro-owner managers after they have participated in training intervention programmes, Alif et al. (2024) evaluated the effects on the learning outcomes of those attending participatory climate-friendly farming practice workshops, then highlighted that knowledge sharing in the agricultural sector was traditionally and remained a one-way process, where farmers primarily received information during the training session without any real engagement or practical intervention, therefore limiting potential innovative thinking. However, Alif et al. (2024) found that participatory training initiatives can significantly enhance farmers' knowledge and ability to adopt sustainable agricultural practices, while encouraging and promoting peer-to-peer learning amongst the learners. The study also emphasized that such training can positively influence the participants' attitudes, which could result in innovative practices being shared. Although the focus of Alif et al. (2024) was on the delivery and format of the training approach, the study does partly contextualise the identified knowledge gap by Ikuemonisan (2024), demonstrating that training initiatives can effectively improve the knowledge transfer intentions of attendees when attending this form of training provision.

2.4.4.6. Training Intervention Programmes and Resilience

An essential characteristic is a female micro-owner manager's ability to deal with crises, or to manage and navigate the business through unforeseen events and disruptions due to their resilience without going bankrupt (Ayinde et al., 2024). A study by Curiel et al. (2024) which presented a comparative analysis of resilience in men and women, argued that women show better resilience to business failure due to the prevalent societal pressure they face. However, men demonstrated higher self-efficacy, which was claimed to enhance a man's resilience during crisis. Furthermore, Curiel et al. (2024) recommended gender specific business training initiatives as a means of improving women's entrepreneurial resilience level.

Analysing resilience in the agricultural sector, Jayadas and Ambujam (2021) identified four dimensions of resilience that farmers need to build to survive in a country or region prone to ecological crisis: economic, social, technical, and physical. The study by Jayadas and Ambujam (2021) conducted in India identified a positive relationship between farmers' social resilience and participation in Farmers' Associations and the effect of climate-related training on farmers' social resilience level. In examining farmers' economic resilience, a comparative study of two farming communities by Jayadas and Ambujam (2021) revealed that access to information on

weather, crop diversification and improved varieties of seeds enhanced the economic resilience of farmers who have limited social resilience. Further studies on resilience in small and medium enterprises, such as Buradum et al. (2018), argued that resilience in individuals and organizations can be enhanced through improvisation, which can leverage the entrepreneur's potential, knowledge, and capabilities. In a study on small and medium agricultural businesses, Buradum et al. (2018) argued that resilience focuses on the individual's entrepreneurial orientation and business know-how. Although Buradum et al.'s (2018) study reviewed the influence of entrepreneurial traits on their resilience, it also highlighted the significance of owner managers' capabilities to meet the challenges posed by the agribusiness sector in Nigeria.

Based on this theme of resilience, studies including Shahin et al. (2022) have reviewed resilience from various perspectives, including ecological, psychological, climate change, economic, and empowerment. Focusing on the resilience and empowerment of women in Bangladesh after a flood disaster, Shahin et al. (2022) explored their response, including the extent and effectiveness of training and financial intervention programmes that had been provided. The study identified the need for adequate knowledge about storage capacity, the ability to self-organise, and ongoing learning as three resilient requirements for women to possess. In another study by Atiase et al. (2022), the authors indicated the importance for improved resilience through organising targeted managerial training to enhance business practices while Hadjielias et al. (2022) found in an extensive literature review that the owner managers' critical decisions influenced resilience amongst small and medium enterprises in activities such as proactively seeking learning opportunities, along with planning and networking. Although the studies by Atiase et al. (2022) and Hadjielias et al. (2022) were focused on organisational resilience, the emphasis was on the positive effects of improving owner managers' business performance through training, but they neglected the challenges this group of entrepreneurs can face. Further studies (e.g., Satpathy et al., 2025) on resilience in MSMEs after the pandemic identified collaboration, technological adoption, learning, and business forecasting as mediums for enhancing resilience in MSMEs. Satpathy et al. (2025) also argued that MSMEs' resilience is centred on financial stability, highlighting access to finance, collaborations, and adaptive capabilities as vital to business sustainability. Although the study by Satpathy et al. (2025) is not focused on micro enterprises in the Agricultural sector, there is, however, an emphasis on the importance of building resilience and how training programs can enhance adaptive capabilities in enterprises.

In a study on agricultural and retail MSMEs, Tete et al.'s (2024) contended that resilience can be enhanced by MSMEs' internal resources, particularly as to valued internal assets, including entrepreneurial orientation, and specifically risk-taking, through an understanding of how to conduct environmental and horizon scanning. Although Tete et al. (2024) focused on organisational resilience in Zimbabwe, the study revealed a gap in the resilience literature regarding micro enterprises and individual resilience, indicating the need for further research into the training needed to improve resilience. From the context of this study, in Sub-Saharan countries like Nigeria, which suffers from extreme weather conditions such as floods and heat, micro enterprises in the agricultural sector face crisis situations that can negatively affect crops, livestock, and ultimately the business's finances. To study this, Ayinde et al. (2024) analysed resilience in the Nigerian agricultural sector to assess farmers' adaptive capacities and operationalised activities, by developing a resilience framework that covered economic and financial, technical know-how, social, and physical resilience of the business. The findings from Ayinde et al. (2024) showed that farmers can struggle in the face of climate challenges economically due to the limited financial resources available to rural farmers, and to compound this, the business may be further impeded due to the lack of availability of social networks and external support. This opinion by Ayinde et al. (2024) indicates that entrepreneurs in the agricultural sector, especially female micro-entrepreneurs, may be disenfranchised due to limited access to financial and extended resources, but the extent of this remains under-researched.

2.4.5. Training Intervention and Female Micro-Owner Managers' Managerial and Entrepreneurial Capabilities

Managerial capabilities, marketing expertise, and technological skills have been identified as critical determinants for the growth of SMEs (Bouazza et al., 2015). These characteristics can significantly influence an enterprise's competitive advantage and sustainability. Existing research (e.g., Bouazza et al., 2015; Mayuran, 2016; Muriithi, 2017) consistently points to a notable deficiency in managerial skills amongst SME and MSME owners, which can lead to poor business performance and, in some cases, business failure. These findings are particularly relevant in developing economies, where limited access to quality education and training opportunities can lead to restricted growth. Bouazza et al. (2015) focused on Algerian entrepreneurial training for SMEs and indicated that this form of initiative can lead to the development of managerial skills and improvements in the overall performance within a small business. The study asserted that entrepreneurial training initiatives increase business owners'

confidence and enhance their decision-making skills, facilitating business growth and innovation. These insights underline the importance of training as a key enabler for managerial development and the growth of enterprises. Bouazza et al.'s (2015) stance on the influence of training on owner managers' confidence supports the concept of self-efficacy and individual entrepreneurial orientation as key determinants in micro-enterprise performance and the need to evaluate how training intervention programmes can influence these constructs.

Essuman et al. (2024) reinforced this perspective of Bouazza et al. (2015) from a women-owned business context, noting that limited managerial and entrepreneurial competencies are often linked to inadequate education and training. For Essuman et al. (2024), the lack of formal managerial training opportunities for women entrepreneurs can hinder business development and the ability to innovate and manage growth. Such gaps in skills, especially in managerial and entrepreneurial capabilities, can negatively influence women owner-managers' business performance. This view was reinforced by Mang'ana et al. (2023), who, in a study on financial management practices in the agricultural sector, argued that challenges facing agricultural enterprises can be attributed to poor financial management practices. The study by Mang'ana et al. (2023) also highlighted the positive influence that improved financial management can have on business performance. These findings suggest the need for targeted intervention training initiatives to enhance the managerial competencies of women entrepreneurs, fostering a more supportive environment for their businesses to thrive. When examining female-owned businesses, Akther et al. (2024) extended the academic debate by indicating that enhancing managerial capabilities can allow women entrepreneurs to think strategically, plan more effectively, and identify new market opportunities. The outcome of Akther et al.'s (2024) study emphasized the critical role of leadership development programmes that focus on enhancing women's managerial skills, which are essential for adapting to market changes and overcoming specific challenges. Focused on the agricultural sector, Ikuemonisan (2024) advocated for capacity-building training programmes to improve managerial competencies and agricultural skills. While the research Ikuemonisan (2024) did not focus specifically on women farmers, the study attempted to address a critical gap in the literature regarding how training intervention programmes can help equip entrepreneurs with the necessary skills for successful business operations. The findings of Ikuemonisan (2024) suggested that structured training programmes could foster entrepreneurial spirit and innovation in the agricultural sector, which, for women, is often unavailable due to marginalization.

As literature on entrepreneurial and managerial capabilities continues to evolve, marketing skills have emerged as another vital attribute needed for business survival and growth. Marketing has been recognized as a core competency for enhancing the visibility of businesses and gaining a competitive advantage in the marketplace, especially in developing countries. Existing research (e.g., Wardaya et al., 2019; Maryanti et al., 2020) has increasingly emphasized the importance of marketing knowledge and skills for SMEs, which has been identified as critical for business sustainability. Wardaya et al. (2019) found that SMEs with marketing skills and competencies tended to improve their market presence and gain a competitive advantage, leading to improved business performance and growth. Maryanti et al. (2020) argued that the higher an enterprise's marketing capabilities, the higher its business performance, and recommended that SMEs need adaptive marketing capabilities to enhance performance. Although the studies by Maryanti et al. (2020) and Wardaya et al. (2019) focused on SMEs, the theory of improving marketing capabilities to boost business performance can be applied to micro-enterprises. Supporting this view, Cao and Weerawardena (2023) highlighted the strategic use of social media in marketing but emphasized that its effective utilization within enterprises remains relatively limited.

Furthermore, studies on female-owned businesses (e.g., Bhagat et al., 2019) have emphasized the need for effective marketing strategies, particularly the adoption and usage of digital marketing. Bhagat et al. (2019), in their study of female micro-owner managers in India, highlighted the importance of utilizing digital marketing tools such as social media to enhance market visibility. The research suggested that women entrepreneurs often face challenges in accessing traditional marketing channels and acquiring market information, limiting their ability to compete in dynamic business environments, but digital marketing offers a potential solution. Digital marketing, particularly via mobile phones and social media platforms like WhatsApp, has been proposed as a cost-effective solution for women entrepreneurs. Adopting a digital marketing strategy can enable women entrepreneurs to reach a wider audience without significant financial investment, which is often associated with traditional marketing methods.

Supporting these findings, Wardaya et al. (2019) argued that digital marketing strategies can be cost-effective and enhance SMEs' overall business reach. To contextualise and explain this, Wardaya et al. (2019) emphasized using Facebook as a tool for micro-businesses to engage with existing and potential new customers, build brand awareness, and drive sales. While Wardaya et al.'s (2019) research focuses on using Facebook as a marketing tool, the findings align with Bhagat et al.'s (2019) assertion that digital marketing can empower women

entrepreneurs to overcome market access barriers and gain a competitive advantage. Both studies advocated that these women entrepreneurs must improve their digital marketing capabilities to adapt to the evolving and changing business landscape.

From a digital marketing perspective, Maryanti et al. (2020) supported the shift from traditional marketing approaches, emphasizing the need for businesses to develop adaptive marketing strategies. This proactive approach may involve market sensing, scanning, and utilizing social networks to gather valuable marketing insights, but these entrepreneurs need to understand how this technology works. Maryanti et al. (2020) argued that adapting to digital marketing tools and techniques allows businesses, particularly women-owned, to remain competitive in a rapidly changing business environment. The increasing shift toward adopting a social media marketing strategy has been echoed by Priambodo et al. (2024) who asserted that improving digital marketing skills, especially for women entrepreneurs, could enhance their competitiveness by providing an affordable and accessible tool to reach potential customers.

In the overall agricultural sector, the use of social media and digital network tools for marketing has steadily increased. Ekeke et al. (2021) highlighted a notable rise in technology adoption amongst farmers, particularly in leveraging these social media platforms to market their agricultural products. This shift towards social media usage has enabled farmers to expand their business activities, connect with new potential buyers, and cost-effectively increase the visibility of their products. However, Upulwehera et al. (2024) critiqued the underutilization of digital networks by women farmers, suggesting that these entrepreneurs are not fully capitalizing on the opportunities provided by these digital platforms. As a result, many entrepreneurial women are potentially missing out on valuable business opportunities that could enhance their market access and overall business growth. This gap underscores the need for targeted initiatives to support women farmers in adopting digital tools and networks to improve their marketing strategies and competitive positioning. A growing body of literature has highlighted the importance of enhancing managerial capabilities and marketing skills, particularly in the context of MSMEs and female entrepreneurs. Training intervention programmes, leadership development, and the adoption of digital marketing strategies are seen as critical to empowering women entrepreneurs to improve their businesses' performance. However, there remains limited research on female micro-owner managers' capabilities and the use of digital marketing by women in the Nigerian agricultural sector.

2.4.5.1. Training Intervention and Female Micro-Owner Managers' Access to Local Markets

The increasing need for social media marketing presence underscores female micro-owner managers' constraints in marketing their agricultural produce. In Nigeria, cooperatives, often called Farmers Associations, have played a pivotal role in strengthening farmers' willingness to take business risks and improving the prices they receive for their produce (Omotesho et al., 2019). This view was also shared by Kalogiannidis et al. (2024) in a study on the agricultural sector in Greece, which concluded that resource sharing through Farmers' cooperatives increases productivity and access to finance by a large margin. Women entrepreneurs in agribusiness, however, face unique marketing challenges, including limited access to market information, lower bargaining power, and reduced opportunities to engage in high-value market chains (Omotesho et al., 2021). From the context of the agricultural sector in Nigeria, this problem has been widely recognized as being limited by both demand and supply constraints. Balana and Oyeyemi (2022) contended that rural farmers often exhibit risk-averse behaviour and suffer from information asymmetry, limiting their ability to capitalise on supplying larger markets. While these constraints have been primarily examined in relation to limited financial access, they also pose significant barriers to female micro-owner managers by restricting their ability to capitalise on accessing local markets. These constraints have led to the establishment of Farmer Associations or Cooperatives to focus on enhancing female farmers' access to finance, technology, and marketing opportunities (Kalogiannidis et al., 2024; Onyishi et al., 2022). Onyishi et al. (2022) argued that farmers mitigate financial constraints by obtaining informal credit facilities through community-based organizations such as Farmers' Associations in rural communities. As a result, Farmers' Associations can be considered essential in accessing social networks, facilitating knowledge exchange, accessing finance, and fostering business resilience. Research into social networks (e.g., Chaudhuri et al., 2021) have emphasized these associations' significant role in enhancing farmers' business performance. However, despite the recognition of social media's benefits, there remains a notable gap in research regarding the extent to which training intervention programmes can influence female micro-owner managers' access to local markets and social networks.

Existing studies have shown that training programmes provided by these associations, which are tailored to women in agriculture, can improve their marketing skills, financial literacy, and digital engagement, thereby enhancing their market access (Gumbo et al., 2024). This view was also shared by Ma et al. (2024), who argued that although access to market can be

positively linked to income generation and poverty alleviation, these farmers still had certain challenges. These challenges included limited access to markets in rural communities due to insufficient business skills and critical information, and higher operational costs because of their remote locations. The effectiveness of intervention programmes in improving farmers' access to markets remains underexplored, particularly in a Nigerian context. In addition, while social media is increasingly seen as a tool for market expansion, due to limited digital literacy and resource constraints, female agribusiness owners are restricted from fully capitalising on these opportunities. As a result, further research is needed to assess how targeted training initiative programmes, combined with social network support, can bridge these gaps and foster inclusive agricultural marketing strategies for women entrepreneurs. There is, limited literature on female micro-owner managers' access to the local market, as existing literature (e.g., Karedza & Govender, 2020; Njinyah, 2018; Sibanda et al., 2018; Tonuchi & Onyebuchi, 2019; Singh et al., 2023) has been focused on export promotion and internationalisation. In a study on export promotion in Cameroon, Njinyah (2018) argued that Government policies significantly impact market information and directly influence export performance. Similarly, Sibanda et al. (2018), in their study on export behaviour in Zimbabwe, found a positive correlation between access to finance and export activity, indicating that improved financial access enhances SMEs' export capacity. Regarding Nigeria, Tonuchi and Onyebuchi (2019) assert that diversifying the country's export products beyond oil to include non-oil commodities, such as agricultural produce, would boost employment and positively impact the gross domestic product. These findings, however, highlight gaps in the literature regarding micro enterprises' access to local markets, which need to be addressed

2.4.5.2. Effect of Training Intervention on Record-Keeping

McKenzie and Woodruff (2017) listed record keeping, marketing, financial, and stock management as important business practices. In contextualising and explaining this, McKenzie and Woodruff (2017) argued that studies on business practices associated these practices with a higher level of survival and sales growth of enterprises, notwithstanding the minimal influence of training initiatives detected. This finding of McKenzie and Woodruff (2017) implied that the influence of training intervention programmes on owner managers' record-keeping skills, amongst other skills, is inconclusive. However, Khair et al. (2025) argue that financial record-keeping positively influences resource allocation and optimization, raising profitability and business performance in SMEs. Turner et al. (2018) in a study on record-keeping in the agricultural sector affirmed that targeted and comparative recordkeeping by

farmers to benchmark progress in operations boosts farmers' confidence in decision making. However, record keeping in micro enterprises has been criticised for not being accurate due to the use of manual records, which has been attributed to the failure of some enterprises and limited adoption of digitalized recordkeeping (Basir et al., 2024; Adela et al., 2024). In their analysis of record keeping in micro and small businesses in Tanzania, Malaury et al. (2021) supported the assertion of Basir et al. (2024) by highlighting that micro and small businesses, when keeping records, tended to record their sales inaccurately; therefore, they needed to become more digital. Although digital record-keeping can create accurate records, this solution can present financial and technological challenges. This view was supported by Malaury et al. (2021), who argued that poor record-keeping skills in micro and small enterprises might be due to limited finances, for example, to hire key staff to keep accurate records, or could use digital solutions effectively. In acknowledging the importance of record keeping and improved accounting skills in owner managers, Adela et al. (2024) contended that owner managers need to realize the positive link between improved record keeping, managerial capabilities and business performance.

Khadim and Choudhury (2024) evaluated the record-keeping by women entrepreneurs and revealed that although record-keeping had a positive influence on SME business performance, women entrepreneurs tended to exhibit poor record-keeping skills. In contrast, Malaury et al. (2021) found that gender had no direct influence on record keeping in micro and small businesses based in Tanzania. In concluding, Malaury et al. (2021) indicated that both men and women entrepreneurs tended to exhibit poor financial record-keeping skills, which was attributed to their poor financial literacy. The view on poor record keeping knowledge was also echoed by Omotesho et al. (2022) who assessed record keeping from a youth farmer perspective, then concluded that while the intention was to keep financial records, their understanding of the importance of accurate record keeping, the level and attitude towards performing this activity was limited. To address this, Omotesho et al. (2022) called for training to be provided to improve farmers' record-keeping and literacy levels. This recommendation is aligned with Turner et al.'s (2018) study on livestock farmers in Australia, which revealed that record keeping can assist in effective decision making, thereby increasing the farmers' financial position. Furthermore, the literature on record keeping (e.g., Khadim & Choudhury, 2024) showed the importance in management practices and identified that paper-based record keeping was the most prevalent methodology adopted by micro-owner managers but was also ineffective. However, Khadim and Choudhury (2024) did support the findings of Basir et al.

(2024) that there was a need for micro and small enterprises to migrate to digital record keeping, whereby improving decision-making processes and ultimately business performance, but this needed to have effective training and to be accessible to all entrepreneurs.

2.4.5.3. Effect Of Training Intervention Programmes on Financial and Resource Management

The ability to make informed financial decisions, by assessing the finances and the position of the business through creating plans and setting financial goals, can be described as financial management, which needs to be fully understood by business owners and managers (Upulwehera et al., 2024). Bismark et al. (2020) contended that the success and development of small and medium enterprises are directly linked to good business practices including strong financial management. To justify this, Bismark et al. (2020) indicated that the limited resources available to micro-enterprises meant that informed financial management practices could ensure that resources are effectively allocated to maximize opportunity costs. Nkwinika and Akinola (2023) argued that sound financial management provides an enterprise with a competitive advantage, and maintaining accurate financial records positively affects cash management and resource allocation. However, for McKenzie and Woodruff (2017) Training intervention programmes for micro-enterprise businesses tended to have a minimal effect on improving their decision-making practices, including their financial decisions.

Reflecting the view of McKenzie and Woodruff (2017) Micro-enterprises have faced criticism for poor financial accounting practices, such as owner-managers combining personal and business funds, which results in ineffective financial management (Rankhumise & Letsoalo, 2019). More recently, Bismark et al. (2020) have indicated the strong need to keep up-to-date financial reports through maintaining accurate cash flow, accounts receivable, and inventory records. This view was also supported by Upulwehera et al. (2024) who stated that informed financial risk-taking and an understanding of record-keeping were important financial management attributes. Although focused on small and medium enterprises in Ghana, the study by Bismark et al. (2020) was relevant to the present project because it is based in an African country that shares similar challenges with Nigeria, such as limited resources (Nkwinika, & Akinola, 2023).

In relation to the agricultural sector, Nkosi et al. (2024) studied agricultural investments for small businesses in South Africa, and recommended training on advanced technology to move farmer entrepreneurs from traditional practices that can restrict their business growth due to the

inaccessibility to finance and network opportunities. Although the study by Nkosi et al. (2024) was not focused on training intervention programmes, the outcome identified the need for ongoing training for farmer entrepreneurs to grow their businesses. This view was supported by the findings of Ikuemonisan (2024), who asserted that Nigerian farmer-entrepreneurs need to enhance their competencies, particularly in improving managerial capabilities, while acquiring new skills in cost and supply chain management. Furthermore, effective resource allocation to boost productivity in the agricultural sector has also been an area of significant interest in agricultural research. In a study focused on crop farming in China, Miao et al. (2023) noted that optimizing the allocation of resources such as water, land and labour in areas known for limited resources is important for the development of the agricultural sector. Effective resource allocation and optimization, therefore, presents as a solution in combating the challenges of limited resources faced by female micro-owner managers in the Agric sector.

2.4.5.4. Training Intervention on Female Micro-Owner Managers' Self-Employment

Ibitunde et al. (2021) contended that women are predominantly employed in the agricultural sector as self-employed farmers, unpaid labourers working on family farms, or workers on farms and agricultural businesses owned by a third party. This assertion by Ibitunde et al. (2021) highlighted the nature of employment within the agricultural sector, where women, despite their notable employment contribution, often face structural challenges that limit their economic empowerment. The opinion on women's self-employment is key as existing literature (e.g., Chinen et al., 2017) have evidenced that training intervention programmes have improved women's self-employment opportunities. Chinen et al.'s (2017) perspective on self-employment aligns with the current Nigerian Government's empowerment agenda, but does not fully address the objective of improving employment opportunities as one of the underlying reasons for providing training intervention programmes. Onyekwelu and Oyeogubalu (2020) stated that a positive relationship exists between acquiring entrepreneurial skills and employment opportunities in Nigeria. The study of Onyekwelu and Oyeogubalu (2020) added that the provision of incentives such as tax breaks, lower interest rates on loans, and less red tape for business formalization processes beyond the training provision positively affected employment opportunities in Nigerian MSMEs.

The significance of providing entrepreneurship skill acquisition in mitigating unemployment has been supported by Adeyanju et al. (2021), who concluded that agricultural training

programmes for youth and women sponsored by the Nigerian Government reduced unemployment. Furthermore, Adeyanju et al. (2021) stated that “Agriprenurship”, which is entrepreneurship through agriculture, can generate direct and indirect employment to increase socio-economic development outcomes in Nigeria.

Further studies (e.g., Ajuwon et al., 2017; Attah & Joseph, 2023; Barron, 2020) acknowledged that micro, small, and medium enterprises can create and positively influence employment opportunities. However, limited studies in Nigeria have focused on the effect of training intervention programmes on women’s self-employment opportunities. This research gap is significant because understanding the effect of these programmes on women entrepreneurs can inform policy decisions and training intervention initiatives that are tailored to their unique challenges and opportunities.

Although Adeyanju et al.’s (2021) study was focused on youth and women’s participation in the Fadama training programme, there was limited evidence related to the effects of training initiatives on women attendees. Similarly, Afolabi et al. (2017) investigated the effect of entrepreneurial education on self-employment amongst students in higher education. The findings of Afolabi et al. (2017) emphasized a positive influence of entrepreneurial education on self-employment aspirations. However, Afolabi et al. (2017) did not specifically focus on women or the agricultural sector, further contributing to the gap in existing understanding. Given the distinct socio-economic and cultural barriers women face in Nigeria’s agricultural sector, a detailed evaluation of the influence of training intervention programmes in promoting women’s self-employment is essential.

2.4.6. Training Intervention and Female Micro-Owner Managers’ Financial Independence and Empowerment

Entrepreneurship has long been recognized as a critical driver of women’s economic and social empowerment, offering the potential to increase personal income, improve business profitability, and contribute to the growing number of female entrepreneurs worldwide. This connection between entrepreneurship and empowerment has become more pronounced in recent years (Asiah et al., 2020). Empowerment, however, is a multi-faceted concept and has been defined in different ways depending on the context. Bayeh (2016) defined empowerment as the means to equip individuals, particularly women, with the social, economic, and environmental resources to improve their lives. Commonly, empowerment is attributed to access to essential resources such as credit facilities, income-generating opportunities, land

ownership, and employment prospects (Shakoor et al., 2021). In Nigeria, empowerment is attributed to vocational and entrepreneurial training by Ahmed and James (2018) in a study on mitigating youth restiveness in Northern Nigeria. Although the study by Ahmed and James (2018) addressed youths, it, however, showcased that Government intervention initiatives empowered participants and provided resources that reduced unemployment. In a study on women empowerment, Bayeh (2016) argued that sustainable development in developing countries like Ethiopia is connected to women empowerment. While studying women in Bangladesh, Ghosh et al. (2021) found that although agriculture was the main occupation for women, most of the women studied did not own their land and had minimal economic opportunities to make their decisions independently. In contextualising this, Shakoor et al. (2021) conducted a study on women's empowerment and financial inclusion in rural Pakistan, which emphasized the disenfranchisement of women in rural areas in developing countries. Shakoor et al. (2021) argued that women, particularly in these areas, face significant barriers to economic participation and require Government intervention through targeted support programmes. While the study primarily focused on financial inclusion, Shakoor et al. (2021) noted that financial support alone is often insufficient for enhancing and promoting entrepreneurial activities. Shakoor et al. (2021) emphasized the importance of empowerment initiatives beyond financial assistance, recommending programmes that provide micro-enterprises with training in specific skills, access to resources, and financial support. Shakoor et al. (2021) highlighted the necessity for peer-to-peer support strategies and opportunities, which can assist in fostering women's independence and self-efficacy, along with a sense of community, further solidifying the foundations for long-term empowerment. Further studies on empowerment (e.g., Bekele & Setegn, 2025) have examined the effect of entrepreneurial self-efficacy on the relationship between women's empowerment and business performance, arguing that empowerment at the individual level is about self-confidence. Although the quantitative study by Bekele and Setegn (2025) was focused on women's empowerment in Ethiopia, highlighting the significance of empowerment and entrepreneurial self-efficacy on female owner-managers' business performance, it was not focused on empowerment through training initiatives.

On the theme of empowerment and the agriculture sector, Anderson et al. (2021) defined and saw the concept as the enhancement of decision-making and providing autonomy in relation to income, resource management, and job creation. Anderson et al.'s (2021) research highlighted the economic benefits of women's involvement in agriculture and its positive effects on social

empowerment and self-efficacy. In concluding, Anderson et al. (2021) argued that women's participation in agriculture can improve their financial situation and contribute to greater autonomy and empowerment, further illustrating the potential of initiatives, such as training intervention programmes.

The notion of empowerment as a process of change was proposed by Kinati et al. (2022), who argued that empowerment as a dynamic experience can incorporate social, economic, and informational resources. Kinati et al. (2022) in studying empowerment in the agricultural sector in Ethiopia, found that informational resources were the most critical for farmers whose livelihoods depend on the information, such as how to access water, improved seedlings, and feed for livestock. Aligned with this perspective, Barak and Melgar-Quinonez (2024) contended that empowerment is often primarily focused on expanding access to external resources, including finance, and therefore saw empowerment as an ongoing process of change. Barak and Melgar-Quinonez (2024) emphasized that empowering women is not simply about access to resources but about creating a process that provides women farmers with the required resources, enabling them to become financially independent.

Supporting these perspectives, Jimmy and Olsson (2023) recommended using training programmes as a key strategy to promote women's empowerment. In presenting their findings, Jimmy and Olsson (2023) underscored the importance of women's social networks, which can act as crucial channels for promoting empowerment. Jimmy and Olsson's (2023) research revealed a clear link between women's empowerment and the strength of their social networks, particularly in rural communities. In contextualising this, Jimmy and Olsson (2023) highlighted a critical gap in the existing literature as to the need for further exploration of how training intervention programmes can be combined with the support of social networks. This gap is particularly relevant for rural areas of Nigeria, where both training programmes and social networks could significantly increase women's empowerment by fostering peer support, shared knowledge, and collaborative problem-solving.

2.5. Theoretical Perspective

This section will explore the theoretical perspectives related to training intervention programmes that are focused on fostering the growth of MSMEs through Government-funded initiatives. Existing research (e.g. Adebisi et al., 2017; Agbim, 2020; Akyuz & Isaac, 2020; Edoko et al., 2017) have made several recommendations for improving MSMEs' performance in Nigeria, ranging from improved access to finance to infrastructural development and training

programmes. In relation to improved access to finance, studies conducted by Omolabi et al. (2020) and Joseph et al. (2021) have varying results that reinforced the importance of training intervention programmes as a possible solution to improve the performance of MSMEs in Nigeria. Focusing on intervention programmes from an institutional approach, Omolabi et al. (2020) argued that specialised institutions such as micro-finance banks can positively influence entrepreneurial growth and performance, while claiming that an institutional approach is best suited to entrepreneurship development in Nigeria. In contrast, Joseph et al. (2021) argued that institutional challenges in implementing financial intervention schemes in Nigeria, such as politicisation of the programme, intervention planning and design issues, and bureaucratic challenges, often derail the success of the programmes.

Furthermore, on the institutional approach debate, Omolabi et al. (2020) maintained that entrepreneurs' personal characteristics and experiences should be disregarded, instead, emphasis should be placed on entrepreneurs' interaction with regulatory and support institutions. In contrast, Karedza and Govender's (2020) study focused on the resource-based view, known as RBV, argued that internal capabilities, which consist of individuals' knowledge and skills, can enable businesses to put these internal resources to effective use, which is fundamental to the success of SMEs. Although the study by Karedza and Govender (2020) was on the effect of organisational capabilities on SMEs' export performance, the research highlighted the importance of individual knowledge and skills as internal capabilities that need to be recognised and improved.

Research on small and medium-sized enterprises (e.g., Banwo et al., 2017; Karedza & Govender, 2020; Nolan & Garavan, 2016) have identified the resource-based view as a foundational theoretical framework, particularly for SMEs with potential resource constraints. To address these constraints, SMEs may need innovative strategies to improve their business performance. The studies of Banwo et al. (2017), Karedza and Govender (2020), and Nolan and Garavan (2016) concluded that SMEs often deal with certain limitations in key resources, such as access to finance, human resources, and technology. However, these authors independently argued that SME owner-managers can overcome these challenges by utilizing available resources, including their own capabilities, knowledge, and skills, but to achieve this, entrepreneurship training needs to be provided. This perspective supports the emphasis on the resource-based view in this study, as the knowledge and skills acquired through training intervention programmes can serve as internal resources for enterprises established upon completing training initiative schemes.

In contrast to the resource-based view, the institutional theory draws on the external influence of Government policies, legislations, and regulations to improve MSMEs' business performance (Alhnity, 2016). Although, the institutional perspective does provide the means to analyse the effectiveness of intervention programmes and schemes (Joseph et al., 2021; Omolabi et al., 2020). The institutional perspective, however, undermines the position of the resource-based view that acknowledges the importance of improved performance of MSMEs through the owner managers' ability to utilize their internal capabilities. Other studies, including Eniola and Entebang (2015) and Agyapong and Attram (2019), have reviewed the influence of internal and external characteristics on MSMEs' performance, arguing that the businesses require knowledge resources to gain a competitive edge. While it is important for MSMEs to receive some form of Government support or intervention, Agyapong and Attram (2019) contended that owner managers' limited skills, knowledge, and attitudes significantly constrain MSMEs' performance.

Alhnity et al. (2016), in a quantitative study on entrepreneurial orientation and Government intervention programmes offered in Jordan, evaluated the relationship between entrepreneurial orientation and SME performance with Government intervention as a mediating influence. In concluding, Alhnity et al. (2016) asserted that innovativeness, risk taking, and proactiveness have shown consistent positive effects, which have been reported in existing studies. Although Alhnity et al. (2016) acknowledged that Government interventions can positively influence entrepreneurs' attitudes, mindsets, and networks, ultimately enhancing entrepreneurial orientation, the study by Alhnity et al. (2016) only focused on the institutional perspective and not the resource-based view. Despite this, the research of Alhnity et al. (2016) did highlight the essential role of entrepreneurial orientation in enabling these individuals to understand how to effectively establish and then create a business through their entrepreneurial activities. Agyapong and Attram's (2019) argument on the effect of owner managers' skills, knowledge, and attitudes on MSMEs' performance, together with Alhnity et al.'s (2016) contention that intervention programmes can positively influence owner managers' mindsets, confirms this study's focus on entrepreneurial orientation and self-efficacy theories. By adopting the entrepreneurial orientation and Self-efficacy theories, this study can provide a significant insight into female micro-owner managers' internal capabilities from a resource-based theoretical viewpoint.

2.5.1. Entrepreneurial Orientation (EO)

The processes, activities, and decision-making that lead to creating a new business are known as entrepreneurial orientation (Covin & Wales, 2019). This concept was echoed by Alkharafi et al. (2024), who asserted that entrepreneurial orientation (EO) is now associated with the practices and activities that drive entrepreneurship. From an organisational perspective, entrepreneurial orientation can be referred to as a tactical process and procedures within a business that reflect SMEs' ability to innovate, be proactive in decision making, be calculative in risk-taking, exercise autonomy, and be competitively aggressive. The entrepreneurial orientation theory is embedded in the resource-based view, which focuses on how a business with high EO is more likely to utilize its internal resources, capabilities, and knowledge to exploit new opportunities and achieve a competitive advantage. Studies (e.g., Covin and Slevin, 1989; Covin & Wales, 2019) have emphasized that EO can influence organizational performance, enhancing the SMEs' ability to adapt, innovate, and respond to changing market dynamics. From an RBV perspective, EO can be seen as a critical driver in understanding organizational capabilities and resources that are difficult to replicate but contribute to improved business performance. At an individual or entrepreneurial level, EO has gained academic attention and criticism amongst researchers. However, Clark et al. (2024) argue that reviewing EO from an individual perspective to the organisational level is more ideal, as the individual/ owner manager can be seen as the source of the EO at the organisational level. Furthermore, Clark et al. (2024) asserted that EO is reflected in the entrepreneurial behaviours and beliefs. This means that an owner-manager's ability to take risks, act proactively, and apply knowledge gained from attending or informed by training intervention programmes can be considered a potential driving force behind the creation and growth of microenterprises, including those in the Agri-sector. Clark et al. (2024) defined individual entrepreneurial orientation as being the autonomous, proactive, innovative, competitive, and risk-taking tendencies and actions that individuals demonstrate when seeking and utilizing business opportunities. Although the concept of individual EO has traditionally been defined as using the entrepreneurial dimensions outlined by Lumpkin and Dess (1996), which also critiqued the concept's limitations. Clark et al. (2024b) argued that while certain constructs, such as risk-taking, apply to organizational and individual EO, autonomy does not function similarly at both levels. This argument further reinforces Covin and Wales' (2019) view that entrepreneurial organizations and individuals can differ in EO characteristics. This perspective aligns with Miller's (2011), and Covin and Wales (2019) assertion that EO is a multi-dimensional construct

that can be examined independently, which was present later in Ahamed et al. (2021) study, which focused on risk-taking propensity and innovation as being important entrepreneurial characteristics.

The debate surrounding the multi-dimensional nature of EO led Alkharafi et al. (2024) to emphasize that motivation and proactiveness can enhance innovative behaviour. Alkharafi et al. (2024) suggested that highly motivated individuals who take proactive steps are more likely to generate new ideas, develop innovative products, and adopt problem-solving approaches. In assessing the effect of entrepreneurial training on EO, Al-Awlaqi et al. (2021) asserted that EO is better measured as a multidimensional construct. Furthermore, the study by Al-Awlaqi et al. (2021) concluded that training initiatives positively influence innovativeness, risk taking, and proactiveness, which are three constructs of entrepreneurial orientation. These perspectives highlight the importance of assessing female micro-owner-managers' internal capabilities and entrepreneurial mindset.

In a study on women entrepreneurs in the Sri Lankan agricultural sector, Upulwehera et al. (2024) agreed that entrepreneurial orientation can be linked with the entrepreneur's ability to identify new market opportunities. However, Upulwehera et al. (2024) argued that women tend to be more risk-averse and have limited social capital compared to their male counterparts. This can result in lower entrepreneurial orientation, particularly in terms of being able to take risks and being proactive with their social networking activities. Further research is therefore needed to explore how training, recognized as a crucial tool as noted by Upulwehera et al. (2024), enhances the risk-taking propensity and proactiveness of female micro-owner managers in the Nigerian agricultural sector. This study will therefore adopt the individual entrepreneurial orientation perspective in evaluating the influence of training intervention schemes on the female entrepreneurs' internal capabilities.

2.5.2. Self-Efficacy

Existing literature (e.g., Srimulyani & Hermanto, 2022; Alkharafi et al., 2024) has studied the theme of motivation and entrepreneurial self-efficacy and has grounded their research in self-efficacy theory as proposed by Bandura (1977), Bandura (1995), and Srimulyani and Hermanto (2022). In studying self-efficacy as a mediator between social capital and entrepreneurial orientation, Srimulyani and Hermanto (2022) defined self-efficacy as an individual's perception of their ability to perform entrepreneurial tasks, indicating the tendency to assess themselves based on whether they can become a business owner. Sulistyani et al. (2022) argued

that those with high self-efficacy traits were more likely to establish a business, have sufficient resilience in the face of challenges, and can set goals and develop operational strategies. Furthermore, the study by Sulistyani et al. (2022) established self-efficacy as a key characteristic that can distinguish those who are entrepreneurs based on the individual displaying entrepreneurial orientation (EO) attributes. Sulistyani et al. (2022) also recognized self-efficacy as an individual construct, while Kevill et al. (2017) identified self-efficacy as an owner-manager's capability, which is a micro foundation of an enterprise's dynamic capabilities and considered it a significant ability in enhancing micro-enterprise business performance. However, both studies recognised that the influence of owner managers' self-efficacy can influence business performance and growth of a micro enterprise. Self-efficacy, therefore, can be applied as a principal concept in evaluating owner managers' capabilities to transfer knowledge gained from attending training intervention programmes to improve the dynamic capabilities of their businesses.

Other studies including Caliendo et al. (2023) have linked self-efficacy to entrepreneurial orientation, particularly innovativeness at the individual level. In the context of entrepreneurship, self-efficacy can influence an entrepreneur's propensity to take risks, innovate, and be proactive in establishing a new business venture. This means that individuals with high self-efficacy are more likely to engage in proactive behaviour, prepared to persist when faced with a challenge, and be successful in their entrepreneurial endeavours. Furthermore, Caliendo et al. (2023) argued that there are no differences in the level of self-efficacy between the genders, however, women showed more self-efficacy in certain entrepreneurial outcomes. Caliendo et al. (2023) also supported Sulistyani et al.'s (2022) view that the higher an owner-manager's self-efficacy level is, the more committed and innovative the individual is when identifying new products and markets, thereby linking self-efficacy to motivation.

There is a prevalence of existing literature on self-efficacy in micro enterprises, which affirms Caliendo et al.'s (2023) view that self-efficacy in entrepreneurship literature encourages opportunity-driven entrepreneurial activities such as business creation and entry into new markets. Self-efficacy has been studied from several perspectives, for instance, Srimulyani and Hermanto (2022) on the influence of entrepreneurial efficacy and motivation on micro and small businesses in the East Indonesian food sector, Tang et al.(2023)on the influence of Self-efficacy and optimism on entrepreneurial alertness, Li et al.'s (2020) comparative study on Chinese gender role characteristics and entrepreneurial self-efficacy, and Baluku et al. (2020)

who researched the mediating role of self-efficacy and moderating influence of gender when exploring the link between mentoring and the intangible outcome of entrepreneurship in Uganda. From a Nigerian context, literature on entrepreneurial self-efficacy has gained recent interest. Osadolor et al. (2021) in their study on the mediating role of the need for independence between entrepreneurial self-efficacy and their intentions, the quantitative study focused on youth entrepreneurship, revealed that self-efficacy does not affect entrepreneurial intention significantly. This outcome of Osadolor et al. (2021) contradicts the later findings of Caliendo et al. (2023) and Sulistyani et al. (2022), which reveal a potential gap in the literature on self-efficacy from a Nigerian context, particularly as to the relationship between entrepreneurial orientation and self-efficacy. Further studies on the moderating role of self-efficacy on entrepreneurial orientation and venture creation in Nigeria by Na-Allah and Ahmad (2022) did indicate a positive indirect relationship between the two characteristics. In contextualising this, Na-Allah and Ahmad (2022) argued that individual-level entrepreneurial orientation leads directly to venture creation, while entrepreneurial support, such as financial and non-monetary intervention initiatives, may not necessarily increase the relationship between self-efficacy and business owners. For Na-Allah and Ahmad's (2022), the authors recommended additional effective intervention programmes to strengthen new businesses being established amongst Nigerian graduates. In contrast to Na-Allah and Ahmad (2022), Eniola (2020) identified a positive relationship between entrepreneurial orientation and self-efficacy in a quantitative study based on Nigerian small and medium enterprises. Furthermore, Eniola (2020) revealed that entrepreneurial orientation mediates the relationship between self-efficacy and SME development in Nigeria, specifically in terms of risk-taking and proactiveness, which were identified as the abilities required by entrepreneurs to overcome market and institutional barriers.

While the studies by Eniola (2020) and Na-Allah and Ahmad (2022) seem to differ in their findings on the influence of self-efficacy in new venture creation and SME development in Nigeria, there is, however, a consensus as to the need for improved skills for young Nigerian entrepreneurs. Despite the need for uniformity to attained improved competencies, neither studies of Eniola (2020) or Na-Allah and Ahmad (2022) have focused on micro-enterprises nor studied self-efficacy from a female micro-owner manager's perspective, thereby highlighting the need to evaluate how training intervention initiatives can influence female micro-owner managers' self-efficacy.

Reflecting this gap, this study developed a theoretical framework to explore the effectiveness of training intervention on female micro-owner managers' entrepreneurial orientation and self-efficacy.

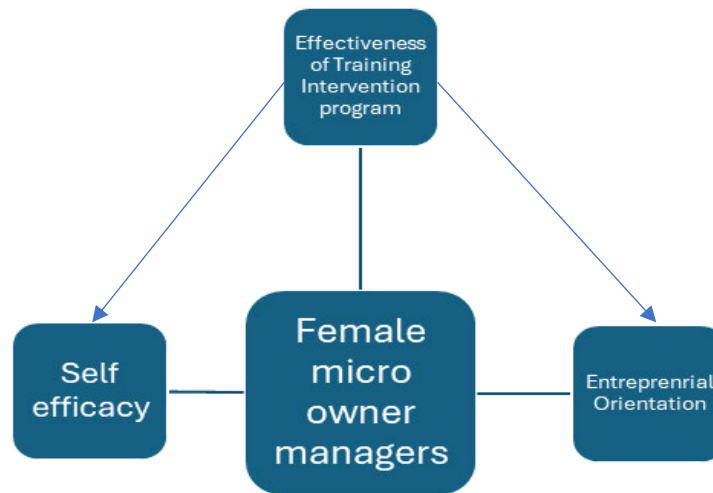


Figure 2.1. Conceptual framework on female micro-owner managers' self-efficacy and entrepreneurial orientation. Adapted from Eniola (2020).

Although the literature has reviewed an increased relationship between entrepreneurial orientation and self-efficacy, there is limited literature focused on the study of female micro-owner managers' entrepreneurial orientation and self-efficacy. However, there are comparative studies on self-efficacy. For instance, Li et al. (2020) conducted a comparative study of female and male entrepreneurs' self-efficacy in China and revealed that gender may significantly affect the individual's self-efficacy, depending on the business growth stage. In another comparative study, Baluku et al. (2020) reviewed the effects on mentoring and self-efficacy amongst Ugandan male and female small business owners. The study of Baluku et al. (2020) found that mentoring had a direct positive effect on women's autonomy and self-employment intentions, while in contrast, men benefited from mentoring more when their self-efficacy was strengthened. Although the study by Baluku et al. (2020) focused on entrepreneurship mentoring, the outcome showed that mentoring can provide an effective learning methodology for small business owners, affirming that self-efficacy can be improved by providing either training or mentorship programmes.

2.6. Conceptual Framework

This section will outline key constructs identified from the literature review in a visual representation, which will guide the research process in this study (Van der Waladt, 2020).

The literature review showed gaps in the study of the influence of training intervention programmes on female micro-owner managers and micro-enterprise business performance. Existing literature (e.g., Adeyanju et al., 2021; Chinen et al., 2017; McKenzie & Puerto, 2021) have varied responses on the influence of training intervention programmes on women and the agricultural sector. Areas of improvement identified in these studies include self-employment (Chinen et al., 2017), income generated from an Agric-business after attending training sessions (Adeyanju et al., 2021) and an increase in sales and the number of customers (McKenzie & Puerto, 2021). These views present a gap in the Nigerian context on how training interventions have influenced female micro-owner managers in Agricultural Businesses, as the study by Adeyanju et al. (2021) was more focused on Nigerian youths in Agriculture. The literature review also highlighted gaps in areas such as female micro-owner managers' improved access to market and finance. This raises the question: how have training intervention programmes influenced women in Nasarawa state, Nigeria, and in what business areas have they experienced growth?

The literature review also highlighted gaps in studies on the influence of training initiatives on female micro-owner managers' internal capabilities, entrepreneurial and managerial capabilities. While Kevill et al. (2017) acknowledged the capabilities of individual micro-owner managers such as self-efficacy as a fundamental component of an enterprise's dynamic capability and Hafiz et al. (2022) highlighted the importance of owner managers' knowledge and intrinsic motivation as significant and unique internal capabilities, there exist gaps in literature in the Nigerian context on the influence of training intervention programmes in enhancing female micro-owner managers' internal capabilities. These views informed the question; how do female micro-owner managers transfer the knowledge gained from the Government-led training sessions into their Agric-businesses and cascade that knowledge to staff following the training they attended.

Furthermore, Zahra's (2021) debate on the use of social networks in addressing constraints such as limited access to finance and other resources, which was supported by other studies (e.g., Sendawula et al., 2023) led to the question, how do female attendees build networks after attending training sessions?

Increasing focus on business practices and the need to enhance managerial competence in micro-enterprises has highlighted gaps in existing literature (e.g., McKenzie & Woodruff, 2017) on the effectiveness of training intervention programmes on record-keeping, financial management, and marketing, particularly in the Nigerian agricultural sector. These gaps led to the question of how training initiatives have improved the business practice capabilities of women attendees and what capabilities were enhanced.

Theoretically, self-efficacy and entrepreneurial orientation have gained prominence in entrepreneurship studies focused on the owner-managers' perspective (Caliendo et al., 2023; Clark, et al., 2024; Osadolor et al., 2021). However, the influence of training intervention on female micro-owner managers' self-efficacy and entrepreneurial orientation has not been studied in the context of a Nigerian agricultural enterprise. The conceptual and theoretical gaps in the literature review also highlighted the methodological gaps in training intervention literature in Nigeria. Studies (e.g., Adeyanju et al., 2021) evaluated the effects of training initiatives using a positivist lens and quantitative research methods. This aligns with the study's focus on income generation. However, the methodology utilised in studies such as Adeyanju et al. (2021) presents a limitation in gaining owner-managers' experience of the training attended and the resultant effect on micro-enterprise growth, which this study will address.

These limitations and gaps highlighted in this section are represented in the conceptual framework below, which outlines the research aim and objectives, research questions informed by the literature review, and the research gaps identified in this study.

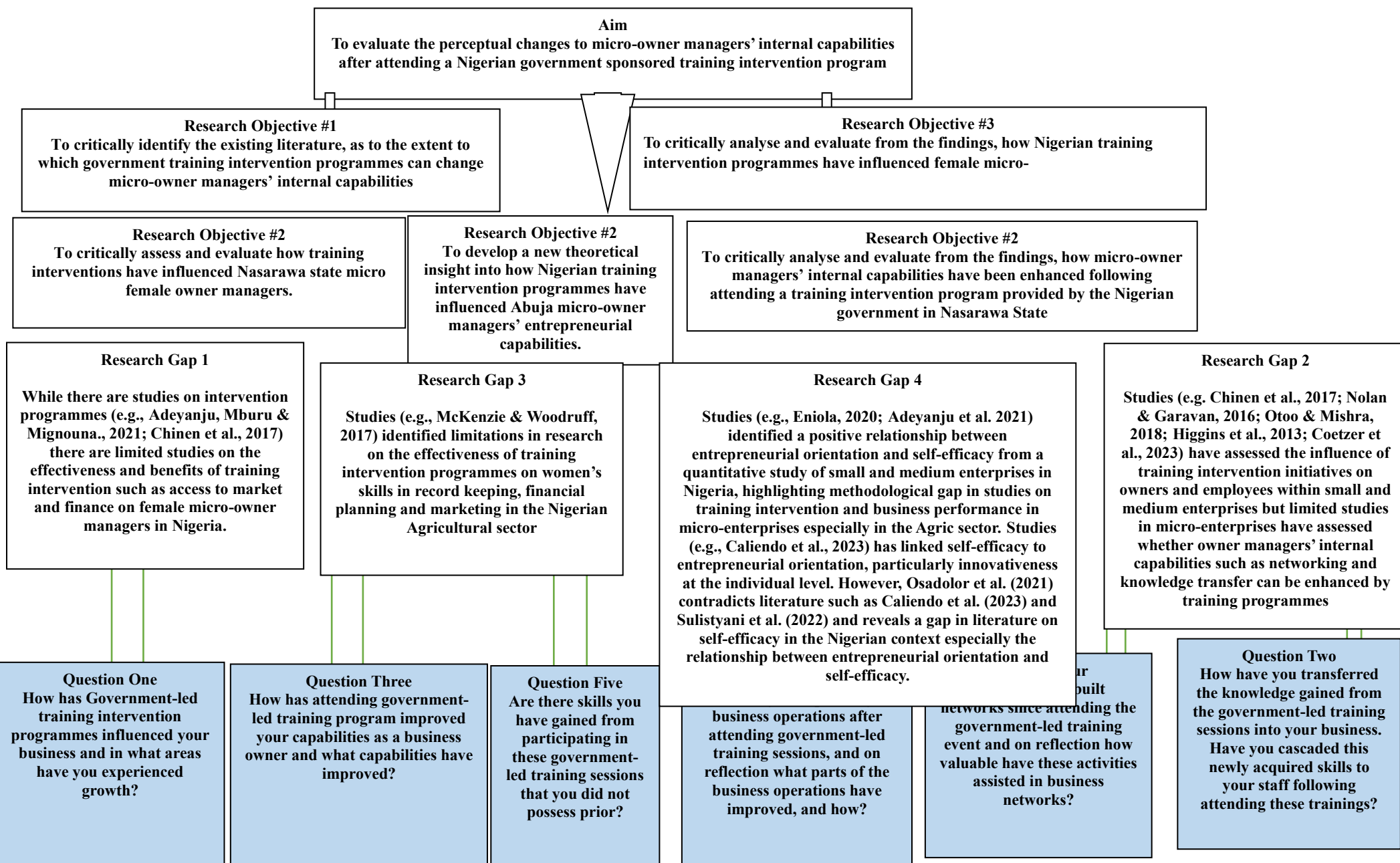


Figure 2.2. Conceptual framework depicting research aim, objectives, research gaps, and research questions. Source: Author

2.7. Chapter Summary

The literature on micro-enterprises remains relatively limited, as these businesses are often grouped with small and medium-sized enterprises (SMEs). This categorization is particularly evident in developing countries such as Nigeria, where micro-enterprises are classified under the broader term micro, small, and medium enterprises (MSMEs). As a result, research specifically dedicated to the challenges and dynamics of micro-enterprises is often overshadowed by SMEs' studies. Despite the variation in how different countries define and classify micro-enterprises, these businesses tend to face similar challenges. These include limited access to finance, inadequate managerial competencies, poor record-keeping practices, and restricted access to local and international markets. These obstacles significantly restrict the business's growth.

Recognizing these challenges, Governments worldwide have implemented various intervention programmes to mitigate these difficulties in micro-enterprises. In Nigeria, for instance, several training initiatives have been introduced, often accompanied by financial incentives, designed to address the managerial challenges this size of business encounters. These programmes tend to be designed to equip business owners with the necessary skills and knowledge to manage their enterprises more effectively. However, the effectiveness of these training initiatives has not been adequately studied, leaving uncertainties regarding the effectiveness of these intervention initiatives on micro-enterprise business performance.

A review of the existing literature (Adeyanju et al., 2021; Chinen et al., 2017; McKenzie & Woodruff, 2017) on training intervention programmes have revealed several limitations as to how micro-owner managers are trained and have benefited from this initiative. Although researchers (e.g., Sendawula et al., 2023) have explored the influence of certain tools, techniques, and strategies such as social networks, these studies have not focused on micro enterprises or from a female entrepreneurial perspective. The literature reviewed in this chapter has, however, highlighted the importance of training intervention schemes as a means to empower female entrepreneurs and how this format can assist in improving business activities. Furthermore, the literature review has revealed the need to study training programmes' influence on female micro-owner managers' internal capabilities. Further studies (e.g., Brachert et al., 2020; Sayarh, 2023; Shetty et al., 2024),

which have focused on the critical entrepreneurial attributes such as motivation, the propensity for risk-taking, proactiveness in decision-making, and the ability to build networks, have not been studied from the perspective of the influence of these training initiatives. The literature has, however, attempted to link these characteristics to broader concepts such as individual entrepreneurial orientation (EO) and self-efficacy. While there is an established connection between EO and self-efficacy, the literature presents conflicting views on whether training intervention programmes directly or indirectly influence an entrepreneur's capabilities.

This chapter has also reviewed the current debate on female micro-owner managers and has identified that the theme remains relatively scarce. Many studies that have focused on self-efficacy (e.g., Li et al., 2020) from an entrepreneurial perspective have adopted a comparative gender-based approach, analysing differences in entrepreneurial confidence and effectiveness between men and women. However, these studies have provided inconsistent findings regarding whether female entrepreneurs exhibit greater self-efficacy than their male counterparts, particularly after participating in mentoring or training programmes. This inconsistency highlights the need for further research that explores the unique experiences of female micro-owner managers and evaluates how targeted intervention programmes can influence women's self-efficacy and internal capabilities.

The literature review has also identified several significant gaps in research on training intervention schemes, particularly in the context of developing countries like Nigeria. Of these existing studies on intervention programmes in Nigeria (e.g., Joseph et al., 2021) have predominantly focused on the provision of financial assistance rather than capacity-building programmes. Much of this existing research has also employed a quantitative methodology, which may not fully capture the nuanced effects of training on entrepreneurial behaviour and business growth. Furthermore, there has been a strong emphasis on youth entrepreneurship, with relatively little attention given to micro-enterprises led by women. Given these gaps, there is a need for more in-depth studies that evaluate the effectiveness of training intervention schemes specifically designed for micro-enterprises managed by women in Nigeria. Further research using a qualitative method approach would also gain a deeper understanding of how training can influence female micro-owner managers' internal capabilities, addressing the existing methodological gaps in the existing literature. Furthermore, expanding the scope of the research to include only female micro-owner managers will provide valuable insights into

how tailored intervention training schemes can foster women's business and entrepreneurial growth. The methodology to be adopted in this study will be discussed in Chapter Three.

Chapter Three

Methodology

3.1. Introduction

The literature review conducted in Chapter Two has identified several gaps in existing studies on the theme of intervention programmes in Nigeria. These gaps include limited literature on the effectiveness of training intervention schemes in Nigeria and the extensive usage of a quantitative methodology (e.g., Joseph et al., 2021). This has proven to be the norm in studies on intervention programmes, thereby creating a gap that this study addressed.

This methodology chapter will discuss the researcher's ontological, epistemological, and axiological perspectives to justify the research design and data collection method utilized. Establishing the researcher's worldview is important in justifying the research approach and results. Section 3.2 will explain why the researcher employed a constructivist worldview and an interpretivist perspective in the study, contrasting the prevailing positivist paradigm and realist perspectives in existing research into intervention programmes. Focusing on female micro-owner managers' experience from attending a training intervention scheme, the study conducted a pilot phase followed by a main study, which will be outlined in section 3.3.

Furthermore, this chapter will discuss the research strategy and data collection method and indicate how rigour and trustworthiness were achieved in the study. A methodology sequence in Figure 3.1 will illustrate the link between the literature review and the methodology, with the outcome of the pilot study explained in Section 3.8. The next section will present the project overview in section 3.2 below.

3.2. Project Overview

A methodology plays a key part in a study, including the data collection and analysis strategy, which is informed by the researcher's ontological, epistemological, and axiological perspectives. Therefore, research follows a prescribed pattern grounded in the researcher's paradigm or worldview; a worldview that influences how the individual views and interprets situations (Kivunja & Kuyini, 2017). Kuhn (1970) and Khan (2014) described this worldview or research paradigm as a roadmap to identify and solve a research problem, with justifiable results that serve as guidelines for future researchers.

By following this roadmap, researchers can identify their philosophical perspectives, which are reflected further in the research strategy and design undertaken to solve an identified research problem. The strategic positioning of a researcher in achieving this is known as the research methodology, which is informed by the researcher's ontological, epistemological, and axiological perspectives. Scholars, including Nayak and Singh (2021), have argued that no ideal research methodology exists. Instead, researchers draw on different philosophical assumptions when developing their research methodology depending on their field of interest (Easterby-Smith et al., 2021).

3.3. Research Strategy

The literature, which was reviewed in Chapter Two, indicated several gaps in existing knowledge (e.g., Melese, 2018; Onukwuli et al., 2014; Sibanda et al., 2018) When assessing the efficacy of training intervention schemes in micro-enterprises. Of particular interest is the research perspective adopted in the field of small business research by Volery and Mazzarol (2015) who analysed a series of articles related to small business research. Volery and Mazzarol (2015) identified a prevailing concern over methodologies adopted in existing articles and concluded that there was a high prevalence of quantitative research, calling for more qualitative studies. This view on methodology is reflected in existing research on Government-led intervention programmes (e.g., Fowowe, 2017; Joseph et al., 2021; Xiang & Worthington, 2017) which tended to adopt a positivist paradigm and a realist perspective in their research approach. By adopting the positivist principles of objectivity, deduction, and theory testing, these studies had tested several theories ranging from the resource-based view, human capital, and institutional theory to ultimately measure the performance of a small business. This strategy of data collection and analysis using a quantitative method will provide replication and a generalizable outcome (Robson & McCartan, 2016). However, theory testing does not provide any new or unique insight.

To address this gap in methodology, by adopting a constructivist worldview using an interpretivist perspective, this study can focus on understanding female micro-owner managers' experiences of attending a Government-sponsored training intervention scheme and reviewing the effectiveness of this provision. Denzin and Lincoln (2018) highlighted three assumptions of the constructivist worldview: that multiple realities are based on its relativist ontology, having a subjective understanding of constructs based on

its subjectivist epistemology, and a naturalistic methodology where the data is collected in a real-world setting. This study reflecting this, adopted the assumption that reality is subjective and subject to multiple interpretation is in line with Denzin and Lincoln's (2018) perspective that the interpretivist perspective is relative to human observation and sense making, not tied to any existing reality but instead grounded and focused on a process of discovery and interpretation of data backed by the research context and collection method.

By adopting a constructivist worldview, this study will address the gap in existing literature on the methodological approaches used in the study of Government-sponsored intervention initiatives. The positivist perspective adopted by previous studies (e.g., Adeyanju et al., 2021; Alhnity et al., 2016; Jessen & Kluve, 2021; Xiang & Worthington, 2017), who have studied Intervention programmes in Nigeria and globally, have arguably failed to capture female micro-owner managers' perspectives on the efficacy of the training provision on their internal capabilities and skills. To date, those quantitative studies on Government intervention programmes have only confirmed existing theories. However, the experiences of female entrepreneurs have either not been captured or have been lost in numerical data collected, therefore creating a gap between the theory and existing entrepreneurial experiences (Raco & Tanod, 2014; Rajasinghe et al., 2021).

Therefore, this constructivist research has focused on the female micro-entrepreneurs' perception of the training intervention schemes they attended, and how the knowledge gained has been utilised and transferred to set up and improve their business. This project aimed to explore the perceptual changes to female micro-owner managers' internal capabilities and infer meaning from their perspectives. To gain an in-depth understanding of the Government's objectives for instigating this training provision, a pilot was conducted before conducting the main study with facilitators of these training sessions to understand the effectiveness of this concept in meeting the original objectives. Therefore, the goal of the study was to capture and understand the experiences of micro-owner managers' and facilitators' perspectives, which is aligned with Creswell's (2014) notion that the interpretivist perspective is about interpreting the world as constructed by humans based on their historical and social orientation. From an interpretivist perspective, knowledge of the world is subjected to multiple interpretations as it is gained from numerous participants with varying experience and social orientation. Through adopting this strategy, the study discovered multiple perspectives from facilitators and female

owner managers to ensure the research was rigorous and robust as to the data collection strategy.

3.4. Research Method

The constructivist paradigm utilizes a qualitative research method grounded in anthropology and sociology. It is usually context-specific and involves observation of human interactions (Merriam & Tisdell, 2016). The data collection process for this method is usually conducted using semi-structured and open-ended interviews. This aligns with data collection and analysis method that utilizes non-numerical data (Mohajan, 2018). Qualitative research considers the complexity of people's experiences, how it influences their perspectives, and their interpretation of a phenomenon. This method was chosen to address the gap in existing literature on entrepreneurship and female micro-owner managers, which has been predominantly quantitative. This has led existing literature (e.g., Marlow, 2020; Oliveira et al., 2024; Rajasinghe et al., 2021) to highlight the need for qualitative studies on female entrepreneurship to be conducted, as gender is a key characteristic in determining challenges in entrepreneurship research.

Studies by Oliveira et al. (2024) and Rajasinghe et al. (2021) utilised an interpretative phenomenological analysis (IPA) in their entrepreneurship research to address this qualitative gap. Oliveria et al. (2024) argued from a feminist perspective that using an interpretative phenomenological analysis (IPA) methodology permitted the study to dive deep into female entrepreneurs lived experiences. However, Rajasinghe et al. (2021) emphasized the subjective nature of qualitative research and its appropriateness for entrepreneurial studies. This debate concludes that an inductive approach could be applied in the data collection and analysis, which is currently missing. Although this study did not adopt a phenomenological approach, using a qualitative strategy would generate rich insight compared to the more generalised quantitative outcomes of previous research into female entrepreneurship.

A further justification for conducting this qualitative research is the flexibility of the data collection process, which was conducted using semi-structured questions. This enabled the researcher to adjust the questions asked as the interviews progressed. Flexibility of the data collection process allowed the researcher to explore new and emerging themes by incorporating them into the interview guide as the study progressed, to gain multiple perspectives from the different participants. This approach aligned with the subjective

nature of qualitative research and provided different interpretations to a singular construct, which interpretivism offers to enrich the data collected (Khatri, 2020). A qualitative strategy can utilise a narrative method to encourage the participants to recall their experiences when starting their business. This reflected the work of Surangi (2022), who used a narrative enquiry in her female entrepreneurship research on culture. Although Surangi's (2022) study was on female entrepreneurship, the research specifically focused on understanding the effectiveness of the training intervention sessions from a cultural perspective and not on their overall experiences. To emerge from the research, however, the narrative approach was predominantly longitudinal as evidenced in other studies (e.g., Bruce et al., 2016; Shields et al., 2015), which involved several stages of interviews and observations. Based on this longitudinal nature of narrative studies, this strategy was rejected based on the access and availability of these women participants.

Participatory action research was also considered a potential method for this study. As community-based research, this approach involves the participation of community members to improve social conditions. Arko-Achemfuor (2019) examined the use of business training intervention schemes to drive social change through capacity-building workshops. By collaborating to identify participants' training needs, both the learners and other stakeholders ensured that the training provided was suitable, enriching the programme's outcomes. In this study, Arko-Achemfuor (2019) employed a multiple case study approach, gathering data through participants' reflections on prior experiences, interviews, observations, and focus groups. While this approach demonstrated rigour, the extensive resources and time required for such comprehensive data collection were beyond the scope of this present study. Participatory action research has also been critiqued by other studies (e.g., Brydon-Miller et al., 2020) as being particularly challenging to researchers for various reasons, these include inconsistencies in its definitions and terminology, and uncertainties regarding control over the research process. In addition, the involvement of non-researchers can pose significant obstacles to achieving the desired outcomes, which can include the level of commitment from non-research members, along with their values and opinions, which can create additional complexities within the research process (Canlas & Karpudewan, 2020; Macdonald, 2012).

Other studies (e.g., Baard & Dumay, 2020) have highlighted that interventionist or action research has often been criticized for resembling consultancy more than traditional research. Conducting participatory action research in the present study would have necessitated an exploratory phase to identify limitations in Government-sponsored training schemes, conducting a needs assessment, designing a tailored training session, and then the facilitation of the programme. Given these requirements, this approach was deemed unsuitable for the current study due to time constraints and the bureaucratic requirements in securing approval for such an extensive project. Nevertheless, participatory action research offers a promising approach for future research to address some of the limitations in existing training intervention programmes, which have been identified in this study.

3.5. Data Collection Method

This study utilised an inductive research approach and qualitative method in the data collection process. Qualitative research employs various data collection methods, including interviews, focus groups, observations, fieldnotes, and audio-visual materials (Creswell & Poth, 2016; Merriam & Tisdell, 2016). For this study, thirteen semi-structured interviews were conducted through MS Teams, a video conferencing platform. This method was chosen to provide accessibility to participants in Nigeria while the researcher was in a different country. The technology also provided a cost-effective solution to gathering data for the researcher, ensuring that the interviews were conducted at the convenience of the participants (Heiselberg & Stępińska, 2023). The data collection took place over three stages, but was not longitudinal. The first stage was a pilot study conducted in May 2023, where three facilitators and two owner-managers were interviewed. The interviews for the main study began in June 2023, with four female owner-managers interviewed, and concluded in May 2024, with an additional four women interviewed that month.

3.6. Sampling Method

The study applied a purposive sampling method as the strategy because of the context of the project. Whilst training intervention schemes in Nigeria covered different vocational and technical skills, including bead-making, tailoring, and ICT, the study focused on the agricultural sector due to the internationalization focus of the Nigerian Government. With an economic diversification objective for sponsoring this type of intervention strategy in the agricultural sector, it was important to evaluate how these training schemes promoted and enabled internationalization. Therefore, by using a purposive sampling technique, the research focused on those participants who had attended a training intervention programme. The participants were also selected based on owning a smartphone and access to the internet, so that they could participate as the data was collected online. Although fifteen participants were considered an ideal number during the planning stage for the main study, the researcher, however, contend that saturation was reached (Naeem et al., 2024). Therefore, this number of participants were considered sufficient as the focus of the data collection process was to gain an in-depth and insightful understanding of female micro-owner managers' experiences of attending a training intervention session and not to produce generalised findings (Creswell & Poth, 2016). Furthermore, the interviews were conducted until no new information was produced or found (Mohd Ishak & Abu Bakar, 2014; Naeem et al., 2024). The rich and in-depth data collected were from participants who were considered to have "maximum variation" or differences in perspectives to enrich the study (Yin, 2016). Although other techniques, such as convenience and snowball sampling, were considered, purposive sampling was chosen to reduce bias and to gain varied opinions from the female owner managers, specifically from the agricultural sector.

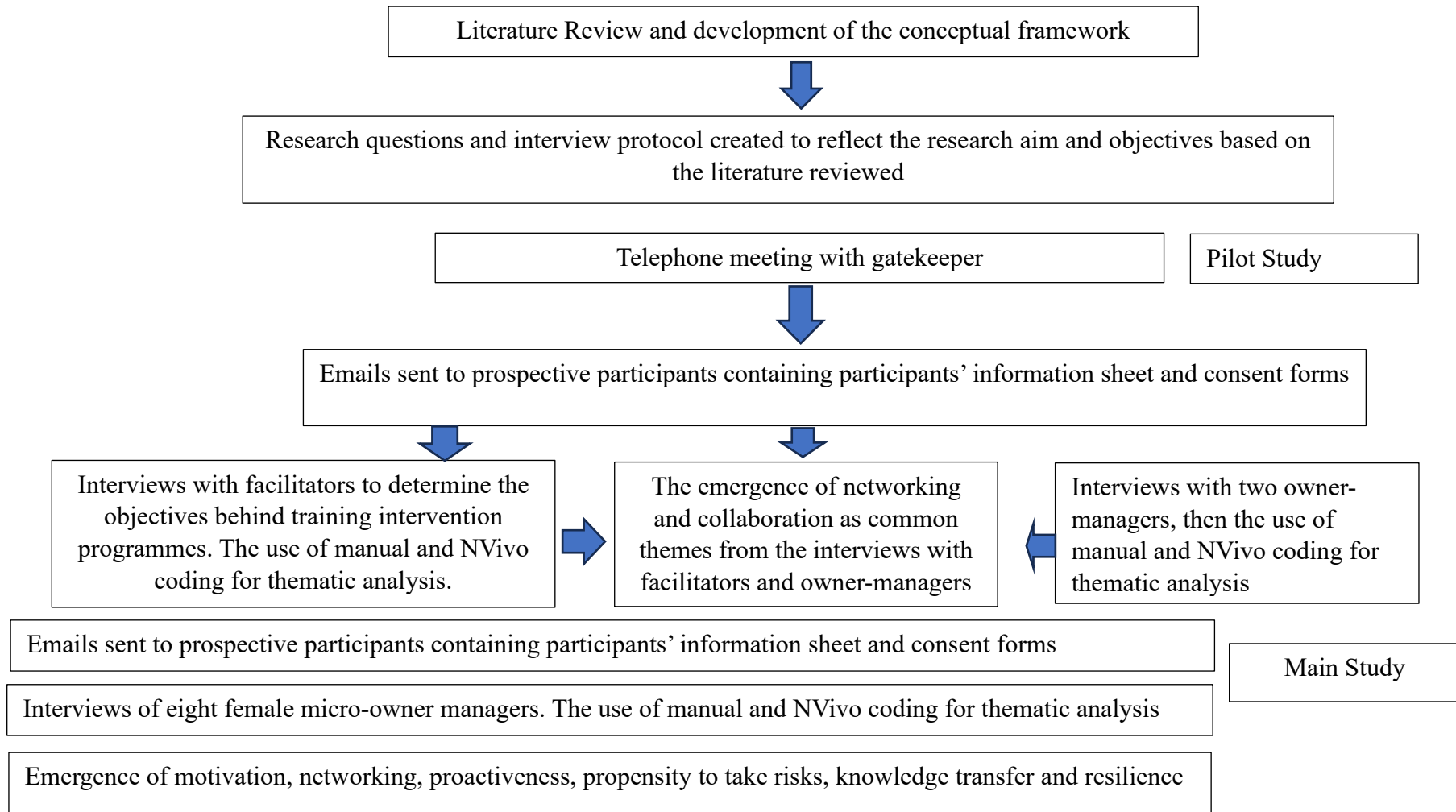


Figure 3.1. The Research Process. Source: Author

3.7. The Pilot Study

To test out the research instrument, it is important to conduct a pilot study to ascertain the viability of the research process. This is to establish rigour in the methodology applied and to ascertain the trustworthiness of the study (Ismail et al., 2017). For this project, a pilot study was conducted over MS Teams with five participants. The sample population for the pilot study was made up of three facilitators and two female owner-managers. The interviews with the facilitators were exploratory and were meant to determine the Nigerian Government's objectives for training intervention programmes and as a basis to determine the effectiveness of the training initiatives from the facilitators' perspectives. MS Teams was chosen for its convenience in reaching participants, despite the geographical distance between them and the researcher (Khan & MacEachen, 2022). Initial contact was established with a professional gatekeeper in April 2023 over a telephone conversation, which was followed up with email correspondence to inform the nominated participants of the purpose of the study. One of the facilitators, an employee of the Government parastatal in charge of training intervention programmes, acted as a gatekeeper. The second facilitator was a professor in Agriculture at a university in Nigeria, who taught on the agricultural programme, and the third participant was a private consultant who had provided micro-business support for entrepreneurs. For the owner-managers, one owned a micro enterprise in the agricultural processing value chain, while the other was a farmer-owner manager. Consent and participant information forms were sent to the interviewees before the interviews to get their signed consent, as presented in Appendices 2 and 3. The participants signed and returned the consent forms before the interviews were conducted. The pilot study helped to ensure that the interview questions addressed the research objectives and assisted in identifying possible areas that the interview instrument had not covered.

3.7.1. Pilot Study with Facilitators

The interview questions for the facilitators were designed around broad criteria on training intervention measures, including how training intervention schemes were aligned with the Government objectives, the process for participant selection, and the methods used to evaluate the effectiveness of these programs. This approach enabled the exploration of the facilitator's perspectives on the training schemes and the Nigerian Government's objectives for these initiatives. The responses from the facilitators

provided clarity on aspects of the intervention programme that the researcher was not privy to before the interviews and assisted in restructuring some of the interview questions to reflect the new information provided, particularly around the area of access to markets. Questions on export promotion and internationalization were removed from the interview protocol for the main study, as the pilot study revealed that the training initiative was focused on providing the women with access to local markets. At the conclusion of the interview, the facilitators were asked for their opinions on the interview questions, including whether the questions effectively addressed their intended purpose. This was designed to obtain expert opinions as to the relevance of the interview questions. The facilitators acknowledged that the questions were credible, with the added suggestion from Participant 3 to include the theme of taxation in the main, which was not considered, as it was not within the scope of the study. The facilitator's opinions were used to substantiate the female owner-managers' views, providing additional insight into themes such as empowerment and financial independence, access to markets, and networking, discussed in Chapter Four.

3.7.2. Pilot Study with Female Micro-Owner Managers

The pilot study involving the owner-managers provided further context on training intervention programmes in Nigeria and confirmed the credibility of the interview instrument. In the pilot study for the owner-managers, the interview questions also focused on their experiences with the training intervention scheme, as to the knowledge gained, the perceived effect on their internal capabilities and skills, along with the knowledge acquired, and then how this was applied when setting up and growing their business. Further questions emerged regarding the owner-managers' opinion on the influence of training intervention programmes on employment and business expansion, access to finance, and market information from the responses given by the women.

Again, like the facilitators, the owner-managers interviewed during the pilot study were asked for their opinions on the credibility of the interview questions to determine whether they effectively addressed the research objectives. Overall, the themes drawn from the pilot were similar between the facilitators and micro-owner managers, particularly networking and collaboration. The profile of the participants of the pilot study is shown below in Table 3.1.

Participant	Role	Years in Business or Experience
1	Private Consultant	15
2	Training Coordinator	10
3	Professor in Agric-Business	20
4	Owner Manager	2
5	Owner Manager	10

Table 3.1. Profile of the Pilot Study's Participants. Source: Author

3.8. Emerging Themes from the Pilot Study

The themes generated in this study were informed by existing literature (e.g., Grimm & Paffhausen, 2015; McKenzie & Woodruff), who identified employment creation, financial and management skills, and access to finance as constraints related to micro-enterprises that training intervention initiatives were originally designed for. However, further themes emerged through the interviews conducted, which are presented below.

3.8.1. Collaboration

The pilot study revealed that collaboration was important, particularly for the facilitators. The facilitators identified that collaboration was essential between Government agencies and micro-businesses, which aligned with the existing academic debate. Collaboration between farmers and private sector organisations provided access to existing markets, establishing the necessary infrastructure for rice farmers and facilitating buyers and sellers to meet through established associations, like the Farmers Association, which acted as a hub for network opportunities and provided information on accessing funds and marketing opportunities.

3.8.2. Network Opportunities

This theme was closely related to collaboration, specifically focusing on how female owner-managers' ability to network outside the training provision enabled these women to gain new marketing knowledge and techniques. Networking also provided the women with an avenue to share their experiences with other owner-managers. The female-owner managers interviewed in the pilot study outlined how networking helped them build

collaborative networks with their peers. This opportunity improved their product quality and provided an opportunity to access improved stock variety and new markets.

3.8.3. Access to Finance

Access to finance was a key outcome associated with the Government-led training intervention schemes, as the programme was designed to provide these female participants with start-up capital and other financial incentives. There were divergent opinions about access to funds after participating in a training intervention scheme. While the facilitators were of the opinion that the training intervention initiatives provided the participants with financial incentives and access to funds, the owner-managers indicated that finance was not readily available or accessible.

3.8.4. Employment

The facilitators identified that employment was a Government objective for sponsoring this form of training intervention initiative. However, the owner-managers believed that starting up a micro-enterprise would not reduce unemployment rates immediately. But on reflection, there was a recognised acknowledgement that job creation would be a direct result of the business growth, which could lead to these entrepreneurs employing new workers in the future.

3.9. Outcome of the Pilot Study

Pilot studies in qualitative research are widely recognized for their role in enhancing the robustness of the research process, improving quality, and strengthening validity (Malmqvist et al., 2019). The pilot study in this research added credibility to the instrument and facilitated the refinement of the interview questions. From the pilot interviews, the focus on female micro-owner managers in the agricultural sector was confirmed, which validated the questions asked. Feedback from the facilitators and owner-managers confirmed the feasibility of the main study and increased the researcher's confidence in focusing only on these female entrepreneurs. No ethical concerns arose during the pilot study beyond those anticipated and addressed prior to the research.

Emerging themes from the pilot study validated the usability and credibility of the interview protocol, enabling a degree of flexibility and adjustments to the questions when needed to ensure that the study's objectives were met. The interviews with the facilitators

explored questions around the objectives of the Nigerian Government and clarified the reasons for the Government-sponsored training intervention scheme. This helped to refine the study's focus on female micro-owner managers and poultry, fish, and rice farms as the agricultural sector to focus on. Testing the facilitators' interview protocol revealed that training intervention sessions often provided incentives for participants, opportunities to access Government funding, and insights into financial intervention incentives available to these farmer managers. These responses also informed the development of the interview protocol for the main study and provided further areas to focus on. At the conclusion of the pilot interviews, participants were asked for feedback on the interview questions, including their clarity and relevance to the stated research objectives. All participants confirmed that they understood the questions and that the questions asked effectively addressed the research objectives. The pilot study with both facilitators and female micro-owner managers disagreed with the assertion by Grimm and Paffhausen (2015) that these forms of training sessions tend to have very low influence on employment but a significant effect on product quality and internationalisation. Based on the outcome of the pilot study, the questions related to product quality and internationalization were excluded from the main study's interview protocol, as it was recognised that these entrepreneurs tended to sell their products to end-users and to export intermediaries only. This outcome indicated that the participants would not necessarily possess export knowledge, and the questions about product quality would therefore be irrelevant. The interview protocol for the main study was then adjusted to reflect these changes, including questions on the women's knowledge of funding opportunities available to them, access to local markets, and incentives received at the end of the training initiative.

3.10. Main Study

Careful consideration was given to the research data collection process, including the sampling strategy, the population being interviewed, the profile, and the sample size (Robinson, 2014). Although, Creswell (2014) contends that a qualitative research strategy is emergent and therefore does not require a fixed process. Robinson (2014) also stated that the sample population must be selected, and the sample size must be decided before the data is collected. Therefore, the sample population for this study was female owner-managers who had attended training intervention programmes for the agricultural sector. The sample size was drawn from a single state in northern Nigeria and eventually

consisted of eight female participants. Any female micro-owner manager who had not attended the training intervention session was rejected.

The business size was not considered, nor was their level of education a major criterion for the selection process. However, the majority of the participants had some form of education, with the highest being a bachelor's degree and the lowest, a diploma. This challenges the perspectives presented in existing literature (e.g., SMEDAN, 2017); Samujh, 2011; Zin & Ibrahim, 2020) which suggested that most women in the informal sector, or running or employed in a micro-enterprise, tended to have low levels of education, which was then used to justify the high rate of women entrepreneurs in this sector. The socio-demographic data did indicate that many female owner-managers in the informal sector of micro-enterprises were homemakers and structured their businesses around family life. These women often establish their farms close to or within their homes and utilize nearby markets, consequently limiting their product internationalization. This also meant that their access to the internet and mobile technology, over time, was limited.

The interviews were conducted online using MS Teams software in two phases to address this. The first group of interviews was conducted following the pilot study, while the second set took place after the manual data analysis of the first interviews was completed. The manual coding of the first interviews highlighted that the data gathered in the initial four interviews were insufficient, prompting the second set of interviews to address and mitigate this issue. The interviews were conducted at the female micro-owner managers' convenience, with some interviews conducted in the evenings and during weekends. Before the interviews began, the purpose of the study was reiterated to the participants, and their permission was also sought before the process was recorded. The first phase of the interviews in the main study was conducted in May/June 2023, and four female owner-managers were interviewed. The inclusion criteria for the study were that the interviewees needed to be female and had attended a training intervention session for the Agricultural sector.

The interview transcripts were generated using MS Teams transcription software, then checked and cleaned by playing back the interview recordings to ensure that the automated transcripts accurately captured the data. Corrections occurred when the automated transcripts did not capture the right words or meaning. Consideration was given that English was a second language for all participants; therefore, replaying the

recordings was crucial to accurately capture their words, especially those spoken in local dialects or incorporating local slang used to express emotions as the women shared their experiences (Rolland, 2023). At the end of the initial data cleaning phase, which also included in vivo coding, it became imperative to conduct further interviews as the data from the four female owner-managers proved insufficient. Although the focus was on the quality of the data, not quantity, conducting further interviews to explore the emerging themes from the first phase provided further depth and added additional rigour to the research.

The second phase of the interview process took place in May 2024, with four more interviews conducted. These interviews brought additional insights into the Government-led training schemes and provision, as some participants in the second phase had entirely different experiences after attending this initiative. This enriched the data collected and provided fresh insights into these female participants' experiences. However, the researcher reached saturation at this second phase as no new themes emerged at this point. The concept of data saturation, applied in this study, aligns with the view by Naeem et al. (2024) that saturation can be considered to have been reached where no new information emerged from the data being collected. From the perspective of this study, although there were areas of divergence of perspectives, particularly around financial incentives received after the training sessions. Some participants claimed to have received additional financial incentives when their farms were inspected, while others claimed not to have received any funds other than the stipends awarded during the training sessions. Nevertheless, there was a shared view on the benefits of the training initiative attended was echoed by all participants of the main study.

3.11. Participant's Profile

Eight female participants were interviewed in the main study, bringing the total number of female micro-owner managers interviewed in the study to ten. These women were all attendees of an agricultural sector-focused training intervention programme. To ensure anonymity, the participants are identified by numbers signifying the order of their interviews, together with their business type, number of years' experience, and employee numbers, as shown below in Table 3.2.

For example, Participant 7 had been in business for 10 years before attending a training intervention programme. Participant 8 had been in business as a rice farmer like her

parents, while Participant 6 had begun her business after attending a training intervention session for the agricultural sector. All participants except Participant 11 had set up or expanded their business after attending and participating in the training. Participant 11 had, however, not started her business due to insufficient funds, although she was incentivised at the end of the training programme. These participants had attended training sessions on rice farming, piggery, poultry, and fishery, but the majority of the interviewees were fish and poultry farmers. This emphasis on fish and poultry could be attributed to the low cost of setting these businesses up compared to rice farming and piggery, which were more capital-intensive and required land.

Participant Number	Role	Business Type	Years in Business	Number of Employees
6	Owner Manager	Fish farm	3	5
7	Owner Manager	Fish and poultry	10	7
8	Owner Manager	Rice farm	1	1
9	Owner Manager	Fish and poultry farm	2	5
10	Owner Manager	Poultry farm	6	0 as the children helped with the business.
11	Attendee	Poultry farm	0	0
12	Owner Manager	Poultry farm	5	0
13	Owner Manager	Poultry farm	3	0

Table 3.2. Demographic Characteristics of Participants. Source: Author

Contact with the participants was established through a professional gatekeeper who informed potential interviewees of the purpose of the research before sharing their email and phone number with the researcher. Personalised emails were sent to the participants, and then follow-up phone calls were made to inform the participants to check their emails and to remind them of the interview schedule. For the main study, a total of eleven participants were contacted, one was excluded from the interview process as she had only finished her training programme a week before the interview and did not meet the inclusion criteria of length of time from attending the training session and having six months of experience. This six-month period gave the participants time to implement lessons from the training sessions to set up a business or grow their existing enterprise. The interviewees were allocated the interview slot based on their availability, with some interview sessions needing to be rescheduled due to poor internet access.

Informed by the pilot study and the information obtained from the facilitators, the interview questions were focused on the participants' understanding of the Nigerian Government's objectives for this form of training. The participants were asked to give an overview of the training session they attended and received, the length of the programme, and what it involved. They were then asked questions about their perspective of the training they attended, along with the activities and content covered.

In drafting the interview guide, the interview questions were developed following constructs outlined in existing literature (e.g., Chinen et al., 2017; Grimm & Paffhausen, 2015; McKenzie & Woodruff, 2017). The participants were asked about employment and business growth, such as “comparing your previous experience to now, after one year, tell me about your experiences,” or “What has changed, or what has improved?” These questions prompted the participants to reflect on their experience during and after the training intervention programme. the interviewees were also asked how the training intervention scheme had helped them increase their market share and access to finance, which has been identified as a major focus in the Nigerian Government's intervention agenda (Joseph et al., 2021). To determine how the training received had influenced the women's internal capabilities, the participants were asked about how the training sessions influenced them to start-up and grow their businesses, the extent to which the training sessions encouraged the women to network and how their network had evolved since attending the training sessions. The responses given by the women on how training sessions influenced the start-up and growth of their micro-Agric businesses inferred that this initiative encouraged the female micro-owner managers' propensity to take risks and

self-efficacy. Interestingly, some of the participants had no business experience prior to attending the training scheme, therefore, the propensity to take risk and improved self-efficacy demonstrated by the women can be attributed to participation in the training programme. This interpretation is reinforced by the participants' views as evidenced in Chapter Four.

At first, some of the participants were reluctant to share their experiences. To address this, the researcher reiterated that the study was an independent project and was completely anonymous. This reassured the participants, who were more open to discussing their participation in the training and how they transferred the acquired knowledge to set up or improve their businesses. The longest time that some participants had attended a Government-sponsored training intervention scheme was three years, while the latest was two weeks before the interviews. The participants were asked to state which sessions they attended and the programme's organizers to confirm they had attended a Government-led intervention programme.

At the end of the interviews, the participants were asked if they had any questions or additional information they would like to share. Some participants asked the researcher whether she could help support their business with finance from the Nigerian Government. The researcher reiterated that she was an independent scholar but directed them to the gatekeeper and his parastatal as the best resource to acquire such information. The interviewees were then asked whether they would be prepared to be contacted in the future for further information, which they agreed to.

3.12. Data Analysis Strategy

Data analysis is a continuous process in qualitative research; therefore, it should be completed simultaneously with the data collection (Taylor et al., 2016). To achieve this, the researcher should be immersed in the data collection process to identify themes and concepts (Farquhar, 2012). This view was supported by Merriam and Tisdell (2016), who emphasized the need to draw out themes from the interviews and incorporate them into future interview questions as the data collection process is ongoing. Reflecting this, the researcher adapted the method proposed by Merriam and Tisdell (2016) by asking the interviewees questions based on emerging themes from their responses or other participants' responses. This was designed to clarify any misunderstanding or to draw out areas of similarity or difference in the participants' responses.

During the main stage of the data analysis process, this study adopted a thematic approach as it provided the structure and reflexivity suitable for qualitative research (Mackieson et al., 2019). The thematic analysis in this study involved coding patterns based on themes, patterns, or meanings that emerged from the textual analysis of the interview transcripts. This strategy was considered ideal as the approach enabled the pilot and main interview data to be used to identify and then generate patterns and themes from the participants (Braun & Clarke, 2012). To establish trustworthiness, this study followed the six phases of thematic analysis as outlined by Braun and Clarke (2006), Nowell et al. (2017). This process began with data familiarization, which commenced with the cleansing of the transcripts and replaying the recordings of the interviews. This phase also involved triangulating the data by comparing the perspectives of the facilitators in the pilot study with those of the female owner-managers, together with the literature. The next part of the thematic analysis process involved generating initial codes from the interview transcripts. Merriam and Tisdell (2016) identified coding as the first step in qualitative data analysis. The coding process used an iterative inductive approach, where the coding of the participants' words began during the interviews and continued through the review of the transcripts. New codes were identified from the participants' words.

3.13. Overview of the Main Study

The main study focused on female farm owner-managers' experiences of those who had started or owned an agricultural business but attended a Government-led training intervention programme. These female entrepreneurs included poultry, fishery, or rice farm owners, with some having a combination of both poultry and fishery stock. Confirming the pilot study, these female owner-managers agreed that they received incentives during the training session, with other benefits being offered, including covering the transportation costs to attend training sessions, along with receiving start-up packs, called "stipends." These start-up packs included poultry feeders and drinkers, rice seedlings, and fish fingerlings. The female owner-managers also confirmed that they were given certificates at the end of the programme, but access to funds and finance was more problematic.

3.14. Analysis of the Main Study's Findings

Analysis of the main study followed the same pattern as the pilot study, beginning with a manual coding approach with codes assigned to existing themes informed by the literature or the pilot study, and then creating new ones when needed. The transcripts were then uploaded into NVivo for further analysis, which provided further structure and rigour, as some themes

led to some of the themes being merged with others and enabled the visualisation of the data. At this stage, the themes were classified under three broad headings representing the three research objectives, and a fourth new theme was created to represent the challenges faced by these female entrepreneurs. At the end of the NVivo data analysis stage, four themes were identified, with one theme having six codes, which are presented below.

3.14.1. Influence of Training Intervention on Female Micro-Owner Managers

The main study adopted a narrative approach for some interviews as the female micro-owner managers were asked to recount their business journey, how they started their enterprise, and what changes have been made since attending the training scheme. The female micro-owners were also asked how they have improved as entrepreneurs since attending the training initiative. This question was focused on identifying how the training session had influenced the female micro-owner managers. For those women who started their business before attending a training session, they outlined how the programme helped them redefine and expand their businesses by identifying what they were doing wrong and correcting these mistakes to improve the farm's yield.

3.14.2. Influence of Intervention Programmes on Female Micro-Owners Managers' Internal Capabilities or Skills

A recurring theme from the main study, which matched those from the pilot, was the importance of networking and knowledge sharing. Knowledge transfer was seen as an important internal capability. The female owner-managers were asked how they transferred the knowledge gained from the training programmes into their businesses. Those entrepreneurs who had employees indicated that knowledge transfer within their Agric-business was mainly through on-the-job training, although some of the female micro-owner managers talked about teaching people outside their business but within their social circle, such as friends and neighbours.

The ability to network theme highlighted the theory of self-efficacy, as these female entrepreneurs described seeking and sharing knowledge through their networks and applying it to their businesses after attending the training session. There was a strong emphasis on using social media such as TikTok to learn new information and farming practices, along with using WhatsApp for networking purposes. Other internal capabilities and skills needed included the importance associated with partnerships between farmers and marketers, which was facilitated through the Farmers' Association and linked to the ability to network. The female micro-owner

managers identified the Farmers' Association as a channel to increase their market share, sell their products to new customers, and gain market information.

3.14.3. Influence of Training Intervention Programme on Female Micro-Owner Managers' Managerial and Entrepreneurial Capabilities and Knowledge

In addition to the themes above and those from the pilot phase, the main study confirmed the findings identified in the existing literature (e.g., (Chinen et al., 2017; Dladla & Mutambara, 2018; Z. Ismail, 2018; Mayuran, 2016) about the influence that training intervention schemes can have on female owner-managers' managerial and entrepreneurial capabilities. The theme of financial management emerged as a confirmation that this intervention initiative can influence female micro-owner managers' managerial capabilities and knowledge. In the context of this study, this was supported by the necessity for knowledge as to how to manage their resources, highlighting that not only finance or funds were important, but other resources needed to be managed effectively to grow their Agric-business.

3.14.4. Challenges Faced by Female Micro-Owner Managers

Although not included in the research objectives, themes around challenges faced by these female entrepreneurs emerged from the main study. The themes around financial limitations and the Government not keeping its promise are linked to accessing the necessary finance or funds. This emphasized the potential limitation of the training intervention initiative in meeting the Nigerian Government's objective to improve female micro-owner managers' access to financial incentives and funds.

3.15. Ethical Issues and Considerations

The data collection process adhered to the University of Gloucestershire's handbook of principles and procedures, research ethics (2020). The researcher ensured that the participants were comfortable with the research process and were reassured of anonymity before and throughout the interview process. The participants were made aware of the nature and purpose of the study. To achieve this, participant information sheets were sent out together with consent forms. The participants were also informed that they could withdraw from the interview at any time, and their permission was sought before all recordings began as the interviews were conducted remotely via MS Teams (Taherdoost, 2022). This usage of MS Teams meant that the participants could take part in the interview in a familiar environment and in the comfort of their home. The participants were informed that they could turn off their camera if they wanted.

The interview questions were not provided to the participants in advance; however, the participant information sheets sent to the interviewees gave them an overview of the study.

All participants were informed that the interview recordings and transcripts would be saved and stored securely for a prescribed period and then destroyed. Some participants chose to show their faces during the interviews, while others chose to remain anonymous. However, all participants were assured of anonymity, and their names were removed from the transcripts and coded as Participants 1 to 13, beginning with those who were involved in the pilot study.

There was no conflict of interest as the researcher had no direct link to any participants. Although the power dynamics between the interviewees of the main study and the gatekeeper may be considered to have a significant influence, being a facilitator and member of staff in the Government parastatal, the participants were repeatedly assured that the research was independent of the Government agency, and their participation remained confidential. The relationship between the researcher and the participants was open and interactive, as the interviewees were allowed to ask questions (Anderson, 2017).

3.16. Credibility of the Data

Validation in research is a process of confirming the accuracy of the findings (Creswell & Poth, 2016). Key criteria for measuring quality in qualitative studies are credibility, trustworthiness and authenticity (Creswell, 2014). Denzin and Lincoln (2018) included transferability, dependability and confirmability to the criteria when determining the quality of the qualitative data. To ensure the credibility of the study, a major consideration was to use data from multiple sources. Creswell (2013) contended that credibility can be determined in three ways: using several types of data to draw out similarities or differences in the data analysed, seeking expert opinion on the results obtained and critiquing the results to draw out deeper meaning from the data.

Triangulation was considered which is a method used to achieve in depth understanding of a phenomenon from multiple data sources and to validate the findings (Busetto et al., 2020). In the study, triangulation was conducted by comparing the responses from the participants with the data from the pilot study and the current academic debate (Flick, 2018). Triangulation ensured that the study met the credibility standard and showed rigour in the data collection and analysis process. Connelly (2016) stated that rigour and the degree of confidence in the data collection and analysis method characterizes the reliability or trustworthiness of the research

process. This required that the researcher utilise all the data collected and ensure that the data analysis process was as rigorous as possible. This included going back to the participants for follow-up interviews or asking for clarification on unclear details during the interview process to show the dependability of the data (Ahmed, 2024).

Like reliability in quantitative studies, it is important that the data is constant, meaning that another researcher should be able to verify the data and have it confirmed as being consistent. It is also important that the research is useful to people in other settings (Connelly, 2016). This consideration is very important as the study is intended to influence policy changes in future Nigerian Government-sponsored training intervention schemes. While qualitative data cannot be generalised, it is however, imperative that the researcher presents the participants' views realistically, that inferences from the data are appropriate and that readers are made aware, how the research process reached the conclusions presented (Roberts et al., 2019). To this end, Creswell (2014) included member checking, bias clarification, discussing contrary information that could emerge from the data, the use of external reviewers to assess the research process as other ways to validate research and ensure transparency.

To establish reliability, the researcher sought expert opinion from the research supervisory team in coming up with the interview protocol and the process followed. The researcher also maintained contact with the participants throughout the data analysis process to ensure that participants' perspectives were captured effectively. Follow up calls were made to participants to clarify aspects of the interview that were not clear to the researcher. Data from the facilitator in the pilot phase was also used to triangulate the outcome to establish reliability and clarity of responses from the female entrepreneurs. An external academic was asked to review the findings and themes, matching them against the research objectives to ensure that the interview instrument was credible. To validate the data collected, the researcher adopted the data quality evaluation standard as stipulated by Lincoln and Guba (1985), and Creswell and Poth, (2016). These criteria in measuring quality in qualitative research was confirmed by Denzin and Lincoln (2018), while the quality criteria as to trustworthiness was achieved by following Lincoln and Guba's (1985) strategy.

3.17. Transferability

The Government-sponsored training initiative is a nationwide programme in Nigeria, and there may be some level of transferability if the interview protocol is reused in a different state within the country, and with participants on the same scheme. However, the focus of this research was

not to generalise the findings therefore, transferability may not be as important as dependability (Drisko, 2024).

3.18. Dependability

Although, qualitative research cannot be generalised, it is important to ensure that trustworthiness is established in the research process and that the authenticity of the data collection process is maintained. To assist in understanding the findings of this study, the data strategy has been fully justified as to each step taken to ensure that rigour has been applied to the collection and analysis process. While arguably the data collected can be replicated within the Nigerian context and across participants of the same training intervention scheme, the subjective nature of the research determines that the responses may be different (Zia Ul Haq et al., 2023). As a result of the subjectivity of qualitative research, Connelly (2016) contended that keeping a process log during the data collection process and periodic feedback with a colleague or fellow researcher improved the authenticity of the research. In line with this view, the researcher kept both digital and written notes of observations during the interview and the analysis stages, some of which included annotations made in the interview transcripts. Excerpts from the interviews were also included in the findings to authenticate and show the dependability of the research.

3.19. Conformability of the Data

To further enhance the trustworthiness of the study, the researcher adopted an etic approach in the data collection process to reduce potential bias. This was further enabled by using MS Teams to conduct the interviews. Being an outsider to the organisation and the training intervention programme reinforced the etic approach adopted by the researcher to prevent bias during the data collection process. This reflexive position ensured that the researcher could maintain a bias-free stance while interviewing the female owner-managers (Mackieson et al., 2019). However, given the subjective nature of the study and the selection of female entrepreneurs as the sample, there was an interchange of perspectives from etic to emic during the interview process. This was in relation to the researcher's view as an industry practitioner and a female owner-manager in her own right. To further reduce bias, the participants were asked to confirm answers given during the interview to ensure that the researcher had captured their subjective experiences and views.

3.20. Limitation of the Study

Writers, including Brown (2022) and Tremblay et al. (2021), have identified both advantages and disadvantages of online interviews, which gained popularity because of the COVID pandemic. Conducting online interviews eliminated the cost of traveling to meet each participant in their business environment, some of which were in remote locations. Using MS Teams also produced auto-generated transcripts, reducing the time spent transcribing the data. However, online interviews also presented several challenges, as outlined by Brown (2022), including the ability to establish trust. Trust building was considered a limitation when using online interviews, and this was the case in this study, as some of the participants were reluctant to discuss the financial incentives received or income generated from their business following their attendance in the intervention scheme. Nevertheless, this was not considered a significant limitation as the study focused on subjective views and experiences, not on the income generated.

Methodologically, the study utilized a qualitative approach in the data collection process, which presents a challenge with the subjectivity of the participants' views, meaning that the findings could not be generalised. However, studies on the effectiveness of training intervention schemes are limited in Nigeria, and a qualitative methodology addresses this limitation and rejects the requirement to generalise the outcomes.

3.21. Role of the Researcher

A researcher's role differs between conducting a qualitative and a quantitative project. Qualitative research requires that the researcher interact with the participants (Taylor et al., 2016). In this study, the researcher was an outsider to the subject or theme being studied or observed but had some personal or professional bias that needed to be recognised and acknowledged (Creswell, 2014). The researcher's experience as a female micro-business owner in Nigeria provided an emic perspective and may have been a source of bias in the data collection process. However, this was mitigated by acknowledging this possible bias that could have occurred during the data collection stage, then taking a neutral stance during the interview stage (Merriam & Tisdell, 2016). However, this background also enabled her to consult the participants to confirm that the meanings inferred from their words were consistent with the ideas expressed by recapping their responses before moving on to the next question during the interview process, along with asking for further clarification when the meaning was unclear during the analysis process (Rashid et al., 2019). Furthermore, the researcher, as an outsider,

presented a different challenge to the interview process, which required trust and rapport to be built to foster a cordial interview process. To build trust, the researcher assured the participants that the research was completely independent, and all information shared would be kept confidential. The researcher also avoided pushing for participants to share financial information from their business or financial incentives received from attending a training intervention programme. Trust was also built by going through the gatekeeper, an authority figure familiar with the participants. The use of semi-structured and open-ended interview questions also gave the participants freedom to own their narrative and share their experiences (Creswell, 2013). An outline of the methodology sequence detailing the link between literature review, methodology, and the data collection process is included in Figure 3.2.

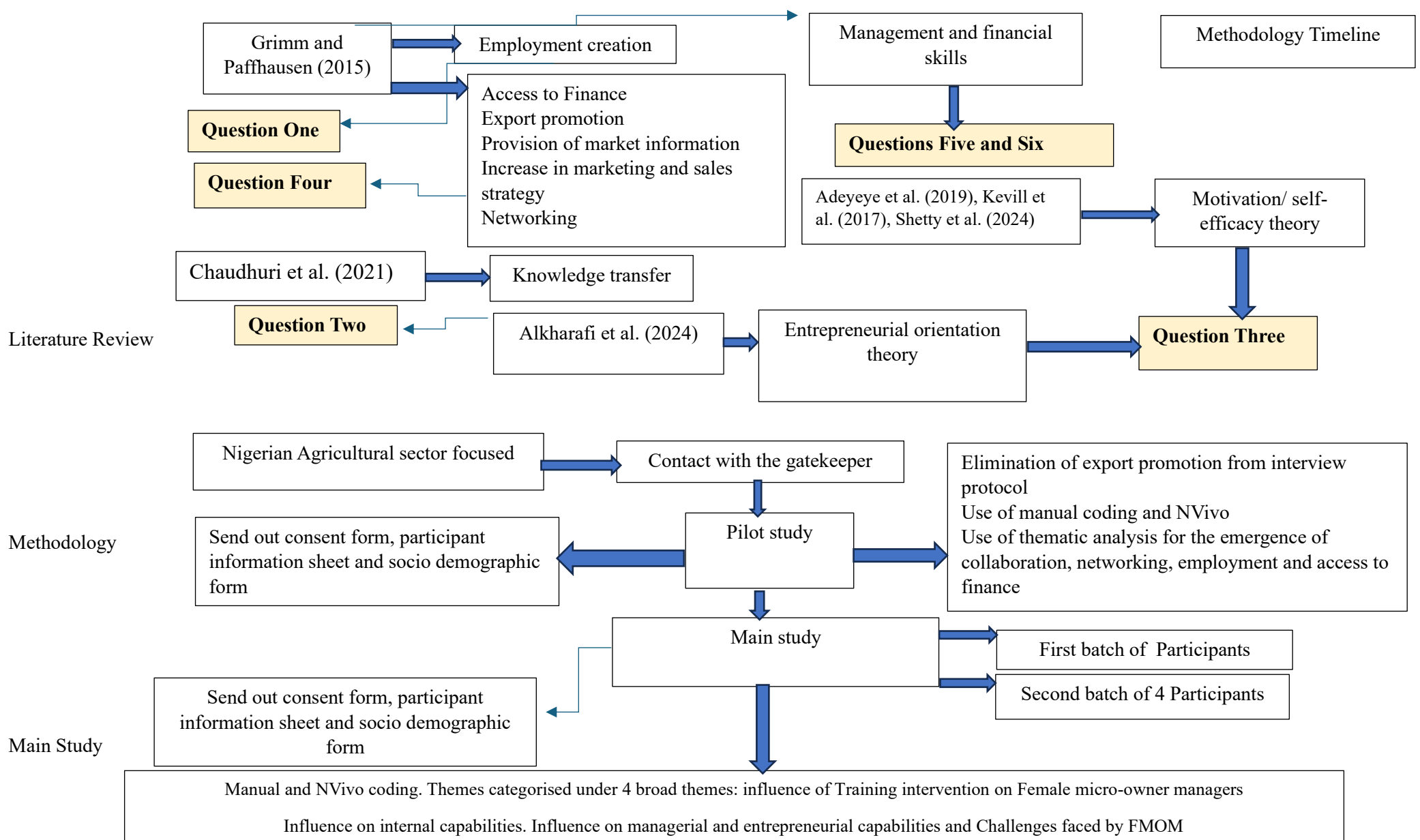


Figure 3.2. Methodology Sequence. Source: Author

3.22. Chapter Summary

This chapter has set out the methodology adopted in this study, commencing with the researcher's ontological, epistemological, and axiological perspectives. The research approach for the study used a constructivist worldview with an interpretive perspective. Several other research methodologies were considered, including the interpretative phenomenological analysis strategy, but the chapter has justified the choice of using an inductive interpretivist strategy. Part of the justification was based on the limited studies on training intervention schemes available for female micro-owner managers in Nigeria, an inductive approach was adopted to explore these women's experiences in depth to gain a critical insight into how these training schemes had influenced them.

In line with the inductive approach adopted in this study, a qualitative method was used for the data collection strategy, using semi-structured interviews as the research instrument. The sample population for the main study was eight female micro-owner managers who attended the training intervention scheme designed for the Nigerian agricultural sector. Prior to the main study, a pilot was conducted with three facilitators of the training provision and two owner-managers who had recently attended the training initiative. In line with the University's ethics guidelines, informed consent was sought in writing from the participants prior to the pilot and the main studies; a sample of the consent form is attached in Appendix 2. The participants were assured of the confidentiality of the data and anonymity both in writing and before the interviews were recorded. The researcher ensured that the participants felt comfortable answering questions and the participants were assured that they could withdraw from the interviews at any time.

The study utilised manual coding and then NVivo during the analysis stage to identify emerging themes as presented in Appendix 6. From the pilot study, employment, collaboration, networking opportunities, and access to finance and funds were prominent themes. However, questions on export promotion identified in Grimm and Paffhausen (2015) were removed from the interview protocol as the pilot study revealed that the female micro-owner managers were not export-focused. Conducting both manual and NVivo coding in the main study produced four main broad themes centred around three of the research objectives as identified in Chapter One. This chapter has justified the steps taken to ensure that rigour was applied to the qualitative data being collected and then analysed, which commenced with the pilot study,

which followed Lincoln and Guba's (1985) criteria for establishing trustworthiness in qualitative research.

Possible biases, including the researcher's positionality, were recognised, minimised, and addressed. This included the recognition that the researcher's axiology was value-laden, given the ontological and epistemological perspectives adopted in the study. Given the research process outlined and discussed in this chapter, the findings from the pilot and main study analysis were also reviewed and revised to ensure minimal bias.

Chapter Four

Findings

4.1. Introduction

Existing research into intervention programmes in Nigeria (e.g., Joseph et al., 2021) have been predominantly focused on financial schemes. This has created a gap in existing literature on how training intervention programmes can assist in meeting Government objectives such as job creation and access to finance for female micro-owner managers. The majority of existing research in this area, as noted by Adamgbe et al. (2020) have been collected using quantitative methods rather than understanding the actual experiences of these entrepreneurs. Therefore, this study addressed this limitation in methodology by adopting a qualitative method to address the research objectives outlined in Chapter One. The data collection process addressed three of the research objectives outlined in section 4.1, in this findings chapter.

This chapter will present the findings generated from the qualitative study. The data analysis of the main study produced 5 main themes and 17 sub-themes, which were encapsulated or grouped into three overarching concepts, which addressed the research objectives as outlined in Chapter One. The sub-themes emerged from three areas: emergent themes from the literature review, the outcome of the pilot, and the data generated from the main study which was focused on the experiences of these Nigerian female micro-owner managers. Some of the women were more eager to share their experiences than others despite being reassured that their responses would be anonymised. The dominant voices included in this findings chapter are from participants who were considered to be *success stories* from the training intervention programmes conducted in Nasarawa state, Nigeria, which was contextualised by Participant 1 in the pilot study, who indicated what could be seen as a successful female entrepreneur:

“.... Yes, we refer to them as success stories, and they are well known. Now, people come to share how the training they received has transformed their lives. So, we have them, success stories, who often attend many of our trainings without fail”
(Participant 1)

In this study, Participant 6 was considered a training intervention success story, and her voice is dominant throughout this chapter. She recalled her experiences initially attending the training intervention programme through setting up and then growing her Agribusiness while meeting various challenges.

This chapter will commence with analysing the interviews by presenting a table, Table 4.1, which outlines the main themes and sub-themes. A visual representation of the research objectives, research questions, and themes was matched against the research questions as shown in Table 4.2. The findings will be detailed in sections 4.3 to 4.5, outlining the three main themes generated. Section 4.3 presents the influence of training intervention programmes on female micro-owner managers, before section 4.4 explains the influence of training intervention programmes on these women entrepreneurs' internal capabilities and skills, while section 4.5 sets out these participants' entrepreneurial and managerial capabilities. Finally, a summary of the findings is in section 4.6.

4.2. Analysis of the Interview Data

A total of thirteen interviews were conducted for this study, five interviews for the pilot or testing stage, consisting of three facilitators and two female micro-owner managers, while eight female micro-owner managers were interviewed in the main study. Following this, a two-step analysis strategy was conducted, commencing with manual vivo coding, before using NVivo, which enabled the generation of a codebook listing the main themes and the sub-themes, as presented below in Table 4.1.

Theme or focus	Outcome and description
Influence of training intervention programmes on female micro-owner managers	
Establishment of a local market	The female participants were able to identify buyers and suppliers, while also being able to sell their farm produce in local markets
Employment opportunities	The increase in job creation opportunities in the Agric-business, which started after attending the training intervention programme
Empowerment and financial independence	The benefits gained from starting a business after attending a training intervention programme
Access to finance	Refers to grants, loans, and financial incentives which were promised or received after participating in the training intervention scheme.
Female micro-owner manager's entrepreneurial and managerial capabilities including skills and knowledge acquired	

Theme or focus	Outcome and description
Financial and resource management	How these female entrepreneurs' capability to plan and manage their finances and other resources were enhanced.
Marketing capabilities	The usage of social media to market farm produce and increase their market reach.
Record-keeping	The skill needed to keep accurate records of expenses and profits from their Agric-business
Female micro-owner manager's internal skills and capabilities	
Ability to network	To be able to build external relationships and access resources to grow their Agric-business
Knowledge transfer	Female owner manager ability to share information gained from the training intervention programme
Motivation	How their internal motivation and self-belief had been enhanced
Proactiveness	The ability to act strategically to creating and developing an Agric-business
Propensity to take risks	The willingness to take risks in relation to creating and expanding their business

Theme or focus	Outcome and description
Resilience	The ability to recover from challenges faced in running their Agric-business
Challenges faced by female micro-owner managers	
Financial limitation	The constraints experienced by these female entrepreneurs as to accessing finance and funds
Government not fulfilling promises on financial support	The Nigerian Government's lack of commitment or promised financial support
Limited access to land	The limited access to land for crop farming
Extreme weather and shortage of water	The challenge associated with adverse weather and water shortages

Table 4.1. NVivo 12 Codebook and descriptions. Source: Author

The codebook above outlines the themes that addressed the three research objectives and is presented below in Table 4.2.

Research Objectives	Research questions	Themes
To critically assess and evaluate from how training interventions have influenced Nasarawa state micro female owner-managers.	How has Government-led training intervention programmes influenced your business and in what areas have you experienced growth?	• Establishment of a local market (drawn from main study and pilot study) • Employment -drawn from literature review (Grimm & Paffhausen, 2015) • Empowerment and financial Independence drawn from pilot study • Access to finance- drawn from literature (Joseph et al., 2021)
To critically analyse and evaluate from the findings, how micro-owner managers' internal capabilities have been enhanced following attending a training intervention programme provided by the Nigerian Government in Nasarawa State.	How have you transferred the knowledge gained from the Government-led training sessions into your business. Have you cascaded this newly acquired skills to your staff following attending these trainings? How has attending a Government-led training programme improved your capabilities as a business owner and what capabilities have improved?	• Knowledge transfer - (Chinen et al., 2017) • Motivation (Adeyeye et al., 2019; Kevill et al., 2017) • Proactiveness (Alkharafi et al., 2024; Lumpkin & Dess, 1996) • Propensity to take risks • Resilience (drawn from the main study)

	How have you built networks since attending the Government-led training event and on reflection how valuable have these activities assisted in business networks?	• Ability to network (Grimm & Paffhausen, 2015)
To critically analyse and evaluate from the findings, how Nigerian training intervention programmes have influenced micro-owner managers' entrepreneurial and managerial capabilities in Nasarawa state.	Are there skills you have gained from participating in these Government-led training sessions that you did not possess prior? How have you improved your business operations after attending Government-led training sessions, and on reflection, what parts of the business operations have improved, and how?	• Marketing capabilities (drawn from main study) • Financial and resource management • Record-keeping (drawn from main study)

Table 4.2. Linking research objectives, research questions, and themes. Source: Author

The table above, Table 4.2, illustrates how the themes were generated, identifying topics from the existing literature and those from the pilot and main studies. It is important to note that some themes identified from existing literature, such as access to finance and employment, were also identified as being the Nigerian Government's objectives for instigating this form of initiative. To critically assess the influence of training intervention programmes on female micro-owner managers, the first research question asked these female entrepreneurs *as to how the Nigerian Government-led training intervention programmes had influenced their business and in what areas have they experienced growth*. The themes identified from the participants' responses were employment, empowerment and financial independence, and access to finance or funds. These themes were categorised under the central theme of the study, which will be presented below in section 4.3.

4.3. The Influence of Training Intervention on Female Micro-Owner Managers

In evaluating the influence of a training intervention programme on female owner-managers in Nasarawa state, Nigeria, the findings indicated a positive influence on the setting up of micro-businesses. The study evaluated the participants' business status before and after attending the Government-led training scheme. Although some participants were already in business before attending the programme, a significant number had only started their business after participating in the training session. The findings identified that training intervention programmes assisted these female owners in gaining and enhancing their business skills. This included the ability to identify and establish local market contacts with suppliers and buyers while enabling these individuals to network with other entrepreneurs. From the interviews, there was an acknowledgement that the Nigerian Government offered and supported farm owner-managers to establish local market contacts by encouraging the formation of associations that not only linked them to other farmers, as outlined in Attamah et al. (2025) for networking purposes, but created an information hub, which linked these female owner-managers with buyers.

“Government also provided interventions by linking... I mean by encouraging farmers to form associations so that they can access credit facilities from the Government” (Participant 5).

Part of the Nigerian Government's support to these farm owners was also to encourage the creation or joining of associations through which micro-farmers could gain access to Government finance. These female micro-owner managers tended to struggle to get the funds needed but stood a better chance of attaining the finance by accessing funds as a group rather than as individuals. This finding aligns with those of Onyishi et al. (2022) who contended that farmers often resort to community-based organisations to access finance. These informal credit facilities through community-based organisations and Farmers' Associations were established to address the disparities in access to credit facilities faced by farmers in Nigeria and Sub-Saharan Africa. The Association of Farmers also provided these female owner-managers with access to training and informative networking sessions.

“How did I get my market link? OK, it was through the training we attended every month. Those interested in buying fish also show up, and they provide their contact

details, so we reach out to them anytime the harvest is ready. That is how we sell”

(Participant 6).

Participant 6 explained that attending regular monthly meetings at the Farmers’ Association provided an opportunity to learn and gain connections with potential buyers who also participated. By sharing contact details with prospective buyers, these female micro-farmers were able to establish a market for their products at harvest time.

For the participants who were already in business prior to attending the training programme, these sessions provided a new opportunity to sell their farm produce.

“...before I would call my neighbour to buy my produce, and I would only sell about a thousand to 10 thousand worth in Naira. But during the training, we were instructed to go to the market and establish contact with buyers. So, after the training, I went to the market and got buyers who bought all” (Participant 7).

Reflecting on the influence of the training attended, Participant 7 acknowledged that there was a shift from selling to neighbours to a market-focused approach, which enabled her to reach a wider range of buyers, leading to an increase in sales because of the training sessions she attended. The training intervention programmes also increased female owner-managers’ confidence to start or expand their business. These sessions included providing start-up packs with various incentives offered at the end of each training programme, such as financial assistance, seedlings, livestock, and basic equipment.

“...They [training coordinators] gave us some seedlings just like these palm trees I told you. Yeah, they give them to us and other trees, like banana and others”
(Participant 8).

Recounting her experience of the training intervention programme she attended as a rice farmer, Participant 8 stated that she was also encouraged to plant cash crops on her farm with improved seedlings of crop species, palm trees and bananas which were distributed to trainees interested in rice farming.

“.... We were given some seedlings just like these palm trees I told you. As well as other trees, like banana and others” (Participant 8).

The response from Participant 8 on the seedlings given to trainees as part of the incentives provided to rice farmers also confirmed information provided by Participant 5 as to the Nigerian Government's support for cash crop farmers:

"...the Government has provided an enabling environment through setting up credit facilities from the banks for farmers to access and to liaise with agricultural companies and organisations that can provide improved seedlings to farmers to improve their harvest" (Participant 5).

Female owner-managers in other agricultural sectors, such as fishery and poultry farming, who had participated in this training initiative, such as Participant 13, were also incentivized by being provided with basic equipment and seed capital to start their Agric-businesses.

"It helped me by gaining some capital and some equipment from them"
(Participant 13).

The *them* mentioned in the perspective of Participant 13 refers to the coordinators of the training intervention programme. As to the *equipment* this was in the form of basic feeders and drinkers for poultry birds while the *capital* mentioned was seed capital. From the interviews, each participant received different incentives depending on their choice of business. For Participant 9, she was given live fish and bags of fish feed to start-up her fishery farm business.

"At the end of my training, I was given certain number of fish and bags of feeds"
(Participant 9).

The incentive strategy offered to Participant 9 and other women was part of the empowerment agenda of the Nigerian Government, as a means of creating opportunities for those participating in the training sessions to start-up their Agric business at the conclusion of the initiative. However, not all participants believed the incentives met the Nigerian Government's objectives to empower citizens through this form of intervention training, as seen with Participant 11:

"The incentive was not much, although I was given transport money" (Participant 11).

Although she received some financial incentive, Participant 11 explained that she was still not intrinsically motivated to start up her business. This view was echoed by Participant 12, who also declared that the financial incentive she received was not sufficient:

“It was transportation and to start up the business, but it wasn’t enough”.

(Participant 12).

Participants 11 and 12's views reflect the findings from Joseph et al. (2021) regarding the limitations of Government-led intervention programmes and, showing that not all participants felt adequately empowered through the training scheme. Despite these participants' views on the inadequacies of the financial incentives provided, most of the female owner-managers interviewed agreed that the training sessions provided a market-focused approach to increasing sales and broadening their market reach.

“Yes, they [training coordinators] trained us on how to market it [fish]. Right now, I’m selling them locally. If I harvest my fish, I call them [buyers] from the market, they will come and weigh it and pack everything [buy up the harvest] and give me my money [pay upfront]. But I have not started exporting them yet (Participant 6).

In addition, the training sessions improved the female participants' ability to plan, as seen with Participant 8. For Participant 8, it was her ability now to plan before the commencement of the planting seasons, keeping in touch with potential buyers and budget for seedlings, so funds would be used appropriately, which was gained directly from attending a training initiative.

“So, they [training facilitators] were like, even before the harvest they said, even before we start the cultivation. Like, we have to make plans. Look for buyers. Know the market and a lot like that, so. I think it has really helped. Then the financial management, like I said. When I sell. Before, I may not have planned what I want to do with the money, but now I know, even before I sell. I know this is what I want to do with this money, and I will tell you. After selling, I tend to buy inputs for the next season” (Participant 8).

Participant 8, a female owner-manager, linked her ability to plan to her better understanding of financial management and how the market operated. Participant 8 also highlighted that planning involved ensuring that the proceeds were reinvested into growing her Agribusiness, which she had gained from attending the training session. This reinforces the findings on how the Nigerian Government can encourage farm owner-managers to join a Farmers' Association and establish local market contacts.

4.3.1. Establishing Local Market Presence

As to establishing a presence in local markets, this theme was closely associated with collaboration, which emerged initially from the pilot study. The training intervention programme provided these female owner-managers with a platform to meet suppliers and buyers and network with other owner-managers. This initiative was designed to encourage collaboration, and the existing Farmer Associations were encouraged to assist farm owner-managers to gain access to finance through farmer cooperatives, which enabled access to market information and access to additional training opportunities, as seen with the comments of Participant 5:

“Government provided intervention by encouraging farmers to form associations, an association of Farmers so that they can access credit facility” (Participant 5).

From Participant 5's perspective, the farmers' inability to access credit individually necessitated using the Farmers' Association to mitigate this challenge. This association also provided a source of encouragement to the female farmer managers, especially those new to the Agricultural sector, who may be struggling with self-doubt about starting and running their own businesses.

“I am a member of the Fish Farmers Association and attend meetings monthly. It has helped me receive advice and gain more knowledge from them [association members]. Anytime I go for meetings, I gain more knowledge on how to take care of both my poultry and fish farm. For instance, I was taught how to care for livestock, especially chickens, using organic methods, which has reduced the amount I spend on vaccines” (Participant 6).

Participant 6's opinion on gaining knowledge through the Farmers' Association was echoed by Participant 7, who shared that the Farmers' Association organized the first training intervention session she attended in collaboration with the Government-led training intervention coordinators.

“The first training I attended was at the Nigerian Fish Farmer Cooperative Lafia branch. Before, I would buy 1000,500, 800 fish but after the training, I have like 3000-5000 fish. I buy fingerlings [young fish]. I grow them up to four months to five months, then contact buyers to purchase them” (Participant 7).

This view from Participant 7, who was already in business prior to attending the training programme, supported the relevance and importance of the partnership between the Farmers' Association and the Government-led training coordinators in organizing training programmes through the Farmers' Association. Furthermore, the growth of her business experienced after attending a training programme was demonstrated by the number of her fish stock, which grew from 1000 to 5000 fish. The business support she received was explained by Participant 7, who indicated that these initiatives offered other benefits to female owner-managers. For example, Participant 6 was inspired by the information gained through her involvement with the Farmers' Association to establish a network of female entrepreneurs in the Agric-sector within her community.

"...I created a group in my neighbourhood for housewives. We meet every month, and I've trained some of the members. Some are now involved in fish farming, while others have ventured into the poultry business" (Participant 6).

To implement the knowledge gained from the training sessions she attended, Participant 6 explained that she created a group for women in her neighbourhood, which provided the opportunity to learn and share knowledge. Participant 6 emphasized that she trained some women in the group to start poultry or fish farms, demonstrating a clear knowledge transfer from the training she attended.

The training intervention programme and the Farmers' Association also served as a means to encourage farm owner-managers to move their business from being classified as informal to a more formal classification by being recognised by the regulatory bodies in Nigeria. To access finance through Government agencies and banks, these female owner-managers were encouraged to register their farms with the Corporate Affairs Commission in Nigeria, alongside other business regulatory bodies. Participant 6 explained that her women's group decided to get the group registered as a formal business to take advantage of possible funding opportunities from the Nigerian Government.

"We have our certificate of registration in case of anything that is coming [financial intervention from the Government]. We have our certificates of Commerce and Industry. That's the one we registered for. We also have certificate of SMEDAN for the group" (Participant 6).

To access Nigerian Government funds, Participant 6, together with other female owner-managers in her neighbourhood, registered as a women-only group and then registered with

the Small and Medium Enterprise Development Agency of Nigeria (SMEDAN), which is the body regulating micro, small, and medium enterprises in Nigeria. This move by Participant 6 and her women's group aligned with opinions expressed in existing studies (e.g., Onyishi et al., 2022) regarding forming community-based organisations to assist farmers' access to external funds and finance.

The findings related to farm registration by these farm owner-managers support Barron's (2020) assertion as to how training intervention programmes can promote the formalization of micro enterprises by encouraging the registration of businesses to gain access to Governmental funding. The findings in this study indicated that training intervention programmes and the Farmers' Association were seen as reliable channels for disseminating information to encourage micro-businesses to seek accreditation, moving these concerns to become registered businesses. This finding is important as it shows that training intervention programmes can promote micro-enterprises' formalization in Nigeria. However, these training intervention schemes also had various challenges and potential limitations, including access to finance, which will be presented in section 4.3.6.

4.3.2. Employment

The interviews then focused on the theme of employment. The objective of the Nigerian Government was to establish training intervention schemes to create jobs. From the study, the participants indicated that attending these training intervention schemes provided self-employment opportunities for these female owner-managers. This finding aligned with the study by Grimm and Paffhausen (2015) who identified that training intervention schemes can increase self-employment in developing countries. All the female participants interviewed, except Participant 12, had started a farm or improved on their existing Agric-business after attending a Government-sponsored training session. The findings indicated that most participants had employed at least one permanent staff member since attending the initiative. However, three female owner-managers in this study who had already established their business before attending the training provision employed five to ten employees.

“Yes, we’ve employed more people, but it may not be directly related to the training. So, as we grow, as the business grows, we need more people. Right now, we have staff strength of about 10 and basically, this comes because of [business] growth. Yes, you could say that there has been a relationship between our growth and income and some of these training sessions” (Participant 2).

Business growth was determined to be an important consideration for employment, and for Participant 2, a training intervention programme can influence how the enterprise expands and ultimately becomes profitable. The view on the influence of business growth on employment was confirmed by Participant 6:

“When I grew my stock to 2000 fish. I employed people to help me monitor the fishponds from time to time because I may have something to do. I may go out or I may travel. So those employees would visit the ponds and check the fish in the mornings to feed them. In the afternoons, they return to check the water in the ponds, then clean the water if the pond is dirty” (Participant 6).

From the perspective of Participant 6, she had employed staff as the fish farm expanded, which confirms the experiences of Participant 2. The shared perspective, therefore, indicated that the training provision can have a direct influence on self-employment and can have an indirect influence on increasing the workforce in a micro-enterprise, which is seen as being a key determinant in business success and profitability. This view was, however, challenged by the opinion shared by Participant 10, who stated that she engaged her family members in running her Agric-business instead of employing staff to reduce operational costs and increase her profitability.

“I just do it [farm activities]. Myself and my children. It’s not a big business, so we don’t have to employ people. To employ somebody, one will have to pay more, and at the end of the day, selling them [birds] more expensive” (Participant 10).

Justifying her approach to involve family members in managing the poultry farm rather than employing paid workers, Participant 10 explained that paid workers would increase the business overheads and consequently increase the selling price of the farm products or reduce her profitability. This strategy of employing family members instead of paying external workers challenges the Nigerian Government’s objective to promote micro-enterprises as a significant source of employment in Nigeria. Most of the female owner-managers indicated that they could not afford to hire external employees due to increased operational costs. However, for those who had these businesses could only afford one to ten staff, depending on the size of their business.

“I've employed like 1. Before the training, I didn't even have an employee that is the truth. I just do my thing [managed the farm alone]. Then, I may hire labourers [casual workers] sometimes. But now I have one permanent employee”
(Participant 8).

The response from Participant 8 showed a reliance on casual workers only when she needed extra assistance. However, she had employed one permanent staff member after attending a training intervention session, as she had realised the potential overall benefit. The findings have indicated that training intervention programmes can positively influence female owner-managers' self-employment opportunities. However, this initiative may not directly influence the employment of paid workers in a micro-Agric business.

4.3.3. Empowerment and Financial Independence

Empowerment was one of the Nigerian Government's key objectives, which has emerged as a recurring theme in this study. Existing literature (e.g., Okoi et al., 2022) identified that empowerment is a pathway to financial independence for these female entrepreneurs who tended to be mostly from marginalized communities. This view also emerged during the pilot study, in which Participant 1 indicated that empowerment can positively influence female financial independence. Participant 1 also highlighted that empowerment was a Nigerian Government sustainable development goal.

“I am more interested in some of the SDG [sustainable development goals projects] and some of the [government] institutions where they have a budget and a plan for empowerment. So, when we succeed [in our empowerment initiative], the Government gets feedback from us and can put it down as part of their empowerment programme. For instance, it can be recorded that about 50 people in the production of sesame seed, cashew nut, cassava, and so forth have been empowered. And through this, the people can cascade this empowerment down. This way, they would have empowered themselves [financially], empowered where they get the seedlings [suppliers] and the agent in processing [processing factory for export], and the rest of them” (Participant 1).

From the perspective of Participant 1, empowerment can lead to financial independence for the trainees, and it has multiple effects across the agricultural value chain. This was also a major theme that emerged from the main study, highlighting that the training session positively influenced female owner-managers' financial independence. Prior to the training programme,

most interviewees were stay-at-home wives who were financially dependent on their husbands, as illustrated by Participant 6.

“I was a full-time housewife doing nothing, waiting for my husband to give me money. And if he doesn’t have it [money], either I will be angry, or he will shout before giving me, so now that I’m on my own [own an Agric business]. I don’t ask him. I did bye-bye with asking [stopped asking for money]” (Participant 6).

The phrase “I did bye-bye with asking” symbolised the participant’s financial independence as she no longer had to depend on her husband, as she became financially empowered after engaging with the intervention programme. Furthermore, Participant 6’s perspective aligned with the empowerment objective of the Nigerian Government, but when asked whether the Government’s objectives of supporting women entrepreneurs in their micro-businesses had been perceived to have been achieved, the participants unanimously agreed, to varying extents, that these initiatives had empowered women, as illustrated by Participant 6.

“...with most of these empowerment programmes, they are training, empowering youths. Taking them off the streets and empowering them. I think they [training coordinators] are really doing something good” (Participant 6).

For Participant 6, attending a training intervention programme had empowered her, which had in part been achieved by being given start-up packs and equipment to put their learning into practice following the completion of the scheme. The perspective and experience of Participant 6 emphasized training intervention programmes as an instrument to keep young female Nigerians from becoming unemployed, while enabling financial empowerment. As a developing country with high unemployment rates, youth employment has been a societal challenge due to economic disempowerment and other external influences. Ahmed and James (2018) highlighted the benefits of Government-sponsored skills acquisition programmes as a channel to address youth unemployment. Reflecting Ahmed and James (2018) perspective, Participant 6 went on to share her perspective on the various skills acquisition programmes provided by this intervention initiative, which she had attended, and the outcome on these young women, which she had observed:

“Taking youth from the street and giving them something to do. For example, if you look at the tailoring aspect, you will see a lot of youth doing the tailoring. I once attended tailoring, but it was not part of my training. I just went there to see what they are doing there. A lot of youths, both male and female, attend the

training programmes. Apart from the tailoring, mechanics were there, and computer trainees were also there. You see, if these trainings are not there, you will be seeing them [youth] going about drinking and misbehaving. That training keeps them occupied” (Participant 6).

Participant 6's viewpoint confirmed Participant 3's response as to the relevance and benefit of this form of training programme offered by the Nigerian Government.

“On the interventions, they are programmes designed by the Federal Government, but through the Industrial Training Fund. That is, we train people on different skills and there are modules, there are packages that we offer. After the end of the programme. we give them a value [trade] certificate, which is equivalent to national diploma in Nigeria. At the end of the day, we equip them with the startup pack of the skills they have learnt. With the certificates participant receive, public or private organisation can employ them. And if they want to start their business to be self-reliant or independent, they can also use the certificate to establish their own private company” (Participant 3).

Participant 3 outlined the purpose and outcome of these intervention initiatives, which were designed to provide employment opportunities for young and female participants, enabling them to be self-reliant and independent, whether as business owners or employees in other businesses. Whilst the Nigerian Government encouraged self-employment for these participants through providing start up packs and other incentives, Participant 3 also highlighted that the trade certificates issued to participants by attending this form of programme also offered an opportunity for those who chose not to pursue self-employment opportunities but rather seek secure jobs in other businesses. However, some participants such as Participant 11 believed empowerment could not be attained without the correct funding for participants who decided to be self-employed.

“...achieving it, achieving it is having the necessary funds to now start your own [business]. To me, yes, it is having the necessary things [funds, stock and equipment] to start your own. And then, that is when they would say that yes, they[government] really achieved what they want to achieve because going to the training and then coming back to sleep on it, is like they have not achieved anything not until, all those trainees have started, making use of what they've learned” (Participant 11).

The response above outlined the prerequisites for determining the success of training intervention programmes from a female owner manager's perspective. Unlike Participant 6, Participant 11 believed that training without providing required funds to build and grow a business cannot be considered empowerment. This view, shared by Participant 11 is very important as access to funding is a fundamental objective of the Nigerian Government for instituting training intervention programmes. At the same time, there was a recognition of the benefits of this form of training provision, particularly as to the young and women in Nigeria who may be financially disempowered.

4.3.4. Access to Intervention Funds

The next theme to emerge from the findings was access to finance and funds. The female owner-managers interviewed stated that attending training intervention programmes had not provided them with access to finance or funding opportunities, although it was promised, as seen with Participant 6:

“There’s one thing they [training coordinators] said we should do and that was the reason why I even did my CAC registration [farm registration]. We were promised Agric loan. I did all the necessary things [farm registration and application process] that I was supposed to do. We submitted, they [funding coordinators] came for interview, from Abuja. They came and interviewed us. They saw our business plan and everything. They went away with the business plan that we will hear from them” (Participant 6).

Aligned with the Nigerian Government's empowerment objective, as discussed in 4.3.3, the training intervention scheme was promoted to guarantee access to Agric loans given to the participants, which required that they meet some regulatory requirements. However, despite meeting the requirements set out by the Government, which included the need to be registered with the Corporate Affairs Commission (CAC) and providing a business plan, some of the women, including Participant 6, had not received the funding. This inaccessibility to financial intervention from the Government was attributed to several reasons, such as corruption, as indicated by Joseph et al. (2021) and Onyishi et al. (2022). This view was also reflected in the comments and perspectives of Participant 1, who, in the pilot study, indicated political reasons for the inaccessibility to finances and the inexperience of these female owner-managers.

“The way Government runs. Sometimes, they [Government] are political. So, when they want to run intervention programmes, they run it sometimes from

political aspects. They use these programmes to gain some popularity, but the real benefits, the real empowerment, may not take place. The Government tell people, they tell the whole world that they have trained 10,000 people. For instance, a political party may state that in their four years in office, they had trained 10,000 people and people will applaud them, and they use that as a campaign strength for next election They can also say, we have distributed 10 billion and we have distributed 1 billion per local Government” (Participant 1).

The response by Participant 1 indicated that the notion behind the Nigerian Government’s approach to empowerment programmes was political. There was also the view that the Nigerian Government may prioritise political gain over attaining effective empowerment thereby minimising the effectiveness of this form of intervention programme when facilitating access to finance. The view by Participant 1 was also echoed by Participant 6 who described her experience of trying to access financial funding from the Government.

“It actually didn’t take long [after applying and submitting a business proposal], after 2-3 months they started paying [Agric loans]. After they paid the prominent people in the state, everything [payment] then stopped. They [financial intervention coordinators] later said the programme was not even functioning anymore” (Participant 6).

The viewpoint of Participant 6 confirmed that agricultural loans were disbursed to people within her State, however, it was only paid to the prominent people in the locality and not to local farmers who were informed that the funding programme was no longer available. From the perspective of Participant 6, there was an indication that although training intervention programmes have been designed to provide participants with skills and access to finance. This, however, was not the case for the participants who could not access agricultural loans, due to internal and external reasons.

“Anchor borrower? Oh okay, anchor borrower [funding programme] is for a civil servant. They [funding coordinators] promised the civil servant, but the promised funds were not disbursed. In our state, we were not allowed to fill out the [application form], we were told the funding was for only civil servants” (Participant 7).

The Anchor Borrower Programme was a funding programme designed for Nigerian farmers. However, Participant 7's response indicated her limited knowledge of the funding programme's

scope and a restriction on accessibility by the scheme's coordinators. Participant 5 confirmed that the Anchor Borrower Programme was open to Agricultural Farmers.

“...One of those credit facilities is called the Anchor Borrower Programme. The anchor borrower programme links a group of farmers whose lands have been identified, and then they are encouraged to access a credit facility from the bank. So, with this, the Government puts the farmers in check, particularly through the various independent companies and through the federal Ministry of Agriculture to monitor how agricultural products are produced and sold” (Participant 5).

The perspective of Participant 5, a facilitator in the training programme and a professor of agriculture, provided an expert opinion on the Anchor Borrower Programme and its scope. From the interview data, Participant 7 had limited knowledge of how the financial aspect of the programme operated, the requirements, and how to access funds. Based on this, it can be concluded that the perspective of Participant 7 indicated a minimal awareness of the Nigerian Government's financial intervention strategy, which had led to limited access to funding opportunities for micro-owner managers in the Agric sector, despite attending these training initiatives. Therefore, the findings show that female owner-managers may be unable to access finance due to lack of adequate information or knowledge about funding routes available to rural farmers.

In response to the question about access to these funds, Participant 10 expressed uncertainty about receiving the promised finance:

“Actually, I haven't received mine yet, I'm not sure if I will still get it. I'm not happy, but since they [funding coordinators] said they would give us the money, I hope they will” (Participant 10).

The perspective by Participant 10 echoed the lack of adequate information and uncertainty surrounding funding programmes in Nigeria as experienced by these women. In addition to the challenge of having an awareness, the interviews revealed that female owner-managers' capabilities may have an influence on their access to funds, as indicated by Participant 9:

“...concerning the supports. Like I said, they [training coordinators] normally come for supervision. Without notice, they will just call and be like, we want to come and supervise your farm. To see how far you have gone and if there is any improvement. So, they will show up, and they can take a report. Because what ITF

normally does is that, after every training, any participant who puts what they learn into practice, they support such a person with any amount, regardless of what the person is doing [irrespective of the type of farming]” (Participant 9).

For Participant 9, female owner-managers’ access to finance was connected to their ability to put their learning gained into practice. This perspective of Participant 9 could be attributed to the access to financial funds and their capabilities to apply the training. Participant 9 further explained this as a “serious mindedness” and stated that it is the reason why some received financial incentives while others did not:

“Financial incentives are provided, but they are based on merit and on whether the trainee is serious-minded. Some people miss training sessions, attending only occasionally—maybe once a week, once a month, or even just at graduation. So, it's about seriousness, actually” (Participant 9).

Participant 3 held a similar view as expressed by Participant 9, which explained what happens at the end of the training session:

“... We have our criteria before participants leave after the programme. We usually train them for one week on how to start a business and the risk involved in the business through SMEDAN. So, we train them on entrepreneurship development. After that, we refer them to Corporate Affairs Commission so that their businesses are incorporated. Then we refer them to open account in the bank. When they meet up all these requirements. We serve as a guarantor for them to obtain soft loan from the Nigeria Bank of Industry. For instance, they could be awarded 10 million naira to pay back in in 30 years. Then on our own part as a training organisation, when we check [during farm visits], and we see that the participants are doing something [putting learning into practice], the organisation gives the participants 500,000 naira free, non-refundable to boost their Agric business” (Participant 3).

The perspective of Participant 3 indicated that the intervention programmes are a collaboration between Government agencies such as SMEDAN, which only cover training in entrepreneurship development, along with the banking industry, where these institutions charge an interest rate for the loan. The process needed to be followed by these female micro-enterprises were outlined by Participant 3 stated that those attending a training programme could be eligible for as much as £5,000 or the Naira equivalent along with additional support

of a minimum of £200, if the learner put their knowledge into practice. Although attaining new knowledge and skills by implementing lessons learned from the training session enabled several female owner-managers to access funds. However, the findings show that female owner-managers' new skills and capabilities were not the only criteria to determine access to funds, as most female owner-managers, such as Participant 6, had not received any finance despite the rapid growth in their business.

“... I contacted one of the supervisors and explained how I started my fish farm with 50 fish, gradually expanded to 100, and now have over 500. I requested their input, and they visited my farm, expressing great appreciation for the progress I've made. Whenever I need their support, they visit because they encouraged us after each training to reach out whenever we require their advice” (Participant 6).

Participant 6 outlined how she had started her fish farm using the initial 50 fish, which were given as an incentive at the end of the training programme. The number of fish had increased gradually to 500 before she was invited by the training coordinators to visit her farm. Participant 6 had also registered her business with the Corporate Affairs Commission and other regulatory bodies including SMEDAN to comply with the requirements needed to access funds indicating her “serious-mindedness” in line with the perspective shared by Participant 9. Despite meeting regulatory requirements and submitting a business plan, Participant 6 did not get access to Governmental funds. This was further emphasized by the fact that female owner-managers' access to funds was determined by other criteria, such as those outlined by Joseph et al. (2021) and Onyishi et al. (2022).

Overall, these women indicated that this form of training had a positive influence on female owner-managers in Nasarawa state in terms of business creation, self-employment, empowerment, and self-independence. However, this initiative had not provided female owner-managers access to financial schemes due to external constraints that had impeded the process.

4.4. The Influence of Training Intervention on Female Micro-Owner Managers' Internal Capabilities

The analysis of the findings presented in section 4.3 above showed that the training intervention scheme positively influenced female micro-owner managers. The interviews revealed a positive influence on self-employment, which is these women's ability to establish poultry, fish, and rice farms. Access to local markets was made possible through the Farmers'

Association, which brought female owner-managers in contact with buyers and suppliers of Agricultural-Based products. This outcome led to the empowerment and enabling of these female entrepreneurs to gain some form of financial independence.

In analysing the influence of this intervention initiative on these Nigerian female entrepreneurs, a further emphasis was placed on understanding how the training attended influenced these participants' internal capabilities and skills. In this study, the internal capabilities and skills were seen in how these female owner-managers used their new abilities to support the creation and expansion of their Agric-business. Six sub-themes emerged from the study, including motivation. The theme of motivation aligns with the theory of self-efficacy as proposed by Kevill et al. (2017) as presented in Chapter Two and will be discussed further in Chapter Five. Kevill et al. (2017) argued that a micro-owner manager's perceived self-efficacy influences the motivation to grow their business. Other sub-themes identified under this theme included proactiveness and the propensity to take risks, which were aligned with the entrepreneurial orientation theory as advocated by Miller (1983) and supported by Alkharafi et al. (2024). The entrepreneurial orientation theory comprises several constructs, including proactiveness and the willingness to take risks, which are key characteristics that distinguish an entrepreneur. The findings discussed in section 4.3 confirmed that attending and participating in a training intervention scheme had influenced these female entrepreneurs positively in gaining an opportunity for self-employment, financial independence, and empowerment while enabling these women to enter into new markets. As outlined in section 4.2, the themes categorised under the influence of training intervention programmes on female micro-owner managers' internal capabilities included motivation.

4.4.1. Female Micro-Owner Managers' Motivation

Motivation for entrepreneurs was identified by Adeyeye et al.(2019) as being driven by either necessity or opportunity. The findings in this study showed that for most female micro-owner managers, the motivation to start their business was necessity-driven, specifically because of the need to be financially independent. For instance, for Participant 6, who was dependent on her husband financially prior to starting her Agric-business, her need or motivation was for financial independence, which propelled her to experiment with the 50 fish that she received at the end of the training she attended.

“When I started the training, I said to myself, Kai! I’m not good in business. I have not done it before. So how do I begin? But I decided to give it a try by starting with

the 50 fish that we were given at the end of the training, which I kept for consumption at home. We usually bought this amount for household use, but instead of purchasing them, we used what I produced. Though the harvest wasn't quite up to the 50 pieces I started with, it still made a difference" (Participant 6).

As one of the dominant voices in this study, Participant 6 recalled how she started her fish farm, illustrating how many of the women initially had self-doubt before starting up their fish farm. However, as indicated by Participant 6, these women gained self-confidence after selling their initial stock. This newfound self-confidence gave Participant 6 the opportunity not only to reduce her household expenses but also to become financially independent. This perspective of Participant 6 aligns with the views by Sayarh (2023) who aligned the personal satisfaction female micro-owner managers gain when their enterprise succeeds with intrinsic motivation.

"...I then moved on to 100 fish, and the same thing happened, I had a good harvest. After reaching 100, I pushed further and scaled up to 500" (Participant 6).

Participant 6's ability to set up a fish farm after her initial success with the 50 fish had boosted her self-confidence and motivation to upscale her fish farm to 500 fish, indicating the potential benefit of the Government intervention programme. Therefore, Participant 6's perspective shows a direct relationship between attending this intervention training programme and the female micro-owner managers' ability to start a business after attending the scheme. This finding was supported by Participant 11, who indicated that the training programme "gingered" her, which in the Nigerian context means motivation.

"...and through that learning, I developed the poultry business. It motivated me and gave me the drive to put everything into action. It really "gingered" me" (Participant 11).

Participant 11's motivation was also aligned with the findings of Shetty et al. (2024) as to the effect of a training development programme on promoting motivation and entrepreneurial activities. In this study, most of the female micro-owner managers agreed that attending the training intervention programme had encouraged and motivated them to take up the opportunity to create and subsequently expand their Agric-based business. However, this motivation to start up an Agric business was not entirely shared by every participant. Participant 11 recalled her initial motivation to start an Agric business during the training session. However, a lack of finances limited her ability and ambition to start the business venture.

“...after the training, I haven’t started yet, but I’m about to. I’m not fully settled because, you know, without sufficient capital, it’s challenging. I managed to get transportation and some incentives to start the business, but it wasn’t enough”
(Participant 11).

The perspective above was shared by Participant 11, who highlighted the limitation encountered due to a lack of finance. Participant 11 was informed and influenced by the training intervention initiative; however, it did not provide sufficient incentive and motivation for her to set up the Agric-business. This view of Participant 11 was supported by Adeyeye et al.(2019) who stated that participating in this training may not always lead to the entrepreneur being extrinsically motivated to start a business due to other constraints. In this study, it has been identified that proactiveness and the propensity to take risks are required to enable female micro-owner managers to become successful entrepreneurs.

4.4.2. Influence of Training Intervention Programmes on Female Micro-Owner Managers’ Proactiveness

The theme of proactiveness emerged from the findings, which existing literature (e.g., Onyenma & Hamilton, 2020) defined as taking a forward-thinking approach in decision-making that can lead to new opportunities being recognised. In this study, proactiveness can be seen as an internal capability influencing a female micro-owner manager’s decision-making process to either set up or expand their Agric business. Proactiveness in this study is considered an individualistic dynamic trait that is closely associated with self-efficacy (Kevill et al. 2017). The findings of this study indicated that female owner-managers’ proactiveness was reflected in their ability to seek information through the Farmers’ Association, as presented earlier in section 4.3, and in possessing the ability to share the knowledge gained with others, such as employees and other female micro-owner managers. Participant 6 demonstrated this proactiveness by recalling how she sought information by registering to join future training sessions-after accompanying a friend to one of these initiatives:

“Later, when they [training coordinators] started the next session, I made sure to be a part of it because I enjoyed the first one so much. I approached my friend and said, ‘Please, anytime there’s such a programme again, let me know.’ She then introduced me to one of the ITF staff members. I pleaded with him, saying, ‘Please, I want to be part of this programme whenever it happens again.’ He agreed, saying,

‘Okay, we’re actually looking for people.’ He took my contact, and not long after, he called me” (Participant 6).

In recalling her experiences of when she was first aware of this intervention programme, Participant 6 recalled how her friend first introduced her to the training coordinators. Following this introduction, Participant 6 had exhibited proactiveness by signing up for the training and then was motivated to start her fish farm with the 50 fish she received as an incentive at the end of the session. From above, it is possible to surmise that the initiative had positively influenced these women by attending and participating in the session, which was also illustrated by Participant 9:

“I think if you are a serious-minded person. You know, some people don’t take training seriously. They might skip sessions, attending maybe once a week or, in some cases, only once a month. Some might not even show up until graduation. So, it all comes down to seriousness.

Regarding support, as I mentioned, ITF usually provides supervision. What they do is, after every training, they support participants who put what they’ve learned into practice. They provide financial or material support, regardless of what the person is doing, as long as they’re applying their knowledge. When they come for supervision and find out you haven’t done anything yet, they document it and submit the report to the headquarters. So, yes, I believe ITF supports participants based on their level of seriousness and commitment” (Participant 9).

The term “serious-mindedness” can be used to encapsulate the theme of proactiveness, as illustrated by Participant 9, who benefited from the opportunity to be provided with the initial stock to start her Agric-Farm after attending a training programme. In summary, this study has found that entrepreneurial proactiveness is present among many of the female micro-owner managers. These perspectives reflect the benefits of proactiveness, as these women were able to practice what they had learned and were provided with the initial livestock or provisions.

4.4.3. Female Micro-Owner Managers' Propensity to Take Risks

Existing literature on the theme of propensity to take risks (e.g., Ismail, 2022) have indicated that those female micro-owner managers who exhibit a high propensity to take risks tend to be more successful in the business than those who do not. This study agreed with this view, as the findings indicated that those women who were prepared to take risks were linked to their level

of proactiveness. The level of risk-taking was shown to be an important influence that distinguished female owner-managers when setting up and then growing their business, compared to those who had not attended this intervention initiative. The theme of propensity to take risks was aligned with the findings of Danso et al. (2016), who identified risk-taking as a crucial aspect in business decision-making. This propensity to take risks and proactiveness was shown to distinguish these entrepreneurs from other women.

In illustrating this, Participant 6 explained that she decided to implement what she had learned after every training session. This decision demonstrated her propensity to take risks, including buying stock and utilizing the limited financial resources. By practicing the different Agric-business strategies taught in the training programme, she could focus on the best option, which could enable her to succeed. However, this also needed her to take a calculated risk.

“Whenever I attend a training intervention programme, I always want to apply the lessons practically to see if I can succeed. Apart from attending training sessions, I also engaged in hands-on practice. I tried rice farming, yams, sweet potatoes, maize, and guinea corn. While I didn’t pursue them as full-time businesses due to financial constraints and to avoid spreading myself too thin, I decided to focus on fish farming and poultry. Poultry farming is seasonal in our area, as it is needed especially during weddings or festivities. However, fish farming has stable demand throughout the year” (Participant 6).

The decision to practice what she had learned not only helped Participant 6 to identify her focus, but it also helped her identify an Agric-business with high demand. By following this strategy, Participant 6 was able to improve her knowledge and make an informed decision, therefore minimising the potential risk. To demonstrate this propensity to take risks by putting what was learned into practice, these female micro-owner managers indicated their understanding of the levels of risk associated with running a micro-business. Participant 11 outlined some of the key challenges she encountered in her Agric-business that could have been considered a potential risk for her enterprise.

“In every business, there are risks. For example, in poultry farming, you may face challenges like the death of birds due to illnesses or diseases, which can lead to significant losses. However, if you're fortunate and everything goes well—without diseases or other issues affecting the birds—your business can run smoothly and be successful” (Participant 11).

The interviews revealed that there was a propensity to take risks amongst these women, which had been informed by attending this form of intervention training initiative, which had enhanced their awareness of taking informed decisions. The findings on propensity to take risks, therefore, align with the assertion by Danso et al. (2016), who argued that the propensity to take risks was a predisposition that can be enhanced or cultivated by attending this form of training. From the interviews, this study has established a positive relationship between motivation, proactiveness, and the preparedness to take risks. Furthermore, the findings also show that taking risks increased the female owner-managers' resilience in managing and recovering from any crisis encountered in their Agric-business.

4.4.4. Influence of Training Intervention Programme on Female Micro-Owner Managers' Resilience

The next emerging theme was resilience, which was illustrated by the perspective of Participant 11 in section 4.4.3, who highlighted the risk associated with her fishery business, and how her internal capability of being resilient has been enhanced by attending a training intervention programme. Existing literature (e.g., Curiel et al., 2024) discussed the notion of entrepreneurial resilience, which is focused on the owner-managers' behaviour and resilience level when dealing with a crisis. The findings in this study have confirmed that female micro-owner managers' resilience was enhanced by attending and participating in a training programme. This participation had increased the women's awareness of the risks and challenges of the business and enabled the female micro-owner managers to take proactive steps to mitigate losses. This was demonstrated by Participant 6 when she faced a crisis.

"There was a time I had about 2,000 fish, but during extremely hot weather, I faced a water shortage, and unfortunately, they all died. I had to start over. But I didn't let that setback stop me. And now, as I'm speaking to you, I have over 2,000 fish in my pond" (Participant 6).

The perspective from Participant 6 on the losses incurred in her business was also echoed by Participant 9:

"...my current location is affecting my business drastically. Earlier this year, we experienced very high humidity, which really affected my farming activities. Being in the Middle Belt region of the country, the temperature and humidity levels had a

severe effect, leading to extensive losses in both my fish and poultry farms”
(Participant 9).

From the interviews, these female owner-managers had experienced different crises, as described by Participants 6 and 9, but had remained viable due to their propensity to take risks and proactiveness in mitigating challenges. These experiences demonstrated their resilience, which could be attributed to the intervention training programmes they had attended. To illustrate this, Participant 6 described how she exhibited proactiveness to prevent financial loss based on the knowledge gained from the training sessions she had attended.

“...When the fish died, I didn’t incur a total loss. I immediately took all of them to a facility where they were smoked. The facility smoked the fish for me, bought them from me, and paid me my money” (Participant 6).

From Participant 6’s perspective, she recovered her losses when the facility bought the dead fish after she had dried them before reinvesting this additional money into the farm. This showed her propensity to take risks, proactiveness, and increased resilience, which was informed and enhanced through attending the training intervention programme.

As already identified in sections 4.4.2, the Government-led training intervention programme positively influenced female micro-owner managers’ ability to network. This capability was also promoted through the Farmers’ Association, which brought female micro-owner managers in contact with suppliers and prospective buyers, as explained in section 4.3.

4.4.5. Female Micro-Owner Managers’ Network Capability

Existing literature on entrepreneurial networking (e.g., Aladejebi, 2020; Sendawula et al., 2023) has highlighted the importance of networking in fostering the growth of micro enterprises. These female micro-owner managers in this study could network with external bodies, which had been promoted extensively throughout the training intervention programme. All the participants interviewed stated that the training sessions enhanced their ability to network both physically and online. The findings showed that networking could be achieved at two levels, one for collaboration and the other for market information. These networking opportunities for collaboration and market information, along with additional training sessions, were promoted by the Farmers’ Association, where the female owner-managers could meet buyers and other farmer-owner managers. The participants in this study also had access to

information on other training opportunities provided by the Government through the Farmers' Association.

"I'm also a member of the Fish Farmers Association, which holds meetings every month. I actively participate, and my friend, who introduced me, is the association's secretary" (Participant 6).

As a dominant beneficiary of the training intervention programme, Participant 6 explained that she had become an active member of the Farmers' Association, which held monthly meetings that also involved training. The findings showed that the Farmers' Association supported female entrepreneurs, improving their networking capabilities beyond the association and organised training programmes.

When asked about their network, the female micro-owner managers revealed that they had different groups that made up their support network. Some of the female owner-managers in this study had formed or belonged to a women-only group to take advantage of financial resources that may be available only to women.

"My friend, who initially introduced me to the ITF programme, was the same person who informed me about another training opportunity. Before attending, we were advised to complete our business registration, obtain our SMEDAN certificate, and prepare our business plan. We followed the instructions, completed the training, and were told that the loan process wouldn't take long after that" (Participant 6).

For Participant 7, her network was made up of her friends who were in the same Agric-business as her.

"...they were my friends prior to the training, and we're in the same line of business, which makes it easier to guide them and share knowledge" (Participant 7).

A common theme to emerge from the interviews was the encouragement these female micro-owner managers received by sharing their challenges within their groups.

"Most of the members in our group are involved in the same business. Every month, on the last Sunday, we meet at my house to discuss our progress, share challenges, and encourage one another" (Participant 6).

Furthermore, Participant 8 described how the knowledge she gained from the training sessions had improved the quality of the seedlings she bought after attending a programme.

“Previously, I used to buy my inputs [seedlings] randomly, but the training helped me understand the importance of buying from certified dealers. They [facilitators] emphasized that some products could be expired or adulterated, so checking expiry dates and ensuring quality is essential. Through the training, I’ve developed a reliable understanding; I now know who to buy from, and I trust they will not cheat me. This has significantly improved my approach to sourcing inputs” (Participant 8).

In addition to the physical monthly meetings organised at the Farmers’ Association, there was also the use of social media to access network opportunities. Some of the female micro-owner managers had joined social media networks to access market information by following other farm owners to observe their practices, thereby learning via this form of networking:

“I was able to build my knowledge and skills by exploring online resources and visiting other farms to observe their practices. This helped me learn and improve my own methods because agriculture and computer science are two different fields” (Participant 9).

As to using online resources for information purposes, Participant 9 revealed that she was a computer science graduate who ventured into agriculture and then used social media, which had proven vital to her agricultural business's growth. Explaining this further, Participant 9 stated that she used social media to source improved varieties of agricultural products.

“...Yes, you can create a webpage or social media accounts to connect with people across Nigeria—in places like Lagos, Taraba, Abuja, Benue, and beyond. This network allows you to exchange ideas and resources. For example, you can order new breeds or species from them, and if they’re interested, you can also sell and send your own products to them as well” (Participant 9).

Social media also served as a communication channel for learning and encouragement through the usage of WhatsApp, which enabled the members to gain important market information.

Participant 9 further explained how online networking had served as a source of accessing market information for her group.

"Being part of the group is very helpful. For example, if someone comes online with a question—like waking up to find a lot of mortality without knowing the cause—you can share similar experiences. You might suggest possible issues, like water quality or overfeeding, and offer solutions, such as steps to take next time to prevent it. This kind of networking is really beneficial for learning and improving farm practices" (Participant 9).

From above, it is possible to deduce that networking can provide access to improved farming practices and serve as a source of knowledge transfer for female micro-owner managers. This outcome supports the findings by Ademola et al. (2020) who contended that women entrepreneurs can access financial services through the use of social networks in Nigeria. Furthermore, by utilising social media in networking, these female owner-managers had quick access to information compared to other network opportunities, such as through the Farmers' Association, which was accessible to both male and female Agric-farm owner-managers but was only held on a monthly basis. From the findings, social media can mitigate against female micro-owner managers encountering a male-dominated world, which is not designed specifically for their business or learning needs.

Therefore, this study concludes that training intervention positively influences female micro-owner managers' ability to network. A key finding in this study focused on their ability to receive and transfer knowledge within their groups through social media networks. While these female micro-owner managers could network, this study has also revealed their ability to transfer knowledge gained from attending a training intervention initiative, which led to an increased business and support network.

4.4.6. Female Micro-Owner Managers 'Knowledge Transfer

There were limited studies on female micro-owner managers' knowledge or learning transfer after attending and participating in a training initiative. These training sessions present a unique opportunity to enable female owner-managers to transfer knowledge gained from these training intervention programmes to their businesses and peers. The findings of this study confirmed that female micro-owner managers shared knowledge within their networks. The interviews revealed that knowledge gained from this form of training programme tends to be transferred to employees through on-the-job training, and it can also be shared within their farming

community, thereby improving community participation in Government-led intervention programmes, raising awareness of this type of training programme.

“...presently, I can teach others the skills I have gained in fish farming, poultry, rice farming, and yam farming. In addition to the training programmes I attended, I have also gained extensive practical experience, which has further enhanced my expertise and ability to train others effectively” (Participant 6).

From Participant 6's perspective, putting the learning into practice had given her both practical and theoretical knowledge that she could teach to others. When asked how these women transferred their knowledge from the training session to their business, these female micro-owner managers with employees stated that they train their staff on the job.

“I now teach others what I was taught. As I am trained, I pass on that training to them” (Participant 7).

For Participant 7 who already had a farm business prior to attending the training programme, she focused on correcting errors in existing practices within her farm to improve business performance.

“I explain to them exactly what we were taught during the training. I tell them, “This is what they advised us to do, so we should stop doing this.” We identify and stop the mistakes we made before, and I guide them on the correct approach based on the training” (Participant 7).

Participant 8 on the other hand, utilised her knowledge transfer as an opportunity to increase the community farming practices by incorporating new methods to promote creativity and innovation.

“They already have their own knowledge of farming, but I guide them by saying, “This is what I want.” Even if they don’t know how to do it, I teach them, and we work on it together. I explain that their way isn’t necessarily wrong but show them how doing it differently could be more effective. I believe this approach has led to overall improvement” (Participant 8).

The findings suggest that knowledge transfer can promote innovation for the individual, as well as at the community and organisation levels. The concept of knowledge transfer provides

employees in the Agricultural-Based businesses with on-the-job training opportunities, which were facilitated by these female owner-managers.

Overall, the findings show that female owner-managers' internal capabilities and skills were influenced positively by attending and participating in a training intervention initiative. The propensity to take risks, the proactiveness, and the level of resilience were identified as important facets for these owner-managers' internal capabilities, which is reflective of the work of Miller (1983) and Lumpkin and Dess (1996). These internal capabilities enabled these female owner-managers to create and then scale up their businesses after attending this form of training. These female entrepreneurs' ability to network also serves as a medium for knowledge transfer with their support groups. Within their farms, on-the-job training was seen as an acceptable way to share the knowledge gained after the training programme. Overall, the findings indicated that knowledge transfer shows a direct link between skills gained and innovation in the Nigerian agricultural sector.

4.5. Influence of Training Intervention Programmes on Female Micro-Owner Managers' Entrepreneurial and Managerial Capabilities

The thematic analysis, as explained in sections 4.3 and 4.4, showed that training intervention programmes can enhance the internal capabilities and skills needed to establish an Agric-business successfully. A review of existing literature, including Rankhumise and Letsoalo (2019) indicated that ineffective managerial capabilities are considered a limitation when setting up and then expanding micro, small, and medium businesses, especially in developing countries like Nigeria. These limitations have led to the need to assess the influence and effectiveness of training intervention programmes on female micro-owner managers' entrepreneurial and managerial capabilities. The findings as presented in section 4.4 set out how female micro-owner managers were motivated by necessity but also displayed entrepreneurial traits through their ability to show proactiveness and propensity to take calculated risks.

The findings indicated a beneficial effect of this form of intervention training on female entrepreneurs' managerial capabilities. Participant 3, a training facilitator, outlined how the training package developed can support female micro-owner managers' entrepreneurial and managerial capabilities.

“We developed several training packages such as how to grow and manage business, marketing strategy for SME, customer retention and saving culture. We also talked to participants about separating business from family expenditures. We have a training session covering risk management which informs the participants that risk-taking is vital to life and business. We communicate the spirit and culture of entrepreneurship to the participants” (Participant 3).

In the interviews, the female micro-owner managers also highlighted three important themes that needed to exist and that they benefited from: financial and resource management, marketing capabilities, and record-keeping. These three themes will be presented below in greater detail, commencing with financial and resource management.

4.5.1. Female Micro-Owner Managers’ Financial and Resource Management

Nkwinika and Akinola (2024) underlined the importance of financial management in small and medium enterprises and emphasized the need for improved financial management knowledge, including financial planning. This knowledge is particularly important for these microenterprises due to the limited financial options available to them. When the female micro-owner-managers were asked about their experience of being trained in financial management, these participants were positive about the training received and the resultant effect on their managerial capabilities.

“...yes, this has truly helped me because I’ve been mindful and deliberate about how I spend [income generated from the Agric business]” (Participant 7).

Explaining her perspective, Participant 7 stated that she was more careful with her expenses after attending the training session, which was echoed by Participant 8 who mentioned that she had learned to plan and allocate funds more strategically.

“When it comes to financial management, I’ve noticed a significant improvement. Previously, I didn’t always have a clear plan for how to use the money I earned from sales. However, things have changed. Now, even before I make a sale, I already know exactly how I want to allocate the funds” (Participant 8).

Drawing on Participant 8’s opinion, the training session on financial management went beyond managing finances to planning how to allocate funds from the revenue generated. The goal here was to reduce excessive spending by reinvesting the funds back into the business. The findings also showed a link between financial management and accurate record-keeping. From

the interviews, these female entrepreneurs emphasized that record-keeping skills were vital to their business. By keeping accurate records of their spending on feed, fish, seedlings or birds, they were able to record their profits after harvest and invest the funds to grow their business, which could also be attributed to these owners' self-discipline. This was demonstrated by Participant 7, who ensured that proceeds from her business were not spent on personal expenditures.

“...Whenever I spend even a small amount [from business income], I make sure to write it down” (Participant 7).

This view was also shared by Participant 9 who mentioned that she had a book dedicated to recording all her finances including every expense on her farm, which had been informed by attending the training session.

“...After the harvest, I make sure to review my records. I keep a book where I document everything—the mortality rate [of the stock if any], expenses, the total number of bags of feed used, and the total amount of vaccines administered. By reviewing this record, I can analyse what I’ve learned so far and identify any problems I encountered. This process helps me avoid repeating the same mistakes in the future and help me improve my operations” (Participant 9).

A detailed description on the acquired financial management skills was provided by Participant 9, as she recalled that for her, financial management also meant improvising with local feed sometimes to reduce the cost of buying foreign stock which being imported often cost more. Through following this strategy, the fish were well fed, but she could also control the costs and generate a profit.

“...It [local feed] has helped me a lot in managing my finances. For instance, if I provide the foreign feed in the morning, I can plan to give them another portion of local feed in the evening, striking a balance. This approach allows me to manage my resources effectively while ensuring that my expenses remain under control” (Participant 9).

From the perspective of Participant 9, there is evidence of a strong link between financial and the management of resources such as buying feed which can affect the business finances. Therefore, the findings demonstrated that both finance and resource management are both interconnected but also key entrepreneurial and managerial skills needed in the agricultural sector in Nigeria.

The findings also confirmed that the resources available to these female entrepreneurs were limited. The limited availability of resources necessitated the need for cautious management and optimization to ensure the business could grow sustainably. This view was shared by Participant 9 in her description of how she managed her costs for buying feed:

“...instead of wasting feed in the water, you need to be strategic about where and how you feed them. This will help save a lot of expenses. For instance, feed that was meant to last a week could be gone in just three to four days if not managed properly” (Participant 9).

With a focus on cost reduction, Participant 9 explained that maximizing feeding patterns could make a huge difference in her available resources. For Participant 6, she highlighted stock management and optimization as her key resource management strategy adopted:

“...as my fish stock grew to 500, I acquired a larger pond—two big ponds, in fact. Initially, I began with a smaller pond of about 200. Once the fish reached two months, I began sorting them. I separated the faster-growing ones and placed them in one pond, while the slower-growing ones went into another. As they continued to grow, I kept sorting them according to their size, following the training I received. This is because the fish prey on each other. There are times when I come to change the water and find that they've already eaten each other. I continued this process until they were ready for harvest” (Participant 6).

Participant 6 emphasized as to how she utilized the training sessions content learnt to optimize her stock. By sorting the fish into separate ponds as they grew, she could reduce overcrowding and provided a better chance for the fish to feed, which potentially could result in less losses.

Reflecting on her resource management practices, Participant 8 in contrast explained that she changed her planting methods which proved to be beneficial as she reduced her loss in seedlings, while increasing her crop yield.

“For example, the way I used to plant rice was by broadcasting the seeds, which often led to wastage. However, I was taught how to transplant—first making a nursery and then transplanting the seedlings to the field. While this process is very hectic, it is the best practice. After transplanting, you might notice that some seedlings don't come up as expected, so you can replace them. This method

significantly reduces wastage and has many other benefits. Overall, it's really the best approach” (Participant 8).

In analysing the interviews further, the data revealed that resource management was an important trait and skill which could be utilized for both finances and the management of other resources, as seen with Participant 9 perspective below. Adopting this shared approach ensured that any profit generated went back to the business while the stock was carefully managed to reduce waste, therefore reducing on operational costs.

“...We need to maintain discipline in managing our business, particularly when it comes to finances and stock. It's important to strike a balance—minimizing unnecessary use of resources without overusing or underutilizing them” (Participant 9).

The findings suggest that the training intervention schemes enabled these female entrepreneurs to gain the necessary resource management skills, particularly in stock management and cost optimization. In managing resources effectively, these women indicated that they had a better understanding of financial management and record-keeping.

4.5.2. Female Micro-Owner Managers’ Record-Keeping Skills

As highlighted in section 4.5.1 above, these female micro-owner managers attributed their improved financial management capabilities and knowledge to their improved record-keeping skills. Attending the Government-sponsored training intervention programme improved their ability to keep track of their earnings and spending, with most of those interviewed having limited or no knowledge of record-keeping prior to the session.

“...before, we didn't keep records of everything, but through the training, we've learned how to track all aspects of our business. We now document what we spend, what we borrow, what we sell, and how much profit we make. We also track any losses” (Participant 7).

For most female entrepreneurs, record-keeping was mostly used to calculate profits or losses.

“...I tend to keep record of everything, so that I will know if I'm losing or gaining. So, they [training facilitators] really taught us how to keep records” (Participant 8).

For some of the participants interviewed, such as Participant 7, record-keeping enabled her to accurately price the items to include every expense. This included feed, vaccines and logistics costs as various products had been bought outside of the State. With knowledge of record-keeping, all the associated costs needed were included in the ultimate selling price. The female micro-owner managers agreed that their business had become profitable due to attending the intervention programme, and they had not incurred losses since they had used their record-keeping skills.

“I’ve been able to avoid losses because I manage my spending carefully. Whenever I buy anything, no matter how small, I make sure to write it down. Whether it’s fuel for the water pump, feed, medication, boosters, or anything else, I keep detailed records. After tracking all my expenses, I calculate the total cost to determine the price I should sell at” (Participant 7).

Participant 8 reiterated that record-keeping had helped her to keep track of her finances and the financial status of her business, which was a priority for her.

“If I don’t keep records, I won’t know whether I’m making a profit or a loss. That’s my first priority. Keeping records helps me track everything I do and stay on top of my finances” (Participant 8).

The findings from above related to record-keeping revealed that the training intervention session tended to provide the fundamental managerial competencies, which enabled these female entrepreneurs to keep track of their expenses. The training on record-keeping also assisted these female micro-owner managers in considering all the costs incurred when fixing the selling price of their produce.

4.5.3. Female Owner-Managers’ Marketing Capabilities

The interviews further showed that this form of training intervention initiative could be designed to assist these female entrepreneurs in developing a more market-focused approach, as presented in section 4.3 above. The focus on improving female micro-owner managers’ marketing capabilities through this type of training highlighted the importance of trading at local markets, as discussed in section 4.3.2, then using social media to gather vital market information, as identified in section 4.4.5. In building competency and awareness of different marketing strategies, these women were encouraged to join WhatsApp groups for networking purposes and create other social media accounts to increase their market reach.

“...Through social media platforms, I engage by asking questions and watching their videos to see how they manage their farmlands and other activities”
(Participant 9).

This perspective of Participant 9’s usage of social media aligns with existing literature (e.g., Cao & Weerawardena, 2023), which highlighted the use of social media to enhance market perception and customer networking skills in small and medium enterprises. Female micro-owner managers could also obtain important market information and connect to suppliers and buyers using social media, as described by Participant 9. However, some of the female micro-owner managers interviewed believed that social media marketing did not translate to instant sales. To illustrate this, Participant 9 emphasized that social media to be effective, required consistent upload of content to build an online presence to gain followers who then may convert to buyers:

“...Social media is a gradual process—it’s not something that happens overnight. Over time, people start to notice your business online. It could take months or even years, but sometimes, you might get lucky. Just by posting consistently, someone could come across your content, show interest, and place an order right away”
(Participant 9).

For Participant 6, this owner-manager talked about the danger of false or fake information and the possibility of fraud when using social media, which had deterred these women from using these online platforms to gather market information.

“...Sometimes, on social media, it’s hard to tell what’s real and what’s fake. I often came across things, whether on Facebook or through email, that seemed genuine at first glance. But after looking into them more closely, I’d eventually realize they were fake. Because of that, I decided to stop stressing myself over such things”
(Participant 6).

The findings above indicate that social media could serve as a good medium for gathering information and marketing. However, not all these women utilize this medium effectively due to the fear of falling victim to fraudsters. The findings do show that training intervention programmes could enable female entrepreneurs to become more proficient in marketing their businesses using the various channels, including local markets, through their networks, and via social media. However, these marketing activities are not without challenges.

4.5.4. Challenges Faced by Female Micro-Owner Managers After Attending Training Intervention Programmes

Based on the interviews conducted with the facilitators during the pilot phase, the study revealed that one of the Nigerian Government's key objectives was for training intervention to be designed to improve access to finance for micro-enterprises. The findings from this study indicated that most of the female micro-owner entrepreneurs interviewed had actively engaged in meeting the various Government requirements for accessing financial funds. Then, after attending these training programmes, these women ensured that their farms were registered with the Corporate Affairs Commission of Nigeria, a prerequisite for Governmental funding. However, with the registration, there was no guarantee for these female micro-owner managers to access these Governmental funds, as seen with Participant 6:

"Even when they promise to come and provide credit facilities or support, it often ends up being empty words. You go through so much trouble, but in the end, nothing materializes" (Participant 6).

From Participant 6's perspective, trying to meet the Nigerian Government requirements to access funds seemed to lead to the expected financial support not materialising. Limited access to finance could be linked to the financial constraints faced by these female entrepreneurs, which had left them reliant on family, friends, and personal savings to grow their business.

4.5.4.1. The Effect of Financial Limitations on Female Micro-Owner Managers

Existing literature (e.g., Joseph et al., 2021) identified limited access to finance as a key constraint faced by most micro enterprises in Nigeria. The findings from this study also revealed that financial constraints were a major reason why some female owner-managers did not employ staff but instead enlisted family members.

"The main challenge is capital. Hiring someone means paying wages, and in turn, selling your products at a higher price becomes necessary. However, not everyone will be willing or able to buy from you at those higher prices" (Participant 10).

Participant 10 argued that employing staff in her micro-business would have increased her overhead costs, which would have affected the selling price and ultimately profit. This view of Participant 10 indicated that the Government was not meeting or fulfilling its promises to provide financial assistance, which had been initially advertised as part of the training intervention initiative. Limited finances also influenced the type of agricultural businesses

these female entrepreneurs could startup. The interviews revealed that most of these women chose poultry and fish farming, as these ventures required relatively little startup capital.

"I'm aware that I don't have the financial capacity to manage all aspects of farming, so I've decided to focus on fish farming and poultry" (Participant 6).

Inadequate finance or funding was also cited by Participant 9, who recalled how this negatively affected her income when she first started, which presented a particular challenge to her business and also enabling her to be financially independent.

"... the challenges I had when I started was that the income wasn't much, as there was no external financial support" (Participant 9).

Further financial limitation was provided by Participant 11, who stated that her business expansion plans were curtailed due to her limited financial resources.

"I tried raising broiler birds once, but due to financial constraints, it was just a small-scale operation, more like a backyard setup. I couldn't afford to expand beyond that" (Participant 11).

From the findings related to these financial constraints, it can be concluded that fish and poultry entrepreneurs tended to be chosen by most of the women because the business startup required minimal land space and minimal finance. Most of the female micro-owner managers started that their Agribusiness activities were based in their homes, for example, by making makeshift ponds. Expanding their business also provided a challenge for these female entrepreneurs, as scaling up the business required them to access Government financial support to mitigate against potential financial risks.

"The profit from these chickens isn't much. The chicks are expensive, and even when they grow big, the profit isn't significant and not enough to expand the business. For example, we buy the chicks at 900 naira each and a bag of feed for 16,000naira [the Nigerian currency]. When you sell the chickens and make a profit, the next step is to buy more chicks, but the profit usually goes right back into the business. You can't even touch the profit because the prices of the chicks and the feed keep increasing." (Participant 12).

From Participant 12's perspective, the inadequate finance or funding along with the low profit generated from the sales, became potential barriers to business expansion. Participant 11

likewise, claimed inadequate finance as a reason for not starting up her business despite receiving the startup pack provided to all trainees after attending the training.

“...Yes, after the training, I haven’t started yet, but I’m about to. I’m not settled yet because, you know, without enough capital, it’s hard to get started. You end up struggling, and at the end of the day, you have nothing. So, I haven’t been able to start, but I’m still planning. Very soon, I will” (Participant 11).

Although, Participant 11 did not indicate any lack of intrinsic motivation, self-efficacy or a propensity to take risks after attending the training session, it can be concluded that financial limitations was the main challenge for her.

4.5.4.2. The Effect of Extreme Weather Conditions on Female Micro-Owner Managers

Extreme weather conditions often presented challenges in two forms: intense heat and a shortage of water for livestock.

“...During very hot weather, I face the challenge of water scarcity. In fact, all of them died because of it” (Participant 6).

The topography of the region where the farms were located was considered as a challenge to business growth and indicated by Participant 9.

“The location I’m in right now is affecting the business, particularly because of the weather. Earlier this year, we experienced very high humidity, and since my state is in the Middlebelt, the temperature and humidity really impacted my farming. As a result, I lost a lot of fish and poultry” (Participant 9).

The interviews identified extreme weather as a major challenge that led to financial losses for these female entrepreneurs and decreased their ability to manage their limited resources. However, dealing with the challenge of extreme weather has helped these women build their resilience and indicated their proactiveness in mitigating financial losses, which is illustrated in section 4.4.2.

4.5.4.3. Limited Access to Land for Female Micro-Owner Managers

Access to land was identified as a major concern for women in agriculture across the globe (Dunne et al., 2021). In Nigeria, this challenge is heightened by cultural practices along with limited financial resources available to women in the agricultural sector. The findings in this

study revealed that, in addition to limited access to finance and extreme weather, there was also a need for access to land for farming, which presented a challenge for these women and restricted the type of Agric-business that they could engage in. These constraints could be the reason why most female owner-managers interviewed had ventured into the farming of fishery and poultry only, which required limited land space compared to crop farming, as stated by Participant 6.

“Crop farming is not easy. One of the challenges is securing land. Starting crop farming is not the same as fish farming or poultry. With crops, it's not something you can do by yourself; you need people to help you” (Participant 6).

Furthermore, Participant 6 explained that other than access to land, crop farming as a sector required additional resources compared to fishery and poultry husbandry. The findings showed that while access to land can be a challenge for these female entrepreneurs, this did not deter them from starting an agricultural business after attending an intervention scheme. Part of the reason could be attributed to the fact that poultry and fish farming can be initiated as a home-based operation, which, unlike crop farming, requires less land.

4.6. Chapter Summary

The findings of this study have addressed three key objectives of the research, which were set out in sections 4.3, 4.4, and 4.5. The findings have shown how training intervention schemes can positively influence and motivate female micro-owner managers. Female entrepreneurs have benefited from becoming self-employed; however, these micro-enterprises are not often large enough to support paid employees due to financial constraints. The study's findings revealed that most of those women interviewed had gone on to employ paid staff as their Agric-business expanded. This outcome showed that employment in micro-enterprises can be directly influenced by business growth but assisted by attending the training sessions.

The findings confirmed the Government's objectives behind the training intervention scheme was known, and that the idea to promote job creation for female entrepreneurs, however, the findings did reveal that entrepreneurial orientation traits such as proactiveness and propensity to take risks was present amongst these women when setting up and then expanding their Agric business but enhanced by the training initiative. There were other characteristics which enabled these female micro-owner managers to be effective, including their self-motivation, the ability to use networks and being resilient. These characteristics were all classified as being internal

capabilities or skills, and the findings of this study showed that Government-led training intervention programmes can have a positive influence on these traits.

While the findings of this study indicated training intervention programmes were beneficial for promoting self-employment opportunities for these female micro-owner managers, but access to finance was seen as a significant challenge. This finding aligns with existing research (e.g., Joseph et al., 2021), who suggested that intervention programmes often fail to provide micro-enterprises with adequate financial access, due to challenges such as possible diversion of funds as identified in this study.

In analysing the findings further, the influence of training intervention programmes on these female micro-owner managers' entrepreneurial and managerial capabilities, the interviews revealed that the provision of training sessions dedicated to financial and resource management, marketing techniques together with the use of social media for seeking information and expanding the customer base was beneficial. However, the findings did indicate that some female entrepreneurs were wary of information gathered through online sources. The findings also showed that further training was required to effectively utilize social media for marketing purposes.

Finally, the findings showed that training intervention programmes did not necessarily improve access to funds, although this was part of the Nigerian Government's objectives. The findings indicated that these women did not have adequate information about accessing the required funds or that the finance needed was not readily available, even though these entrepreneurs had followed the processes of registering their business activity.

Chapter Five

Discussion

5.1. Introduction

This chapter will discuss the findings of the study, which have been informed by the literature review presented in Chapter Two, which highlighted several gaps in the existing knowledge as to the effectiveness of the Government-led intervention programmes in Nigeria for women entrepreneurs. Chapter Two emphasized the need for further research, particularly the experiences of women entrepreneurs participating in this training initiative. Based on the emerging themes from the literature review, Chapter Three sets out the inductive methodological approach used to generate the qualitative findings, which were initially manually analysed and further analysed using NVivo to determine new and emerging themes. The findings were then aligned with the three research objectives as introduced in Chapter One, along with the six research questions. From the interview data, the study identified four broad themes and sixteen sub-themes, which provided a critical insight into the effectiveness of training intervention schemes experienced by Nigerian female entrepreneurs.

This chapter, in addressing the six research questions, will discuss how the findings of the study relate to the existing literature, commencing with Research Question One, which was focused on how Government-led training intervention programmes influenced female micro-owner managers' Agric enterprises, before focusing on how this initiative can potentially affect their business performance. The theme of self-employment was identified as a critical aspect for business growth and expansion as these women were mostly housewives prior to attending this training initiative. Staff recruitment was also highlighted as an indirect benefit following their participation in a Government-funded training initiative. However, the findings showed that the Nigerian Government's objective to reduce unemployment through promoting the creation of micro-enterprises may not be as successful, as not all the women interviewed had employed staff after setting up their business. Research Question Two focused on the internal capabilities enhanced after attending these training initiatives. Beginning with knowledge transfer, the findings indicated that female micro-owner managers tended to transfer the knowledge they gained by conducting on-the-job training for their employees, but this initiative provided the additional benefit of enabling these entrepreneurs to access networking opportunities within their communities. On the theme of networking as an internal capability which could be

capitalised on and used more effectively after attending a training programme, the value of social networks and the use of social media were seen as significantly beneficial. Also, to emerge from the findings related to Research Questions three was the importance of female micro-owner managers' gaining the necessary managerial and entrepreneurial capabilities through attending and participating in a Government-led training initiative. This included the importance of record-keeping, which is seen as a critical skill required to ensure that the business is financially viable and has sufficient resources, which could only be gained by attending this form of training intervention programme. To conceptualise this, a framework detailing the reflective changes after attending a training intervention programme is presented in Figure 5.1, together with a theoretical framework in Figure 5.2, which visualises the business and academic findings. The chapter will then be concluded by providing a summary, revealing a theoretical insight into self-efficacy and entrepreneurial orientation as to the potential benefits of training intervention programmes designed to develop and enhance female micro-owner managers' internal capabilities and the potential effects on their business performance.

5.2. The Aim of the Research

The aim of the research was *to evaluate the perceptual changes to female micro-owner managers' internal capabilities after attending a Nigerian Government-sponsored training intervention programme*. To achieve this aim and informed by the current academic debate, six research questions were devised to understand the female micro-owner managers' experiences attending a training intervention programme to generate an in-depth insight into the effectiveness of these Government-led initiatives from the perspective of female Nigerian entrepreneurs.

5.3. Discussion and Analysis

Based on the aim above, the next section will address in greater depth the first research question by presenting the findings generated from the interviews, together with the current academic debate as presented in the literature review. The overarching research question for this study is: how have Government-sponsored training intervention programmes influenced the perceptual changes to female micro-owner managers' internal capabilities after attending a Nigerian Government-sponsored training intervention programme? This is conceptualised in three sub-questions.

5.3.1. Research Question One

In addressing the first research question, as to *how Government-led training intervention programmes have influenced women due to attending this initiative*, the findings indicated that the training intervention programme can encourage women entrepreneurs to create and establish their micro-businesses. The results from the interviews, as presented in Chapter Four of this study, indicated that training intervention programmes have a generally positive influence on female micro-owner managers' becoming self-employed, together with having the confidence and knowledge to establish and expand their micro-agricultural business after attending and participating in this initiative. The benefits of facilitating women to become self-employed support the evidence of Chinen et al. (2017) who conducted a systematic literature review based on women's labour market outcomes in emerging markets. The study of Chinen et al.'s (2017) concluded that most micro-enterprises were created after the female micro-owner managers attended a training intervention programme. However, these businesses were established mainly out of necessity. This outcome of Chinen et al.'s (2017) study is consistent with Adeyeye et al. (2019), who asserted that entrepreneurs were often driven by the necessity to create a new source of income. To create this opportunity, following attending a training intervention programme, the female micro-owner managers in this study indicated they were highly motivated and willing to take risks despite their limited access to external resources such as finance.

While the findings in this study revealed that most female micro-owner managers had at least one employee working for them since establishing their business, this trend could not be directly attributed to attending a training intervention session but was a consequence of business growth. There was an indication from the findings that as the micro-Agric business grew, these female micro-owner managers had become more opportunity-focused, and this was reflected in their decision-making processes, including increasing staffing levels or expanding the enterprise. This finding is consistent with Onyekwelu and Oyeogubalu (2020), who argued that developing managerial skills can improve and enhance effective decision-making, which can lead to business growth and job creation.

In identifying those skills and knowledge gained and enhanced by attending a training intervention programme, the female micro-owner managers in this study revealed that the training initiatives they attended provided greater access to local markets through a collaboration with the existing Farmers' Associations. This outcome addresses the limited

research into micro-enterprises in Nigeria, which has arguably been neglected, to assess the influence of providing training intervention initiatives together with access to the Farmers' Association, enabling female micro-owner managers to be more effective in accessing both local and export markets. This outcome is supported by Tonuchi and Onyebuchi (2019), who identified limited market access as a key challenge for female entrepreneurs in the Nigerian agricultural sector, suggesting that access to both local and export markets for these entrepreneurs would be beneficial. However, the study of Tonuchi and Onyebuchi (2019) only focused on policy recommendations which were designed to position the agricultural sector as a driver of Nigeria's foreign exchange earnings, without offering specific strategies to enable female farmers to access these markets. In contrast, Onyishi et al. (2022) did identify that the role of the Farmers' Association was an important facet which can enable farmers to access credit facilities, however, the study by Onyishi et al. (2022) neglected the importance associated with the need for market access and the necessity for increased knowledge which can be acquired through the association.

Kalogiannidis et al. (2024) affirmed that Farmers' Associations or cooperatives can enable information and resource sharing for agricultural and business expansion. This view of Kalogiannidis et al. (2024) aligns with the findings in this study as to the importance of knowledge of accessing local markets which can be achieved by information sharing amongst members in the Farmers' Association. Although, Kalogiannidis et al. (2024) identified high costs and inadequate bargaining power in the agricultural value chain as a fundamental obstacle for farmers to enter new markets, this study found a different challenge. For the female micro-owner managers, they reported that the primary challenge was limited awareness and access to these local markets as sellers. Before attending the training intervention programme, these women in this study sold their produce only to friends and neighbours. However, after participating in the intervention programme and engaging with the Farmers' Association, these women were able to establish new connections with their local markets. This finding is significant as Ma et al. (2024) emphasized that farmers' participation in markets are critical for their business success. Furthermore, Ma et al. (2024) argued that this form of training intervention, which facilitates market access, can also contribute to improved market integration and promote the rural economy. Also highlighted in the findings of this study is the growing interest in the role of the Farmers' Association as a channel for improving farming methods, along with access to finance and e-commercialization (Singh et al., 2023). The Farmers' Association was also acknowledged as being an effective learning hub and

networking opportunity for these female micro-owner managers to meet with suppliers and buyers of farm produce which can contribute to the women's access to local markets and relevant information. Furthermore, the increasing focus on the use of social media for improved market access highlighted in this study aligns with calls for further studies on farmers' cooperatives and e-commerce as advocated by Ma et al. (2024). Interestingly, not all female micro-owner managers interviewed were technologically proficient, with some women facing limited internet access and expressing a reluctance toward using social media for marketing and information gathering due to concerns about phishing scams. This outcome highlights the need for further research on how training initiatives can influence women's attitudes towards digital marketing and e-commerce, how to help these female entrepreneurs overcome possible technological barriers, and how to leverage social media platforms for business growth.

5.3.2. Research Question Two

Following the findings in answer to Question One, in which the study indicated positive outcomes for female micro-owner managers who participated in a training intervention programme, research Question Two was focused on determining how attending a Government-led training programme had improved female micro-owner managers' internal capabilities. The internal capabilities identified in this study were motivation, knowledge transfer, propensity to take risks, proactiveness, and resilience. On knowledge transfer, this study suggested that the women attendees had transferred the knowledge gained from the Government-led training sessions into their businesses. This included how these newly acquired skills had been cascaded to their staff following attending these training activities. On-the-job training was seen as a recognised methodology for knowledge transfer in the agricultural sector and micro-businesses. This finding is relevant as Ataei and Zamani (2015) contended that the female participants who attend training programmes tend to fail to transfer the newly acquired learning to their jobs. Ataei and Zamani (2015) and this study found that knowledge transfer was an important aspect of attending and participating in a training intervention programme. The premise of this contention is based on the findings, which indicate that knowledge transfer was perceived to play a crucial role in micro-enterprises within the agricultural sector, as intervention training can raise awareness of improved agricultural practices such as seedling techniques and farming technologies, essential skills for an Agri-business. This perspective aligns with de Lange et al. (2025), who asserted that a successful farmer must stay updated with new trends and technologies and ensure their employees receive continuous, relevant training. The female micro-owner managers highlighted that knowledge transfer can only be

effective through information sharing within their social networks, but they also had limited knowledge and access to the acquired technology. This finding is consistent with existing literature, such as Tumwebaze et al. (2024), who identified networking as a key mechanism for knowledge transfer in the agricultural sector.

The findings of this study showed that knowledge transfer in agricultural micro-enterprises can only be effective by practicing these newly acquired skills. This finding aligns with Genty (2019), who emphasized the need for practice-based knowledge transfer as the most suitable strategy for this sector and size of business. Ataei and Zamani (2015), argued that on-the-job training is most suited for knowledge transfer within the agricultural sector. Therefore, on-the-job training for female micro-owner managers can serve a dual purpose, helping them understand the lessons learned and expanding their business expertise. This study's findings associated with on-the-job training also align with the findings from Ashfield et al. (2020) which stated that farmers preferred on-the-job training and identified farm simulation exercises as ideal training methods.

As presented in Chapter Four, internal capabilities were considered essential for female owner-managers to support the creation and expansion of their Agric-business. Furthermore, the internal capabilities identified in this study were the motivation to set up and grow their enterprise, the proactiveness and propensity to take risks, along with the resilience to face the various challenges, and the ability to network. The network aspect in this study was grouped into two distinct categories: alliance network, which was linked with the Farmers' Association, and the contact network, which was female-only groups formed and established within the women's communities accessible through social media and physical meetings. This finding is consistent with conclusions drawn by Gherhes et al. (2016) who stated that intervention initiatives which encourage networking and knowledge transfer promote growth in micro enterprises through business collaborations. Although the study by Gherhes et al. (2016) addressed collaboration between large firms and micro-enterprises, the study, however, highlighted the need for micro-entrepreneurs to engage in networking and knowledge transfer activities to boost business performance.

The findings of this study suggested a strong connection and reliance on social media for information sharing and community building, along with access to market research. This finding is partially aligned with the study by Bhagat et al. (2019) who focused on Indian farmers' usage of social media to improve their marketing strategies. The findings in this study

did however indicate that social media remained at a basic level of usage, primarily due to concerns about inaccurate information and online phishing attacks. But the women in this study did express their openness to using social media for information sharing and networking, while showing less interest in leveraging it for marketing their farm produce. This outcome highlights the need for digital marketing and market research to be incorporated into the existing training intervention programmes designed for women, which can help female micro-owner managers enhance their business reach and competitiveness. This usage of social media for marketing is particularly relevant for micro enterprises in sub-Saharan Africa, like in Nigeria. In contrast, Daigle and Heiss (2021) in their review of social media amongst female farmers in the United States, linked social networking to resilience building, emphasizing the role of technology as a tool for empowerment. This North American study highlighted that social media can be used as a free and inclusive space for interactive peer-to-peer learning, offering women farmers an alternative to traditional, male-dominated physical groups such as Farmers' Associations. This view of Daigle and Heiss (2021) partly aligns with the findings of this study, which emphasises the use of social media for information sharing and to mitigate or minimise the challenges of attending physical networking events, which can be problematic for female micro-owner managers who could face external commitments such as family obligations. Cao and Weerawardena (2023) provided an additional insight into the use of social media from a UK perspective, specifically examining its role in enhancing brand capabilities and awareness for small and medium enterprises. While the study of Cao and Weerawardena (2023) supported the use of social media for marketing their business, the research was primarily focused on a developed market, which may not be relevant for new and emerging markets like Nigeria.

5.3.3. Research Question Three

Female micro-owner managers indicated that their managerial and entrepreneurial skills were perceived to have been enhanced after attending a training intervention programme in Nigeria. This was particularly the case for record-keeping, which was identified as a significant acquired skill that was needed. The findings from this study indicated a strong emphasis on record-keeping and its positive association with the management of finances and resources. This outcome is supported by Turner et al. (2018), who studied the agricultural sector by identifying the importance of farmers being trained to effectively keep records to create a benchmark protocol to facilitate change in their operations. From a Nigerian perspective, knowledge of record-keeping amongst young farmers was identified as being relatively low by Omotesho et al. (2022), but this study challenged this in identifying that the training initiatives attended by

the women interviewed enhanced their practical application and attitude toward effective record management. While this study has focused on female micro-owner managers rather than youth or young farmers, the findings do align with Omotesho et al. (2022) in contributing to the importance of including record-keeping when training these farmers. This study further suggests that training intervention programmes can play a critical role in improving record-keeping practices amongst women farmers within the Nigerian agricultural sector. In contrast to the original work of Khadim and Choudhury (2024), who argued that women entrepreneurs tend to possess poor record-keeping skills, this study has shown that female micro-owner managers have good record-keeping skills, which have been gained from attending these Government-led training intervention programmes.

As an acquired skill, financial record-keeping was identified as an important management practice, as its usage can support planning, budgeting, and the allocation of resources (Adela et al., 2024). However, the findings of this study did reveal that female micro-owner managers primarily relied on paper-based record-keeping still, which has been criticized for its limitations in maintaining accurate records, particularly in the agricultural sector (Basir et al., 2024). This perspective of Basir et al. (2024) highlighted the need for further research on the adoption of digital record-keeping for female micro-owner managers in Nigeria's agricultural sector. The outcome of this study also supports the recommendation of Khadim and Choudhury (2024), who argued that additional training on record-keeping software for farmers would be beneficial, which is aligned with the Nigerian Government's objective of promoting technological advancements. This study, therefore, reinforces the necessity for training intervention programmes designed to enhance female farmers' record-keeping practices in Nigeria. The findings also established that improved record-keeping could enhance female micro-owner managers' overall financial management capabilities and access to funds. This can include effective record-keeping, which has been linked to better cash flow, knowledge, and inventory management (Bismark et al., 2020). Effective record-keeping practices can also enhance their planning strategies, enabling more efficient allocation of funds, which may be limited. The outcome of this study also addressed the challenge of owner-managers merging personal and business funds, which has been identified as a key obstacle to effective financial management (Rankhumise & Letsoalo, 2019). The female micro-owner managers interviewed indicated the benefit of attending the intervention training programme of having an awareness of ensuring that personal funds were kept separate from those of the business.

The improved knowledge and skills of female micro-owner managers, which had been gained through attending and participating in a training intervention programme, provided an invaluable insight into exploring the women entrepreneurs' experiences following attending this initiative. The findings indicated that the training initiative was particularly relevant for those women who were already in business, as their experiences highlighted the programme's effectiveness in enhancing their skills, knowledge, and business operations. The outcomes indicated that the skills gained by these female micro-owner managers included record-keeping as one of the most beneficial skills needed, along with possessing the fundamentals of financial management. The female micro-owner managers, when reflecting on their ability to establish an Agric-business, had used the startup packs provided, which proved to be an important incentive. Their reflections were also centred on how they applied the lessons learned from the training to expand their businesses, demonstrating how the training initiative positively improved their entrepreneurial skills. The female micro-owner managers emphasized their ability to be able to recruit and train staff since participating in this initiative. The women who were already in business before attending the training session, acknowledged that they initially relied on casual workers in their business, however, after attending the training session, then as their business had begun to expand, they had begun to employ substantive employees, reflecting the programme's influence on business growth and job stability. The findings of this study highlighted that the training intervention initiative directly promoted and provided opportunities to become both self-employed and entrepreneurially independent. This finding on job creation is consistent with the results from Endris and Kassegn's (2022) a systematic study on the role of micro, small, and medium enterprises in creating sustainable development in Ethiopia and sub-Saharan Africa.

Having outlined above how the research questions were addressed through the themes identified in Chapter Four, the findings generated from the interviews have demonstrated that training intervention programmes can have a positive effect on changing female micro-owner managers' business practices and entrepreneurial skills, as graphically represented below in Figure 5.1.

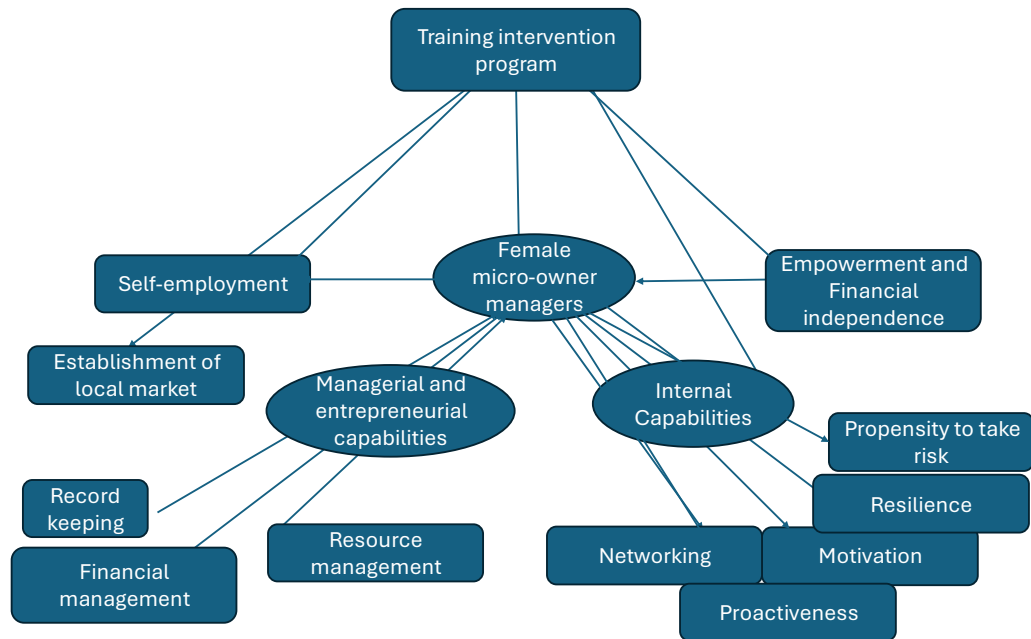


Figure 5.1. Conceptual framework of the perceptual changes to female micro-owner managers after attending a training intervention programme. Source: Author

The conceptual framework in Figure 5.1 outlines the key skills and knowledge gained by female micro-owner managers after attending a training intervention programme. These new attributes were associated with enhancing or attaining internal capabilities, such as developing managerial and entrepreneurial skills. Therefore, the outcomes of these findings have potential implications from a theoretical perspective, as they are relevant to the entrepreneurial orientation and self-efficacy theories when assessing the effectiveness of this training intervention activity from a resource-based lens. This study has highlighted the important role of female micro-owner managers' motivation and internal locus of control as key determinants of change after participating in this training provision. This view is consistent with the assertion of Hamzah and Othman (2023) and Miller (2011), and supported by Covin and Wales (2019), who contended that internal locus of control has an indirect influence on business creation through owner-managers' entrepreneurial competencies. Figure 5.2 illustrates holistically how the study's findings have addressed the project's aim and objectives from a theoretical and business perspective to represent this theoretical underpinning.

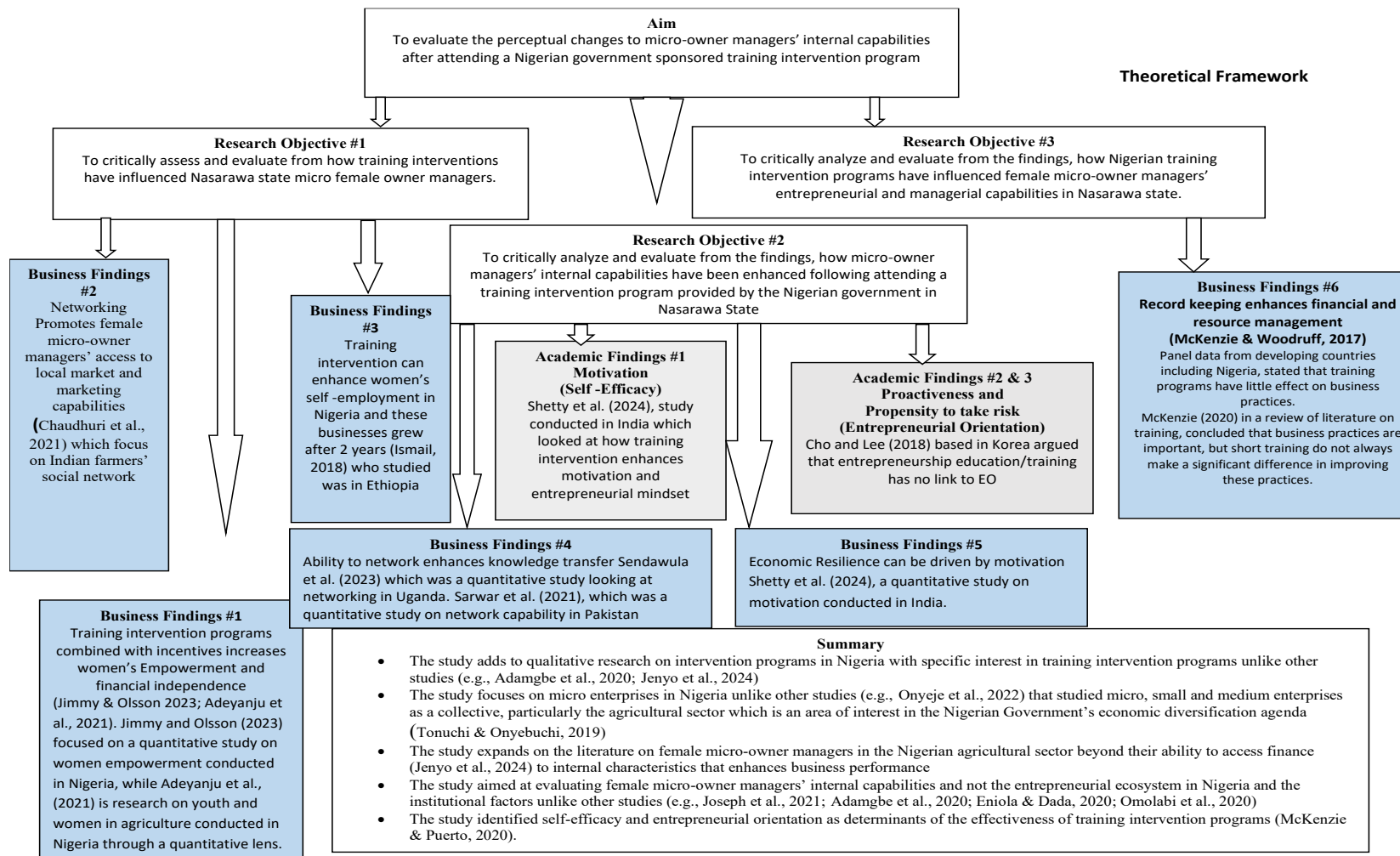


Figure.5.2. A theoretical framework outlining the findings of this study: Source: Author

5.4. Discussion of the Business Findings

The study has identified several significant findings to support business practice, especially the importance of training initiatives in the Nigerian agricultural sector from a female entrepreneurial perspective. Critical to this study is the evaluation of these intervention programmes attended by the female micro-owner managers interviewed to determine the relevance of this initiative from a business perspective.

5.4.1. The Concept of Training Intervention Programmes

McKenzie (2020) stated that a successful training intervention programme can increase participants' knowledge, confidence, and skills, while improving their business practices. In reviewing the outcome of the training intervention programmes on employment opportunities, the findings of this study showed a positive influence on female micro-owner managers' self-confidence in seeking business opportunities for themselves and others, which aligns with existing literature (e.g., Chinen et al., 2017; Martínez A. et al., 2018; Mayuran, 2016). Barron (2020) argued that training initiatives can positively influence future employment opportunities, with the attendees recruiting a minimum of two new employees over a two-year period following their attendance on this form of intervention scheme. However, the findings of this study did show that the training intervention programmes did not directly influence employment rates in these micro-enterprises, therefore not fully meeting the original Nigerian Government's objectives of reducing unemployment through the setting up of new micro-businesses. Instead, employing external employees was attributed directly to business growth and not due to attending a training intervention programme. This outcome agrees with Grimm and Paffhausen (2015) who found that training intervention programmes did not directly affect employment rates, but positively influenced female micro-owner managers' self-employment opportunities. This perspective was further supported by Okoli and Anugwu (2022) who found that entrepreneurial training can have a positive influence on business growth. In the quantitative study on SMEs in South-East Nigeria, Okoli and Anugwu (2022) argued that these training initiatives can enable owner-managers to become self-reliant, develop creative capabilities, and improve sustainable business growth.

However, a critical review into the effectiveness of entrepreneurship training programmes by Ismail (2018) revealed that the format and effects of training intervention schemes varied across different countries. For example, in Sri Lanka, the benefits of these programmes lasted up to two years, however, in Peru, the value of the initiative diminished significantly. This contrasted with those provided in Pakistan, where the training had reportedly no significant influence on female

entrepreneurs compared to their male counterparts, as fewer women engaged in entrepreneurial training. From a Nigerian perspective, this study found that most female micro-owner managers successfully expanded their agricultural businesses two years after participating in a Government-led intervention programme. This outcome indicated that participating in this form of training programme could enable these female entrepreneurs with a higher chance of surviving and to remain operational after three years, which is typically a critical period when many micro-enterprises can experience a decline, which contradicts the work of Ismail (2018) but supports the work of McKenzie and Puerto (2021).

Further analysis of the influence of these training intervention programmes designed for female micro-owner managers highlighted the necessity for financial independence and economic empowerment to enable these women to remain solvent. This outcome is in-line with the objectives of the Nigerian Government to enhance female participation in the country's economy and to alleviate poverty. This finding was supported by the results of Waziri et al. (2020) who reviewed youth empowerment, the use of cash transfers and microcredit schemes can alleviate poverty. However, in contrast to the cash transfers identified by Waziri et al. (2020), the incentives in this study were given to these women and not to young farmers but were mainly provided in a start-up pack which contained birds, fish and seedlings to enable these entrepreneurs to establish their micro-Agric-business. These incentives re-enforced practiced based training which made a difference for these female micro-owner managers' by empowering them through gaining financial independence. By incentivizing these women, the Nigerian Government had fulfilled the empowerment agenda to improve these entrepreneurs' ability to control their financial future especially for those who were financially reliant on their spouses. This outcome aligns with the study of Bayeh (2016) who advocated for women empowerment as a means to generate business and economic growth. Although Bayeh (2016) focused on Ethiopia, the study did highlight the need for women empowerment in sub-Saharan Africa and reinforced this study's findings. This view was also supported by Ghosh et al. (2021) who focused on women empowerment through the provision of agricultural initiatives in Bangladesh. The study of Ghosh et al. (2021) measured women empowerment through using four indices: decision making ability, economic participation, educational rights and economic opportunities, then highlighted the immense contribution that women empowerment can bring to a country and society. By providing this form of training provision together with these incentives can assist in establishing a Agric-business, but there was also a need for an awareness as to how to register the enterprise with the various regulatory bodies, through to providing opportunities to increase

female micro-owner managers' access to information and markets through Farmers' Associations.

5.4.2. Influence of Training Intervention Programme on Nigerian Women's Empowerment and Financial Independence

As a theme, empowerment can be seen as the ability and opportunity to enable an individual to have the knowledge and autonomy that can lead to financial and business independence (Ghosh et al., 2021). This empowerment can include improvements in the individual's skillset and decision-making ability. In this study, the female micro-owner managers were often housewives before attending the training initiative programme. These women invariably did not possess the necessary financial skills or the knowledge of how to build closer links with customers, suppliers, and other farm owner-managers. By creating their Agric-businesses following attending this training initiative scheme, these women improved their decision-making ability by being able to scan for and utilise economic opportunities as the business grew. This finding also relates to the poverty alleviation agenda discussed in Waziri et al. (2020) which was also the focus of the Nigerian Government. For Waziri et al. (2020) poverty alleviation initiatives can empower women and improves their socio-economic interests. These Government-led intervention programmes, like in this study, tend to be targeted at marginalized groups which include women as they are often seen as being economically disenfranchised (Jimmy & Olsson, 2023). The Nigerian Government aimed to meet their goals by offering training in managerial skills and providing start-up packs to female micro-owner managers. This initiative sought to equip these women with the necessary managerial competencies and skills, while also encouraging them to contribute to the economy by becoming financially independent. Although, this outcome aligns with Ismail (2018) who found that business training can enhance self-employment opportunities, there was a divergence as to the benefits associated with this form of intervention training initiative. This study challenges Ismail's (2018) original claim that micro-enterprises tended to decline after two years, as the female micro-owner managers who were interviewed in this study reported business growth extending beyond this two-year period after attending the training session.

This study also addressed the gap highlighted by Jimmy and Olsson (2023) who studied women empowerment from a quantitative lens. Although the training intervention programme evaluated in this study did not improve women's access to finance, the initiative did enhance these female micro-owner managers' access to social networks. This is significant, as Jimmy and Olsson (2023) argued, as social networks could significantly increase women's empowerment by

fostering peer support, shared knowledge, and collaborative problem-solving, which was confirmed in this project. The female micro-owner managers in this study built their social network by creating online groups to share information and gain support when needed. Furthermore, this study supports Kinati et al.'s (2022) assertion that information-based resources through creating and engaging social networks are a crucial form of empowerment in the agricultural sector. Although Kinati et al.'s (2022) study was conducted in Ethiopia, the findings align with the perspectives of the interviewed female micro-owner managers in this study, who emphasized the importance of participating in social network opportunities for information sharing and knowledge transfer.

5.4.3. Influence of Training Intervention Programme on Knowledge Transfer and Social Network

Research into the topic of knowledge transfer, which has included Sendawula et al. (2023), indicated that there was a connection between enhanced knowledge networking amongst small business owner-managers and improved business performance. This view of Sendawula et al. (2023) was shared by Sarwar et al. (2021), who argued that improved network opportunities and social capital can enhance innovativeness and business performance. The findings in this study highlighted the important role of social networking in assisting and facilitating knowledge transfer for these female entrepreneurs. Ashfield et al. (2020) in their Irish-based study identified this method as being closely related to peer-to-peer learning, considering it a practical approach for those farmers who are still establishing themselves. In this study, social networking opportunities increased the awareness of training intervention programmes amongst women and then promoted community participation. For these female micro-owner managers, this knowledge-sharing allowed these women to connect with friends and neighbours, eventually forming groups where information was exchanged, thereby creating an environment of encouragement and support. This support enabled female micro-owner managers to navigate challenges in running their agricultural business by seeking advice within their social group. This outcome aligns with Ashfield et al. (2020), who emphasized the benefits of farmer groups in providing peer support while fostering innovation, as the farmers could adopt new skills and technologies that others had used in the group. This can encourage these women to experiment to improve their farming methods, potentially enhancing the business's productivity.

This study also addressed the knowledge gap highlighted by Ikuemonisan (2024), who demonstrated that training initiatives can enhance female micro-owner managers' ability to transfer knowledge effectively to other peers. The findings also indicated that training

intervention programmes could facilitate knowledge sharing, with female micro-owner managers relying on on-the-job training and their social network connections to disseminate their lessons learned from these training initiatives. As to the findings presented by Alif et al. (2024) as to knowledge transfer amongst livestock farmers in Slovenia, this study found that while knowledge transfer improved female micro-owner managers' business and livestock management practices, the training initiative did not necessarily enhance the female participants' creativity and innovativeness. This outcome could be attributed to the nature of the agricultural value chain in which these women operate, which often requires minimal innovative practices to be adopted. However, the participatory training workshops utilized by Arko-Achemfuor (2019) and discussed by Alif et al. (2024) may offer a viable framework for enhancing the effectiveness of future training intervention programmes by tailoring the provision to the specific needs of these female micro-owner managers. Therefore, this practical approach must be designed to provide a bottom-up strategy by identifying specific training needs and creating context-specific modules to address these female entrepreneurs' evolving challenges effectively.

The concept of building social network opportunities to enhance knowledge transfer also extended to the explicit use of social media for networking and digital marketing. Although this study identified a diverse range of views on social media usage for seeking information, as several female micro-owner managers were sceptical about some of the online information, this study found that most women were receptive to using social media for their marketing activities. This outcome supports the view of Bhagat et al. (2019) that social media, especially WhatsApp, is a more cost-effective means for social networking and digital marketing activities for female entrepreneurs operating in Nigerian rural communities.

5.4.4. Access to Local Markets and Improved Marketing Capabilities Through Networking

This study found that networking can improve female micro-owner managers' access to local markets, particularly through the Farmers' Association. The Farmers' Association allowed women to interact with suppliers, buyers, and other farmers within a single network. This finding is consistent with Chaudhuri et al. (2021), who saw that farmers' networks in India supported sustainable development in the agricultural sector by promoting ideas related to co-production and managing limited resources to enhance the farmers' level of resilience. This study asserts that a positive relationship exists between access to markets through providing networking opportunities and improved marketing knowledge and skills among female entrepreneurs. Rankhumise and Letsoalo (2019) argued that entrepreneurs' limited access to markets was often

due to a lack of market information and inadequate marketing skills. However, this perspective did not apply to the female micro-owner managers interviewed in this study, who had received training to enhance their marketing capabilities and had access to market information through the Farmers' Association. While the women in this study continued to rely on traditional marketing strategies by engaging directly with buyers in local markets, the findings also showed that they were encouraged and prepared to expand their reach beyond their locality using social media platforms. This finding is consistent with Maryanti et al. (2020), who found that entrepreneurs needed to have adaptive marketing strategies, which were flexible and customer-centric, and leveraged through social media platforms, therefore cost-effective.

5.4.5. Influence of Record-keeping on Financial and Resource Management

As mentioned above in section 5.3.4, record-keeping was seen as a significant skill set for female micro-owner managers to acquire. McKenzie and Woodruff (2017) identified the focus on record-keeping as one of the significant business skills needed. This view was emphasized in Tonuchi et al.'s (2020) study of the Nigerian informal economy, which found that micro-entrepreneurs often combined business and personal expenses, which can affect accurate record-keeping. Barron (2020) also contended that financial management training can support micro-enterprises by increasing business performance by providing attendees with fundamental marketing and basic accounting knowledge and information about taxation. The findings of this study revealed that training intervention programmes can positively influence female micro-owner managers' financial and resource management skills through possessing record-keeping knowledge. The female micro-owner managers revealed that keeping records of every expenditure, separating business and personal funds had enhanced their financial management skills and optimised their business resources. This enhanced capability of record-keeping is aligned with Zahra (2021) who emphasized the critical role of owner-managers in attempting to mitigate against resource constraints in a micro-enterprise through carefully managing their finances. By improving their skills and experience, female micro-owner managers can optimize their limited resources and improve business performance. This perspective of Zahra (2021) supports the outcome of this study that improved managerial capabilities are beneficial and essential in navigating financial and resource limitations that can be challenging for any micro-enterprise. Furthermore, these findings highlight the broader implications of investing in managerial skill development for women in developing countries, including Nigeria. McKenzie (2020) recognized the significance of intervention training in enhancing business and financial practices in micro-enterprises; however, the study also raised an opposing view that short training programmes could have minimal effect on improving these activities. In contextualising this, this

study challenges McKenzie's (2020) view on whether the short duration impeded these female micro-owner managers' record-keeping and financial management skills.

This study's outcome was reinforced by the limited resources available to these female micro-owner managers and the need for sound financial management practices. However, possessing the necessary financial skills can be challenging for those operating in developing countries due to restrictive access to funding and resource opportunities (Bismark et al., 2020). To effectively manage their finances, these female micro-owner managers needed sufficient funds to buy stock and feed while paying their workforce. This, however, can be challenging, as seen during the interviews when the female micro-owner managers discussed their financial challenges and how training in financial management, coupled with effective record-keeping, had improved their management skills. This finding aligns with Mang'ana et al. (2023), who argued that agricultural businesses need effective financial management practices to improve their business performance. The findings from this study also showed that these female entrepreneurs improved their financial management capabilities, which positively influenced their ability to manage their farm resources. However, the study revealed a clear need for further training in record-keeping, as the findings showed that these female managers possessed only basic knowledge in financial management. The study did reveal that better financial management practices could enhance women's ability to compete favourably in the male-dominated agricultural sector. Without this skill set, these women may struggle to remain financially solvent, which, for Nkwinika and Akinola (2024), was why financial management skills are vitally important for such enterprises due to the challenges of having limited resources.

Therefore, the findings from this study add to the existing research on the influence and importance of intervention programmes designed for women micro-entrepreneurs, which train them in financial management. The findings of this study also emphasize the need for maximizing other resources, which were identified as important by Miao et al. (2023). Miao et al. (2023) focused on crop farming in China and the necessity to use scarce resources properly, emphasizing the need to optimize resources to provide a suitable agricultural yield, particularly in the efficient usage of water, which is also a challenge in Nasarawa State, Nigeria. By optimizing water usage, the female micro-entrepreneur in the agricultural sector can enhance their ability to have a sustainable business, while reducing financial costs such as water usage. This view reinforces the relevance of Miao et al.'s (2023) findings, but from a Nigerian context. Therefore, female micro-enterprise owners need to be trained on financial and resource management skills.

5.4.6. Influence of Training Intervention on Female Micro-Owner Managers' Motivation

Motivation was identified as being an important attribute that these entrepreneurial women needed to possess when starting up and then growing the business. This study found that attending a training session directly influenced female micro-owner managers' motivation.

This concurs with Shetty et al.'s (2024) conclusion that entrepreneurial development programmes can positively influence participants' motivation and confidence. In this study, the facilitators interviewed in the pilot study highlighted that past micro-owner managers were self-motivated and volunteered to participate in future training sessions as they wanted to share their experiences. Furthermore, these female micro-owner managers had actively sought network opportunities with their fellow entrepreneurs and were prepared to pass on their knowledge, thereby inspiring others to be successful.

This strategy of motivating through sharing and inspiring others is aligned with the findings of Adeyeye et al. (2019), who advocated a push-pull motivation concept when training micro-owner managers. Some of the women interviewed were motivated initially by their interest in the content of the training being taught. However, they were then pushed by economic necessity to create and set up an agricultural business, due to the pull of potential financial opportunities. Lingappa and Rodrigues (2023) studied this push-pull effect for entrepreneurs, who highlighted that women are often pushed into entrepreneurship by necessity but also pulled by the opportunity of being financially independent. This outcome reflects the institutional theory postulated by Omolabi et al. (2020), which underpins the recommendations that the Nigerian Government should provide opportunities and financial grants for women, as supported by Adeyeye et al. (2019), who highlighted the connection between female owner-managers and their motivation to become entrepreneurs. However, reviewing the interview data, this study contends that motivation should be more intrinsic than extrinsic during the startup stage, encouraging these female micro-owner managers to seek expansion opportunities when establishing their Agric-business. This view on intrinsic motivation was also highlighted by Sayarh (2023), who argued that intrinsic motivation was often influenced by the needs and personal values of the entrepreneur, which tend to be different for female managers compared to their male counterparts. Caliendo et al. (2023) suggested that entrepreneurs driven by intrinsic motives are more likely to transform knowledge into new ideas, foster innovation, and expand their business. This perspective was evident amongst the female micro-owner managers

interviewed in this study, as they exhibited intrinsic traits through applying the knowledge gained while actively working to grow their businesses.

5.4.6.1. The Influence of Motivation on Economic Resilience

When female micro-owner managers have an understanding and awareness of potential challenges, this knowledge tends to strengthen their business resilience. Having faced crises such as the effects of extreme weather conditions on their agricultural businesses, the women in this study had developed the perseverance needed to navigate adversity while still growing their agricultural businesses. In the agricultural sector, literature on resilience (e.g., Ayinde et al., 2024; Jayadas & Ambujam, 2021) has created a farmers' resilience index. Using this index, owner-managers in larger businesses tend to show better resilience during a crisis. However, the findings in this study concluded that attending a Government-led training intervention programme for female micro-owner managers can positively influence these entrepreneurs' economic resilience levels. Attending this training initiative made the women interviewed aware of potential business risks and how to mitigate against financial loss. However, this finding indicates that this theme potentially needs further research on utilizing training intervention programmes to improve adaptive capabilities and strengthen resilience in female micro-owner managers in the agricultural sector.

Despite these identified benefits associated with attending a training intervention programme designed to improve female entrepreneurs' economic resilience, the findings revealed the Nigerian Government's failure to meet the target of providing financial stability for these micro-businesses. The female micro-owner managers' economic resilience was problematic regarding how they could respond to extreme weather, compounded by the lack of financial assistance to procure water systems to mitigate against water shortages during the dry seasons. This failure to access financial intervention has led to these female micro-owner managers needing to adapt their business operations to the weather conditions, while improvising their processes and business to reduce financial losses. This limitation of the Government-led objective could be attributed to two aspects: firstly, these female entrepreneurs had inadequate knowledge of financial intervention strategies. Secondly, corruption is a systemic issue in Nigerian society. This outcome implies that Government-led intervention funds tend to be diverted beyond the intended purpose. The limited information amongst female entrepreneurs on financial strategies to manage a crisis aligns with the conclusions of Balana and Oyeyemi (2022), who identified information asymmetry as a reason for small farm holders' low access to credit. Although the study by Balana and Oyeyemi (2022) was not focused on female micro-owner managers in the

agricultural sector or access to funding through training intervention programmes, the study did address the issues of limited access to intervention funds in Nigeria.

The findings related to the external limitations, such as corruption, which can adversely affect these female entrepreneurs' access to finance, are consistent with the research of Joseph et al. (2021), who evaluated the challenges faced when implementing financial intervention programmes by the Central Bank of Nigeria. The findings of Joseph et al. (2021) on the politicization of financial intervention programmes are also consistent with this study and may explain why the female micro-owner managers do not readily receive intervention funds despite meeting the requirements. However, this study did not establish a positive relationship between training intervention programmes and enhanced access to finance, despite existing research (e.g., Edoko et al., 2017) suggesting that such initiatives can alleviate poverty and enhance financial accessibility for entrepreneurs. Edoko et al. (2017) highlighted the influence of corruption, which often led to limited access to finance and funds for entrepreneurs. However, they then advocated the need to establish financial programmes through cooperatives and local Government schemes designed to benefit rural communities specifically. On the other hand, this study aligns with the view by Jenyo et al. (2024), who, in a quantitative study on women in agricultural businesses, identified a positive influence of intervention programmes on women-owned businesses and recommended that access to funding be improved to ensure financial inclusion for women. However, as Joseph et al. (2021) noted, access to finance can be fraught with challenges for female entrepreneurs when accessing financial resources provided by the Nigerian Government. These challenges range from inadequate information on financial schemes and available credit facilities designed for farmers to corrupt practices in fund distribution. (Okoli and Anugwu, 2022). This study contends that the Nigerian Government's objective to make financial funds accessible to beneficiaries of this form of training was not achieved.

Despite these limitations, the female micro-managers displayed resilience by improvising during a crisis, thereby ensuring that the business had not suffered significant financial losses. To achieve this, improvisation and proactive practices were recalled, including incorporating locally made feed for the fish to save costs and ensure that the fish was sold quickly when the farms experienced a water shortage. The findings on improvisation are aligned with Buradum et al.'s (2018) view that resilience in individuals and organizations can be enhanced by being adaptable, while leveraging the entrepreneur's potential, knowledge, and capabilities to strengthen their resilience. In this study, the women's understanding of the region's ecological terrain, improved access to local markets, and awareness of the risks associated with fish farming contributed to their economic resilience, enabling them to navigate challenges effectively.

5.5. Determinants of an Effective Training Intervention Programme from an Internal Capability Perspective

Intervention programmes in Nigeria have mainly been evaluated from an institutional perspective, emphasizing the role of Governments in establishing and developing micro enterprises. The Nigerian Government's objective was to move micro-enterprises from being categorised as informal entities to becoming formal businesses by supporting these businesses by providing access to finance, simplifying the registration processes, and providing the necessary infrastructure and resources (Etim & Daramola, 2020). However, external facets such as corruption and politicization of intervention programmes were highlighted as limiting the effectiveness of this Government-led initiative (Joseph et al., 2021). However, findings from studies such as Wijewardena et al. (2008); Tang et al. (2023) as well as Zin and Ibrahim (2020) have indicated the need to assess owner-managers' personality on business performance. Theoretically, this study contends that training intervention schemes can enhance entrepreneurial orientation and self-efficacy amongst female micro-owner managers. This study suggests that self-efficacy and entrepreneurial orientation are linked to the positive perceptual changes to female micro-owner managers' internal capabilities after attending a training intervention programme. This view is aligned with the study on the characteristics of an entrepreneur. Ahamed et al. (2021), who contended that motivation and entrepreneurial orientation can significantly and positively influence an SME's growth. However, this study contends that self-efficacy and entrepreneurial orientation are determinants and results of the effectiveness of training intervention programmes on female micro-enterprise owners.

From the context of this study, entrepreneurial orientation can be defined as the impetus to explore opportunities proactively while engaging in innovative and risk-taking business activities (Huang et al., 2023). The female micro-owner managers interviewed in this study demonstrated proactiveness in starting their Agric-businesses. They gained their knowledge through engaging with social networks while also improvising during a crisis to ensure the business had economic resilience. This study further reinforced the notion that entrepreneurial orientation is multidimensional, as only proactiveness and propensity to take risks were found to have been enhanced through the female micro-owner managers' participation in the training intervention programmes. This study affirms the view shared by Miller (2011); Covin and Wales (2019) and reinforced by Hamzah & Othman (2023) which states that entrepreneurship in a micro-enterprise tends to be driven by the owner-managers' "internal locus of control" due to

the small size and limited number of employees in this type of business, and that this *internal locus of control* can be likened to self-efficacy in this study.

5.5.1. Influence of Training Intervention Initiatives on Self-Efficacy

As defined by Duarte Alonso et al. (2019), self-efficacy can be seen as an individual's belief in their ability to get a desired outcome. This definition was expressed in the female micro-owner managers' actions after attending the training intervention programme to motivate them to create an Agric-business due to their increased confidence to take the risk. The idea of female micro-owner managers' self-efficacy can also be associated with the dynamic capability of an entrepreneur (Kevill et al., 2017). Kevill et al. (2017) contended that a micro-enterprise's growth is positively related to the owner-manager's perception of their capability to create a successful Agric-business. This view was confirmed by the female micro-owner managers' narrative on how they grew their business, the initial self-doubt, and the confidence gained following the first harvest. The female micro-owner managers' ability to overcome self-doubt and the confidence to move forward successfully with their Agric-business was based on their personal development and capabilities, demonstrating their self-efficacy and entrepreneurial orientation (Li et al., 2020). The women's effective use of incentives, resilience in crises, and networking through the Farmers' Association, which was enhanced by the women's active participation in the community through creating women groups, highlighted their self-efficacy. Part of this high level of self-efficacy can be attributed to the influence of attending and participating in a training intervention programme. The findings align with Li et al.'s (2020) concept of entrepreneurial self-efficacy, which documented the importance of confidence in fulfilling the various entrepreneurial activities. From the perspective of this study, this was demonstrated by the female micro-owner managers who shared how their confidence grew after experimenting with the incentives they received, which in turn increased the women's willingness to take proactive business risks.

This study, therefore, concurs with Li et al.'s (2020) comparative study on self-efficacy in men and women, which concluded that women were more inclined to identify entrepreneurial opportunities due to their intuitive cognitive styles. The findings in this study did, however, reveal that self-efficacy can enhance an entrepreneur's motivation and influence other internal capabilities, such as propensity to take risks, which could improve business performance. This view aligns with Shetty et al.'s (2024) study in India concluded that entrepreneurial development programmes can improve the trainees' mindset towards entrepreneurship. Shetty et al. (2024) also stated that an improved entrepreneurial mindset can enhance internal capabilities, including leadership, decision-making, networking abilities, self-confidence, and empowerment skills. Furthermore, Shetty et al. (2024) indicated that an entrepreneurial mindset can influence

creativity, innovativeness, and risk-taking. This view of risk-taking aligns with the findings of this study as to the influence that self-efficacy can have on motivating the individual female entrepreneur to take calculated and strategic risks.

Anderson et al.'s (2021) study on empowerment for women in the agricultural sector found that economic empowerment is tied to women's psychological mindset and self-perception. In explaining this, Anderson et al. (2021) suggested that activities promoting economic empowerment can also improve self-efficacy, which was present in this study. While economic empowerment was established through the various incentives offered at the end of the training initiative, this study contended that providing information and related resources through the Farmers' Association enhanced the female micro-owner managers' self-efficacy. This perspective supports Kinati et al. (2022), who identified that information and associated resources were critical assets in the agricultural sector. For Rankhumise and Letsoalo (2019), self-confidence and propensity were related to taking risks, an internal attribute associated with ensuring that the MSME remains profitable. This study agrees with Rankhumise and Letsoalo (2019) on the notion that self-confidence and a propensity for risk-taking are essential internal capabilities. Furthermore, the findings of this study contend that the concept of self-efficacy, proactiveness, and propensity to take risks did exist amongst female micro-owner managers after attending a training intervention programme.

5.5.2. Influence of Training Intervention Programmes on the Propensity to Take Risks

In evaluating the effects of the Government-led training intervention programmes on female entrepreneurs, this study supported the claim of Al-Awlaqi et al. (2021) that the provision can have a positive influence on micro-enterprises. The findings of this study emphasized the proactiveness and propensity to take risks as essential internal capabilities, which had been informed by attending this provision. In line with the research of Miller (2011), these constructs fit into the "internal locus of control" concept and are essential for micro-owner managers to possess. Furthermore, the female entrepreneurs interviewed in this study indicated a high level of risk-taking capabilities when initially establishing their Agric-business after attending the training programme. This was indicated in the women's narration, suggesting that risk-taking is important in business creation and expansion, especially in the agricultural sector, which has specific and unique challenges. The findings from this study, however, did not highlight the need for autonomy, competitive aggressiveness, and innovativeness as essential characteristics as advocated by Lumpkin and Dess (1996), as supported by Alkharafi et al. (2024). Innovativeness was inferred from the narration of the female micro-owner manager who started a rice farming

business as an important capability, as she had incorporated improved seedlings and adopted alternative farming methods in her farming operations. However, it cannot be concluded that all female micro-owner managers in the Nigerian agricultural sector demonstrated innovativeness characteristics in their agricultural businesses.

The findings of this study do, however, contribute to the ongoing debate on entrepreneurial orientation and are aligned with the perspectives of Miller (2011), Covin and Wales (2019), and Al-Awlaqi et al. (2021), who suggested that entrepreneurial orientation constructs can be viewed as multidimensional but depend on the sector and business. This study also highlighted that dimensions such as competitive aggressiveness may be less relevant in micro-enterprises, particularly in the agricultural sector in rural Nigeria. This outcome is because many of these enterprises begin as necessity-driven enterprises, motivated by domestic needs and not focused on internationalization. The outcome of this study further revealed that female micro-owner managers were conscious of the risks associated with agricultural businesses through the training they received and the interactions with their peers through the Farmers' Association. This included the propensity to take risks as a vital capability and attribute that can be developed through attending a training intervention programme. As the women's confidence in their business ability grew, so did their willingness to take further or additional risks. This outcome suggests that the propensity of female micro-owner managers to take risks may have been shaped by the women's enhanced capabilities and networks, illustrating a connection between individual traits and environmental influence in risk-taking behaviour (Xie, 2021).

5.5.3. Influence of Training Intervention on Proactiveness

In addition to the findings related to the propensity of taking risks, which can be enhanced by attending this training activity, the outcome of this study also revealed that the female micro-owner managers exhibited proactiveness in wanting to build networks, engaging with their suppliers and buyers through the Farmers' Association. Existing research (e.g., Onyenma & Hamilton, 2020) has defined proactiveness as a forward-thinking approach in decision-making to recognize new opportunities. This study agreed with Cho and Lee's (2018) definition of proactiveness, which is the ability to identify a business opportunity, explore, and then utilise market information to grow the enterprise. However, the findings of this study contradict the work of Cho and Lee (2018) that entrepreneurial education has an insignificant effect on entrepreneurial orientation and proactiveness. Instead, this study found that there was a positive effect of attending a Government-led training intervention programme in developing entrepreneurial propensity in taking risks and having a proactive mindset, which challenges Cho

and Lee's (2018) findings, but from a Nigerian context. This perspective is justified by Huang et al. (2023) who argued that entrepreneurial orientation depends on the business context, such as the size and sector. This study has shown that training intervention programmes can positively influence these women's proactiveness and risk-taking behaviour in a Nigerian micro-agricultural business context. This study has also demonstrated that improved self-efficacy can be seen through the motivation to take risks and be proactive when setting business goals and overcoming challenges.

5.6. Influence of Training Intervention Programmes on Access to Finance

Access to finance proved to be important in this study and was one of the main reasons for attending a training intervention programme in Nigeria. To address the issue of limited access to finance, the Nigerian Government-led initiative incorporated a series of incentives to enable access to financial resources. During the training sessions, the female micro-owner managers interviewed were encouraged to register their farms, as it was a precondition to access financial resources provided by the Nigerian Government. This finding regarding Agric-business formalization showed that the training intervention programme positively influenced these entrepreneurs to register their micro-enterprises formally. This finding aligns with Barron's (2020) study on farmers in Peru, which concluded that training initiatives promoted business formalization. At the same time, however, this study revealed that the female micro-owner managers had a limited awareness and knowledge of available financial resources, which had prevented these entrepreneurs from accessing available funds. Furthermore, the findings of this study are consistent with the research of Joseph et al. (2021), who identified external characteristics such as corruption and politicization of training programmes as limitations to female micro-owner managers' access to financial initiatives and incentives.

5.7. Chapter Summary

This chapter presented the findings compared to the current academic debate by addressing the research questions aligned with the emerging themes. The findings in response to Research Question One identified that self-employment and female micro-owner managers' connection to the Farmers' Association was a positive influence, as informed by attending the Government-led training intervention programme. This outcome is consistent with existing literature (e.g., Onyishi et al., 2022) which showed a growing interest in Farmers' Association as a creative hub to enable e-commercialization to be taught in the agricultural sector, and act as a means to inform farmers about accessing finance. The study's outcome also adds to the importance of using the

Farmers Association as a medium for knowledge transfer and a platform for connecting female owner-managers to prospective suppliers and buyers. In addressing Research Question Two, which was related to knowledge transfer, there was two significant outcomes, the need for the establishment for female micro-owner managers to be able to share their knowledge, both within the business, and through on-the-job-training which was identified as a vehicle to share their experiences and lessons learned through practice-based learning. The connection with the Farmers' Association and the established contacts gained through social networking had enabled peer-to-peer learning to occur, which was consistent with the findings of Chaudhuri et al. (2021) and Sendawula et al. (2023).

In addressing Research Question Three, the focus was on understanding how training intervention programmes had potentially improved female micro-owner managers' internal capabilities and skills. The findings revealed several key internal capabilities: motivation, networking, proactiveness, and the propensity to take risks. Motivation emerged as a fundamental capability that had driven the women interviewed to set up their business and achieve economic independence, which was strengthened by the entrepreneurs' self-efficacy. The ability to network effectively enabled these women to build valuable business relationships, exchange knowledge, and access new opportunities, reinforcing their entrepreneurial growth. Proactiveness enabled these women to anticipate challenges, adapt to market demands, and take the initiative to expand their enterprise. The propensity to take risks was considered an essential entrepreneurial capability recognized as a critical characteristic in business growth and sustainability. Given the significance of risk-taking, the study highlighted the need for future training intervention programmes to emphasize developing risk-taking capabilities amongst female micro-owner managers, equipping them with the confidence and entrepreneurial mindset needed to navigate uncertainties while growing their businesses. Networking was identified as an important facet for female entrepreneurs, with social media identified as a vehicle to access market information, which addressed Research Question Four.

This chapter has also elaborated on the necessity of record-keeping and its connection to financial and resource management, which was in response to Research Question Five, which focused on understanding the managerial and entrepreneurial capabilities needed and how they were enhanced by attending the training intervention programme. The findings showed consistency with existing research. (e.g., Basir et al., 2024; Khadim & Choudhury, 2024) on the importance of record-keeping for micro-enterprises and the need for further training in digital record-keeping in line with the Nigerian Government's information and technological objectives.

In encapsulating the entire experience from attending the training intervention initiative to the establishment and then the growth of the business, these female micro-owner managers were asked to reflect on their experience in Question Six. The findings revealed that these women attributed their business acumen to the information received from the training sessions and emphasized the importance of record-keeping, financial management, and recruitment efforts as important themes of the content delivered. The Chapter has also emphasized the significant role of self-efficacy, which refers to an individual's belief in their own ability to succeed, and how this attitude can contribute positively to the confidence and resilience of female micro-owner managers. Linked to this was the entrepreneurial orientation dimensions of being proactive and having the propensity to take risks. The implications of these findings on business practice and academic research, including the constraints of this study, will be discussed in the next chapter, Chapter Six.

Chapter Six

Conclusion

6.1. Introduction

This chapter will present a synthesis of the literature review and methodology, and then the findings and discussion chapters outlining the business and academic contributions of this professional doctorate study. The Chapter will begin with an overview of the research, including the aim and objectives of the study. As a professional doctorate, this study will focus on the business contribution, followed by the academic insights generated, specifically related to micro-Agric enterprises in Nigeria. This Chapter begins with an overview of the study in section 6.2, in which the research paradigm, epistemological perspective of the project, and the methodology adopted are summarised. This will be followed by the aim, objectives, and research questions addressed in the study, set out in section 6.3. The findings and conclusions of the project are discussed in section 6.4, which will be developed before informing the business contribution. These contributions are divided into implications for different stakeholders, beginning with the potential ramifications for training intervention providers in section 6.4.1, then policymakers in 6.4.2, and finally related to female micro-owner managers in section 6.4.3. The business contribution indicated a requirement for better business practice training content to be developed, the inclusion of stronger intervention policies that promote meritocracy, and the inclusion of a reflective component in training design. The incorporation of reflective learning into the content of intervention training programmes would enable female micro-owner managers to critically examine their self-motives and perceived barriers, which could restrict business growth prior to and after attending the training scheme, while also providing a vehicle to enable them to self-assess their progress to highlight areas of personal and professional growth. This initiative is designed to strengthen women's internal capabilities and to promote the establishment of opportunities for enhancing their skills and knowledge. The academic contribution of this study is centred on the methodology adopted and the significant role of self-efficacy and entrepreneurial orientation theories from a Nigerian and female micro-owner managers' perspective. Finally, in sections 6.5, 6.6, and 6.7, the limitations of the study, areas of further research, and a concluding reflection will be presented.

6.2. Overview of the Study

This study has focused on understanding the perceptual changes experienced by female micro-owner managers in Nasarawa state, Nigeria, after attending a Government-led training

intervention programme. The agricultural sector was specifically selected as this industry has emerged as a major area of interest for the Nigerian Government's economic diversification policy (Tonuchi & Onyebuchi, 2019).

The study was conducted from an interpretivist perspective using a qualitative research approach to interview ten female micro-owner managers and three facilitators. To answer the six research questions outlined in Chapter One and discussed in Chapter Five, thirteen semi-structured interviews were conducted for both the pilot and main study. These participants were facilitators and attendees of training intervention programmes in Nasarawa state, Nigeria, which consisted of three facilitators and two owner-managers for the pilot study. Eight female micro-owner managers who had attended training programmes specifically targeted to the agricultural sector were interviewed for the main study. These female micro-owner managers owned Agric businesses in fish or poultry, livestock, or a combination of both, with only one owning a rice farm. Five participants started their Agric-businesses after attending the training initiative, while two expanded their existing enterprises after the conclusion of the programme, with only one not starting up an Agric business at the end of the scheme.

An inductive approach was utilised in the study to gain an in-depth understanding of the participants' experience. Using semi-structured interviews, this approach enabled some flexibility in the questions asked, providing opportunities to focus on new and emerging themes highlighted in the findings chapter. The interviews were conducted using the MS Teams teleconferencing application and were recorded and then transcribed. Analysis of the interview transcripts was conducted using Braun and Clarke's (2006) thematic analysis strategy. A two-stage coding process was conducted, beginning with an initial manual coding of the interview data before the transcripts were imported into NVivo for the final coding process. The findings were constantly evaluated in response to the central calls of Chinen et al. (2017), Grimm and Paffhausen (2015), and McKenzie and Woodruff (2017) as to the effectiveness of existing training intervention programmes on entrepreneurial activities, along with the acquisition of skills and knowledge. The study also evaluated female micro-owner managers' internal capabilities in line with the studies (e.g., Adeyeye et al., 2019; Caliendo et al., 2023; Kevill et al., 2017; Srimulyani & Hermanto, 2022; and Zahra, 2021), which focused on motivation and self-efficacy as important aspects of entrepreneurial capabilities.

6.3. Aim and Objectives of the Study

The aim of the research was *to evaluate the perceptual changes to micro-owner managers' internal capabilities after attending a Nigerian Government-sponsored training intervention programme*. To achieve this aim, the following research objectives were devised:

- To critically identify in the existing literature as to the extent to which Government training intervention programmes can change micro-owner managers' internal capabilities.
- To critically assess and evaluate how training interventions have influenced Nasarawa state micro female owner-managers.
- To critically analyse and evaluate from the findings, how female micro-owner managers' internal capabilities have been enhanced following attending a training intervention programme provided by the Nigerian Government in Nasarawa State.
- To critically analyse and evaluate from the findings, how Nigerian training intervention programmes have influenced micro-owner managers' entrepreneurial and managerial capabilities in Nasarawa state.
- To recommend practical implications to policymakers on improving training intervention programs and access to Government-sponsored financial intervention.

To achieve the first research objective, a comprehensive literature review was conducted in Chapter Two, which discussed the current academic debate on training intervention programmes, the profile of micro enterprises, along with the necessary internal capabilities of entrepreneurs, including their managerial attributes. The review identified several gaps in existing literature, which was highlighted and summarised in a conceptual framework in Figure 2.2 in Chapter Two. The literature review revealed that micro, small and medium enterprises tended to be grouped together and explored as a complete entity (e.g., Ajuwon et al., 2017; Egere et al., 2022; Onyeje et al., 2022; Onyekwelu & Oyeogubalu, 2020). This grouping is not restricted to Nigeria as other studies (e.g., Dela Cruz et al., 2023; Endris & Kassegn, 2022) have also analysed micro, small and medium businesses as a complete entity but have concluded this grouping often neglects micro-enterprises, which this study has addressed. In addressing this omission, the study drew on Gherhes et al. (2016) assertion that micro-enterprises tended to be managed by the owner who often have underdeveloped and limited business knowledge and skills or adequate resources. This recognition of underdeveloped capabilities amongst micro-owner managers, including those who are female, resulted in limited access to markets, finance, network support, and training opportunities to acquire the necessary managerial skills (Adeyeye et al., 2019; Zin & Ibrahim, 2020). The literature review

revealed that micro-enterprises were seen to be considered as an unrecognised or informal sector, and consisted predominately of low income and self-employed individuals who ran unregistered businesses which were often owned by women (Tonuchi & Onyebuchi, 2019). To address this trend, the Nigerian Government have instigated a series of training intervention programmes to upskill trainees and to promote the formalization of micro-enterprises. Existing studies (e.g., Chinen et al., 2017; Dladla & Mutambara, 2018; McKenzie, 2020) have however offered differing views about the effectiveness of these training intervention initiatives which have ranged from the politicization of this form of training which can limit the effectiveness of the provision (McKenzie, 2020), through to the limited support available to women who attend this scheme which could have been beneficial if adequate financial and business support was made accessible (Dladla & Mutambara, 2018). Furthermore, studies including Jenyo et al. (2024) and Joseph et al. (2021) have mainly focused on financial intervention schemes and not the training provision, which has revealed another gap in existing literature. In analysing training intervention initiatives for the agricultural sector, existing literature (e.g., Adeyanju et al., 2021) has revealed that these training schemes were evaluated based on income generated by the participants after attending this form of programme, which presents a challenge as to evaluating the effectiveness of this initiative, as many micro-enterprises do not maintain accurate sales or income records due to limited financial management and record-keeping skills (Malaury et al., 2021). Having identified these research gaps, the literature review then informed the overarching research question, *as to how have Government-sponsored training intervention programmes influenced the perceptual changes to female micro-owner managers' internal capabilities after attending a Nigerian Government-sponsored training intervention programme* and the three sub-research questions aligned to Research Objectives Two, Three and Four as presented in section 6.3 in this Chapter.

Research Question One: *How have Government-led training intervention programmes influenced women in the Nigerian agricultural sector?*

Research Question One was focused on the female micro-owner managers' general perception of changes to their business acumen after attending a Nigerian Government-led training intervention programme. Although, studies on intervention programmes (e.g., Adeyanju et al., 2021; Chinen et al., 2017) have identified some benefits of this form of training, the effectiveness and benefits, such as access to markets and finance for female micro-owner managers in Nigeria, have been underexplored. The responses from the interviews conducted in this study identified that female micro-owner managers' self-employment, levels of empowerment, and financial independence, along with access to local markets and affiliation

with Farmers' Associations, had been significantly enhanced after participating in this form of scheme. These benefits were also aligned with the Nigerian Government's poverty alleviation objectives which included ensuring that women could become more financially independent (Waziri, et al., 2020). Although the female micro-owner managers' self-employment aligned with the Nigerian Government's job creation agenda, the training provision only partially fulfilled the degree of success, as the interviews revealed an indirect influence on staff recruitment, which was a broader Government objective when instigating this training initiative.

Research Question Two: *How has attending a Government-led training programme improved female micro-owner managers' internal capabilities?*

One of the key internal capabilities identified in the literature review was related to knowledge transfer (Noerlina et al., 2023). However, the review highlighted a gap in existing debate regarding the transfer of knowledge specifically gained from this training. Despite this identified limitation, prior research has acknowledged that knowledge transfer can effectively occur when the learner participates in on-the-job training and engages in social networking (Abu Amodu & Aka Ama, 2016; Efobi & Orkoh, 2018; Genty, 2019). Although Ikuemonisan (2024) contended that knowledge transfer remains a significant weakness in Nigeria's agricultural sector due to rural farmers' limited knowledge and expertise, this perspective was challenged by this study. Specifically, female micro-owner managers in this study were found to actively facilitate knowledge transfer by applying their newly acquired skills through on-the-job training and optimizing community participation through the usage of social networks. Knowledge transfer emerged as a pivotal capability that interconnected various entrepreneurial functions and played a critical role in enhancing the female micro-owner managers' access to local markets, which also included undertaking effective marketing activities and improving their networking capabilities.

Motivation was recognized as a significant outcome that improved other capabilities such as proactiveness, propensity to take risks, proficiency in networking, improvement in resilience, and facilitating knowledge transfer. Based on studies including Adeyeye et al. (2019) and Huang et al. (2023) on motivation, this study revealed that female micro-owner managers were both necessity and opportunity driven when setting up and expanding their Agric-business. Risk-taking and proactiveness were identified as the key driving forces for business expansion, while networking, including social media usage, enhanced the women's marketing capabilities. Furthermore, resilience was also indicated to have been improved through participating in the

training intervention scheme, as the women were made aware of the potential risks in operating an Agric-business. However, proactiveness was acknowledged as a capability that increased women's economic resilience, as they were able to make proactive decisions to prevent financial loss during a crisis, such as due to extreme weather conditions.

Furthermore, this study suggests that female micro-owner managers actively built their professional connections through the Farmers' Associations and via social networks. This outcome aligned with studies by Samujh (2011) and Zin and Ibrahim (2020), who asserted that micro-enterprises tend to rely heavily on community-based networks for market information and knowledge transfer. Aladejebi (2020) emphasized the importance of access to networks to attain entrepreneurial success, which can provide a useful framework to understand the various strategies available for these female micro-owner managers. Specifically related to this study was the importance of engagement for the women entrepreneurs through network opportunities to foster shared experiences and establish localized support systems. The women saw that membership in Farmers' Associations represented a shared support network opportunity, enabling them to gain access to market and agricultural resources, including engaging with potential suppliers and buyers. These networks facilitated knowledge transfer and enhanced the women's market reach, business resilience, and overall economic empowerment.

Research Question Three: *How has participation in Government-sponsored training interventions improved female micro-owner managers' managerial and entrepreneurial skills?*

To answer the research question, this study focused on managerial and entrepreneurial skills such as record-keeping, marketing capabilities, and financial and resource management attributes, which were seen as skills that could be enhanced through attending and participating in a Government-led training initiative. These skills were identified as essential business techniques, but McKenzie and Woodruff (2017) suggested that a training intervention scheme may have limited influence on these practices, which were absent in this project. While existing literature (e.g., Basir et al., 2024; Malauri et al., 2021; Omotesho et al., 2022) has argued that micro-enterprises often have poor record-keeping skills, this study revealed that the female micro-entrepreneurs showed improved record-keeping practices after attending this form of training provision.

This study revealed that female micro-owner managers' marketing capabilities were considered to have been enhanced following these training sessions. This project also discovered a focus on digital marketing and increased social media usage. This finding aligned with Bhagat et al. (2019) who asserted that digital marketing can empower women entrepreneurs to overcome

market access barriers and gain a competitive advantage. Although existing studies (e.g., Bhagat et al., 2019; Maryanti et al., 2020; Wardaya et al., 2019) have recommended the use of digital marketing and social media platforms such as Facebook and WhatsApp, this study, however, revealed that the level of competency was still at a basic level for female micro-owner managers; therefore, they need to have a greater presence in future training initiatives. The study further indicated a positive influence on business practices as record-keeping was shown to have improved amongst the female micro-owner managers' financial and resource management skills. Due to the limited resources available to these female-led micro-entrepreneurs, enhanced financial management practices have enabled them to use their resources more effectively (Bismark et al., 2020).

The female micro-owner managers in business before attending the training intervention session emphasized the importance of record-keeping and staff recruitment, which were areas that had improved following their participation. For those women who had begun their Agric-business after attending the training session, the fundamentals of business creation and financial independence were highlighted as essential components. While not all female micro-owner managers had employed staff after attending the training session, those who had employees attributed recruitment directly to their business growth, while seeing the intervention initiative scheme as indirectly responsible for expanding their concern.

6.4. Conclusion

This section will discuss the study's practical and theoretical contributions, focusing on its business and academic implications. The following section, on the business contribution, will highlight implications for training providers, policymakers, and female micro-owner managers.

6.4.1. Business Contribution

This study's focus was to understand the effectiveness of Nigerian Government-led training intervention schemes for female micro-owner managers. By exploring how this form of training initiative can influence business creation through informing and developing female micro-owner managers' internal capabilities, managerial skills, and access to resources, this research has provided an invaluable insight from both a Nigerian and an Agric-business perspective. A key business contribution of this research has been the identification of the positive influence that training intervention schemes can have on women's empowerment and the formalization of micro-enterprises.

6.4.1.1. Implications for Policymakers

This study revealed that training intervention programmes did not directly enhance female micro-owner managers' access to finance or funding. which aligns with the challenges associated with intervention programmes and funding opportunities highlighted in existing studies (e.g., Joseph et al., 2021; McKenzie, 2020), but from a Nigerian and Agric-business perspective. This provides an opportunity for policymakers to review existing policies, as whilst intervention initiatives for micro-enterprises have been identified as a popular political tool introduced in emerging economies, the politicization of these training schemes has led to challenges in successfully providing financial intervention to farmers. To improve access to finance, policymakers at the Federal Government level need to address the challenges of corruption and politicking when the funds are allocated to ensure that financial resources are provided to these micro entrepreneurs. Policies on financial interventions such as the Anchor Borrowers programme need to be re-evaluated to eradicate the diversion of intervention funds and raise female business-owners' awareness of funding opportunities for rural agricultural communities. The Nigerian Government, through SMEDAN and the Industrial Training Fund, can strengthen collaborations with Farmers' Associations and micro-finance banks to provide financial information and specific funding for women in the agricultural sector, particularly women who meet formalization requirements through a merit-based system. To further support accessibility to finance and funds, policymakers can institute policies that encourage awareness campaigns to increase knowledge of existing intervention programs through Farmers' Associations, and the organization of town hall meetings in collaboration with financial institutions and Government agencies to ensure that information is disseminated directly to female Agric-entrepreneurs. This outcome will address the issue of information asymmetry identified in this study, ensuring that the women's efforts in meeting regulatory requirements are rewarded with financial access.

6.4.1.2. Implications For Training Providers

This study has established that training intervention programmes can positively influence female micro-owner managers' motivation to create and set up their new business. This finding is significant as it justifies designing and tailoring Government-led training programmes to address both the necessity and opportunity-driven motives of female entrepreneurs. This implication aligns partially with Lingappa and Rodrigues's (2023) assertion that training methods can be beneficial for those who are establishing or setting up a new Agric-business, however, this strategy might be detrimental for those female micro-owner managers who are focused on expanding or growing their existing enterprise, as their needs are different, therefore

indicating the need for tailored content. Although, these Nigerian women in this study who were already in business prior to attending the training initiative, their participation in the programme did lead to an invaluable insight being gained as to business knowledge through the generic sessions attended, however there was the identified need for further tailoring to enhance their existing skills, such as digital marketing, e-commerce and the usage of professional networks. The inclusion of mentorship programmes specifically tailored for female micro-owner managers was seen as a positive vehicle to motivate these women to seek opportunities to grow their business through being inspired and assisted by their fellow female peers. Furthermore, adopting a participatory approach in training intervention programme design and delivery, as discussed by Alif et al. (2024), would ensure that female micro-owner managers' business needs are identified and addressed through participating in this training scheme. To achieve this recommendation, this study contends that the training design needs to consider a focus group discussion to identify specific business and training needs, as this would ensure that the female micro-owner managers' voices are central to the training development, leading to more tailored and effective learning experiences to be acquired as discussed in Leger et al. (2025) which argued that training initiatives should be contextualised to improve effectiveness. Contextualised training modules for improved agricultural training initiatives in Nigeria in response to the limitations identified in this study would focus on digital technology modules targeting digital marketing, record keeping, and the safe use of social information for information seeking and acquisition. Furthermore, a participatory approach to module design and delivery would address contextual challenges, especially those associated with the agricultural sector, by improving knowledge retention and empowering these female micro-entrepreneurs to navigate potential challenges more effectively.

Training providers should also be encouraged to adopt peer-to-peer network opportunities amongst female micro-owner managers to promote knowledge transfer and self-efficacy. By interacting with other women with similar business interests, the female micro-owner managers' confidence can be enhanced, which could ultimately increase knowledge-sharing and taking calculated business risks to improve their business performance. This study has shown that engagement in peer networks can enable female micro-owner managers to share their best practices, discuss common challenges, and collaboratively develop problem-solving strategies, reinforcing individual and collective business knowledge. Furthermore, the varied entrepreneurial experiences shared within these networks can contribute to the female micro-owner managers' improved levels of confidence in decision-making, which is critical for micro-business growth. Aligned with the view on self-efficacy in existing literature (e.g., Caliendo et

al., 2023; Srimulyani & Hermanto, 2022; Sulistyani et al., 2022), this study contends that entrepreneurial self-efficacy can be reinforced by training and empowering these female micro-owner managers to improve their business performance. Therefore, training providers can positively influence these women's economic resilience by cultivating an environment that promotes peer learning and mentorship, especially for micro-Agric-business entrepreneurs, as the sector is predominantly practice-oriented.

6.4.1.3. Implications for Female Micro-Owner Managers

A major practical contribution and outcome of this study is the positive influence that training intervention schemes in Nigeria can have on female micro-owner managers' empowerment and financial independence. This financial independence and associated empowerment have major implications on the country's economy and society. To achieve this, this study contends that female micro-owner managers need training that focuses on self-efficacy, motivation, other internal capabilities, and entrepreneurial and managerial skills. While this study has highlighted a shift in micro-enterprise and entrepreneur literature from an institutional perspective to become more individual-centric in terms of the necessary skills, knowledge, and capabilities, there remains a gap in existing professional knowledge and practice. While this study has highlighted a shift in micro-enterprise and entrepreneurship literature from an institutional perspective to become more individual-centric in terms of owner-managers' skills, knowledge, and capabilities, there remains a gap in existing professional knowledge and practice. This gap includes the need for female micro-owner managers to be encouraged to apply lessons learned from the training intervention schemes to enhance their internal capabilities and capacity, despite challenges such as seeking funding or being self-motivated in light of insufficient resources. Addressing this gap will reflect the individual's internal attitudes and values to grow their business. This view highlights Sayarh's (2023) opinion that intrinsic motivation tends to be driven by personal values and targets, along with needs or circumstances of the individual. To achieve and address this professional gap, those Nigerian female micro-owner managers who set up an Agric-business after attending a training initiative should have programmes specifically designed to motivate these women during the start-up stage. This is important as studies such as Caliendo et al. (2023) have argued that those extrinsically motivated individuals tend to put less effort towards expanding their business while demonstrating a higher likelihood of abandoning the enterprise when presented with other business opportunities. In contrast, for Caliendo et al. (2023), those entrepreneurs who are intrinsically motivated tend to transform knowledge into business concepts to meet their sense of self-fulfilment. This outcome implies that intrinsic motivation may positively influence business expansion; therefore, the initiative

design needs to include reflective practice content in the training to be provided to encourage business creation.

6.4.2. Academic Contribution

This study provided two key academic outcomes: the theoretical contribution, which focused on the role of self-efficacy and entrepreneurial orientation in determining the effectiveness of training intervention programmes. Existing studies (e.g., Eniola, 2020; Duarte Alonso et al., 2019; Bekele & Setegn, 2025) have studied the effect of self-efficacy and entrepreneurial orientation on micro enterprises; however, these studies were not focused on determining how these constructs were influenced by training initiatives. Eniola (2020) and Bekele and Setegn (2025) argued that self-efficacy had a moderating effect on micro business performance from a quantitative perspective. In contrast, Duarte Alonso et al. (2019), in a qualitative study, emphasized the importance of self-efficacy, stating that motivation, propensity to take risks, and knowledge acquisition demonstrate owner-managers' self-efficacy in microenterprises.

From a theoretical perspective, several contemporary studies (e.g., Sulistyani et al., 2022) have examined self-efficacy and entrepreneurial orientation within the context of entrepreneurial development programs. However, the study did not explicitly focus on female micro-owner managers. Eniola (2020) argued that entrepreneurial self-efficacy mediates the relationship between entrepreneurial orientation and SME development in Nigeria. This study has instead revealed that self-efficacy has a positive influence and can benefit the establishment and growth of female-owned micro-enterprises. This view on the increased importance of self-efficacy and entrepreneurial orientation from an individual perspective also challenges the work of Omolabi et al. (2020), who argued that institutional theory is the most effective means to evaluate the effectiveness of intervention programmes in Nigeria. This study, however, contends that Omolabi et al. (2020) have oversimplified or neglected the subjective experiences of these female entrepreneurs as to their skills, capabilities, and attributes. Therefore, institutional theory excludes various internal capabilities, including motivation, the propensity or willingness to take risks, being proactive, the importance of social network opportunities, the need to share and gain knowledge with others, and being resilient to business challenges.

This study also highlighted a link between self-efficacy and motivation as identified in Duarte Alonso et al. (2019), thereby providing a new theoretical insight into self-efficacy as a determinant in the effectiveness of this form of training. to self-motivate female entrepreneurs to set up, run, and grow their Nigerian Agric-business, to become financially independent. Although existing research (e.g., Simiyu et al., 2016; Brachert et al., 2020; Yusoff et al., 2021)

has linked entrepreneurial orientation to self-confidence in terms of how these owner-managers make decisions, these studies have not explicitly focused on self-efficacy. In this study, the ability to make informed decisions and the motivation to become self-employed were considered as evidence of the propensity to take risks, as advocated by Brachert et al. (2020) and Yusoff et al. (2021). Furthermore, this study has also shown that the motivation of these women was directly influenced by improved self-efficacy from attending a training session. This supports the theoretical contribution in this study that improved self-efficacy and entrepreneurial orientation demonstrated by the female micro-owner managers interviewed were indicators of the effectiveness of training intervention programmes in the Nigerian agricultural sector.

The second contribution is based on the methodological lens adopted in the study. In addressing the methodological gap revealed in the literature review, as discussed in Chapter Two, the majority of existing studies, including Adegoke et al. (2022), Adeyanju et al. (2021), Edoko et al. (2017), and Joseph et al. (2021), focused on training and financial intervention schemes for entrepreneurs in Nigeria, but from a quantitative perspective. However, a more subjective methodological approach was needed to effectively evaluate the influence of training interventions on female entrepreneurs in terms of their experiences and perceived changes to their internal and entrepreneurial capabilities. Reflecting this, this study has therefore contributed to the current academic understanding by offering a qualitative insight into the learning experiences of these female micro-owner managers when participating in a Nigerian Government-led initiative to promote Agric-based micro-businesses. The study also highlighted the importance of evaluating measures such as motivation, propensity to take risk, proactiveness, resilience, and knowledge transfer from a qualitative lens, thereby bridging the methodological gap left by studies (e.g., Shetty et al., 2024) in analysing these concepts. This study has captured how training initiatives can enhance the existing internal capabilities and skills of these women needed to set up and then grow their micro-enterprises. This outcome and difference from existing academic knowledge could be attributed to its focus on micro-businesses, internal capabilities, methodology adopted, and on female micro-owner managers.

6.5. Limitations of the Study

This section will present the limitations identified in this study. A significant limitation is that the data collection was conducted online using MS Teams teleconferencing application. This usage of MS Teams potentially minimised participant observation and the researcher's ability to fully engage and immerse in the interviewee's experiences from an emic perspective.

However, the researcher inferred meanings from the exclamations made by the participants in their local dialect, such as the use of “kai!” made by participant 6 to signify initial doubt in her ability to start up an Agric business. Nuances of the local dialect were not lost in the interpretation of these exclamations nor the inferences made in this study, as the researcher was familiar with the local language. Also, some participants were happy to have their camera on, which supported participant observation during the interviews. Furthermore, the online interviews reduced the accessibility limitations of reaching often inaccessible participants and reduced the power imbalance between interviewer and interviewee that face-to-face interviews can create (Brown, 2022). The number of interview participants was an identified limitation, as ten participants did not fully represent all the female micro-owner managers in Nasarawa State or Nigeria. Although the study focused on generating rich, in-depth data rather than producing a generalised outcome as stated in Yin (2016), the training intervention programme is a nationwide initiative, and the interview protocol can be replicated in other states with a strong presence of female micro-owner managers in the agricultural sector. However, there is no way to determine that the results would be the same, given the subjective nature of the research method utilised. Though the participants' subjective views gained from the interviews limited the ability to generalise the study's findings, which was not the project's original intent. However, the qualitative method is the ideal research approach to address the methodological gap discovered in the literature review, which justifies the context of this study, focusing on the experiences and internal capabilities of female micro-owner managers in the Nigerian Agricultural sector.

The women's positive responses to the training intervention programmes may be considered biased due to the financial incentives attached to the program. However, this was not considered a limitation to the study as the findings of this study indicated that the women commended the Nigerian Government and the training facilitators in the areas where they were happy and criticised the inadequacies of the scheme, particularly on the limited access to finance, which they experienced.

The interviews in this study were conducted by one female researcher with industry experience in training intervention facilitation. This women-centric stance would have presented some gender bias as the participants in the main study were female; however, potential bias was mitigated by involving both male and female expert opinions in structuring the research questions and conducting a pilot prior to the main study, to test the reliability of the research instrument (Malmqvist et al., 2019). Furthermore, the associated limitations of the study, which may have arisen from a professional bias, were also mitigated by the focus of the study on the

Nigerian agricultural sector, which is an entirely different industry from the researcher's professional background. Further limitations in this study would be the non-financial measures used to evaluate the research outcomes. By focusing on female micro-owner managers' internal capabilities and skills, the financial measures used to evaluate the business performance, such as sales and profit, were not considered. However, evaluating the effectiveness of the training intervention initiatives by using non-financial measures helped to gain the female micro-owner managers' trust to talk more openly about their experiences regarding the questions related to accessing finance and funds.

6.6. Areas for Further Research

This section will present those areas that should be considered for further research, emerging from the findings and limitations of this study. It is critical to reflect on the implications of the findings in this study to identify opportunities for future research, particularly in the context of understanding and supporting female micro-owner managers in the Nigerian agricultural sector.

A significant area for further research involves assessing the influence of training initiatives on women's attitudes towards digital marketing and e-commerce. While this study highlighted limited engagement with digital tools amongst the female participants, the growing relevance of digital platforms in the Agribusiness sector does present a need to understand how female entrepreneurs can overcome these technological barriers and leverage social media and e-commerce for business growth. This view on improving female micro-owner managers' attitudes towards technology also links to the need for improved financial record-keeping through digital technology. Although this study revealed that female micro-owner managers' record-keeping capabilities were enhanced by attending Government-sponsored training initiatives, Basir et al.'s (2024) perspective on the need for digital financial record-keeping also presents an area for further research to determine whether digital record-keeping improves female micro-owner managers' managerial competencies in the Nigerian agricultural sector.

A further recommendation for future research is the need to conduct a participatory action research (PAR) approach that includes the researcher and the female micro-owner managers in the process of module design and delivery. This approach would encourage the collaborative nature of training intervention programs that have been established in this study, allowing the researcher to be further immersed in the research process. Although effective for exploring the in-depth experiences of the female micro-owner managers, the inductive qualitative design employed in this study limits the generalisability of the findings.

The use of teleconferencing, which limited participant observation, also justifies the recommendation of PAR. Participatory action research would increase the number of participants in the study, engagement with the training, and enhance replication of the research process, potentially across several Nigerian states. Furthermore, improved training intervention programmes with advanced business practice content that incorporates female micro-owner managers' learning needs would be an ideal focus for future research, which would address the limitations in managerial and entrepreneurial capabilities identified in this study.

Lastly, this study cannot ascertain why financial limitations and lack of access to finance or funds exist despite meeting formalization requirements, as experienced by the female micro-owner managers in this study. The question that emerges is whether this challenge is gender based, as indicated by Wellalage and Locke (2017). This limitation provides an area for further research in determining whether limited access to finance after attending a training intervention programme is closely associated with the gender of the micro-owner manager.

6.7. Concluding Reflection

This research journey has been both challenging and fulfilling for me. From the coursework stage of this doctorate programme, I experienced a paradigm shift to become the qualitative researcher I am today. In exploring the effectiveness of training intervention programmes on the experiences of female micro-owner managers and their internal capabilities, I learned about the entrepreneurial journey of women interviewed in this study, their challenges, proactiveness, and propensity to take business risks in a male-dominated sector. The resilience shown by the women in establishing their Agric-businesses in Nigeria ranged from the incentives received at the end of the training session to the expansion of their enterprises within two years after the training session was completed. The study revealed gaps in the existing training design and challenges in implementing intervention policies that this study attempted to address. On completing this doctorate, I intend to contribute my skills and expertise in working collaboratively with academics from business schools within Nigeria and internationally to redesign business practice content that addresses female micro-owner managers' learning needs. Furthermore, this research has provided ample opportunities for me as a business practitioner to identify areas for improved business practice and future collaboration with these women entrepreneurs and the Government training agency.

Methodologically, this study has opened conversations in qualitative research about evaluating the influence of female micro-owner managers' internal capabilities in the Nigerian Agric-business from the start-up stage through to the expansion of the business. The insights from

this study will inform future research, influence policy, and make practical changes in training intervention programme design and how the provision can be effectively implemented. To add to existing literature on micro-enterprises, papers will be submitted to the Journal of Entrepreneurship and Innovation in Emerging Economies, along with the Journal of Economic Resilience and Sustainable Development.

6.8. Disclaimer/ Acknowledgement

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7.1. Appendix

Appendix 1: Consent Form

INFORMED CONSENT FORM

For The Project

Perceptions of Female Micro Business Owner Managers in The Agribusiness Sector Based in the North Central Region of Nigeria on The Effectiveness of Government-Sponsored Training Interventions.

Researcher: Elohor Pamela Malaka, University of Gloucestershire, phone number: [REDACTED] Email: [REDACTED]

I hereby declare that I have read the information sheet, received enough information about this study, and understood the meaning behind the information.

I am aware that my participation in this study is entirely voluntary and that I can end my participation at any time without stating reasons and without any disadvantage to me of any kind.

The video and/or audio tape will be destroyed immediately after the conferment of the degree. The interview transcripts will be kept for 2 years after the study. Access to the data is available only to the research team, who are obliged to maintain confidentiality. Publications of the results - for example in journals - will not include data about individual participants, only compressed results on a group level are getting published. Thus, confidentiality is completely guaranteed.

My personal data will remain anonymous and coded and treated with strict confidentiality. I understand the reasons for which these data are collected, treated, and used in this study.

I voluntarily agree to take part in this study and to satisfy the conditions as they are described in the Participant Information.

Place and date: _____

Participant's name: _____

Signature of participant: _____

Part reserved for the researcher.

I, name, hereby confirm that I have informed the above participant about the objectives, the nature, the duration, and the risks of this study and confirm that he/she has agreed to take part in this study.

Place and date: _____

Signature: _____

Appendix 2: Participant Information Sheet

PARTICIPANT INFORMATION SHEET

RESEARCH TOPIC:

Perceptions of Female Micro Business Owner Managers in The Agribusiness Sector Based in the North Central Region of Nigeria on The Effectiveness of Government-Sponsored Training Interventions.

I would like to invite you to take part in a research study towards the award of a doctoral degree in Business Administration at the University of Gloucestershire, United Kingdom. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or if you would like more information. Take time to decide whether to take part.

My name is Elohor Pamela Malaka, and I am a doctoral candidate at the University of Gloucestershire. I am conducting a study on the effectiveness of government intervention by evaluating the perception of owner-managers who have attended government training intervention programs. This research is towards fulfilling the requirements for a Doctor of Business Administration. The overall aim is to evaluate perceptual changes to owner managers' capabilities after attending a government-sponsored training intervention program. Your responses will detail the government's objectives for training intervention programs and the program structure and training module.

Participation in this study is voluntary, and you can withdraw anytime. You will be asked questions about government intervention training programs you have attended and your perception of their effectiveness. You will be asked to reflect on your experience and the training content. The interview will be between 45 minutes and an hour, conducted over Teams, and will be recorded.

You have been selected to take part in this study because you attended a government-sponsored training intervention and are considered an expert in this area.

Appendix 3: Socio-demographic form

Socio-Demographic Data

Profession:	
Age:	
Gender:	female ☐ male ☐ non-binary ☐
Years of professional experience as Owner Manager:	
Education (highest degree):	
Type* of the organization:	Public Sector ☐ Private ☐
Size** of the organization:	Number of staff:
Location of the organization:	
Country:	

** Size of the organization by listening the number of the whole number of employees.

Appendix 4: Interview Protocol

INTERVIEW GUIDE FOR OWNER MANAGERS

- How many government-led training programs have you attended and what subject areas were covered?
- How long were these government-led training programs?
- To what extent have these government-led programs influenced your business and in what areas have you experienced growth?
- How has attending government-led training program improved your capabilities as a business owner and what capabilities have improved?
- What skills have you gained from participating in these government-led training sessions that you did not possess prior?
- How have you transferred the knowledge gained from the government-led training sessions into your business. Have you cascaded this newly acquired skills to your staff following attending these trainings?
- To what extent have you built networks since attending the government-led training event and on reflection how valuable have these activities assisted in business networks?
- How do you identify what business problem, challenge or assistance is needed, and who and how have approach to seek external assistance?
- To what extent have you improved your business operations after attending government-led training sessions, and on reflection what parts of the business operations have improved, and how?
- To what extent do you think that the training programs are gender focused, and do they target specific gender, age, and sector of the economy?

INTERVIEW GUIDE FOR OWNER MANAGERS

- How many government-led training programs have you attended and what subject areas were covered?
- How long were these government-led training programs?
- To what extent have these government-led programs influenced your business and in what areas have you experienced growth?
- How has attending government-led training program improved your capabilities as a business owner and what capabilities have improved?
- What skills have you gained from participating in these government-led training sessions that you did not possess prior?
- How have you transferred the knowledge gained from the government-led training sessions into your business. Have you cascaded this newly acquired skills to your staff following attending these trainings?
- To what extent have you built networks since attending the government-led training event and on reflection how valuable have these activities assisted in business networks?
- How do you identify what business problem, challenge or assistance is needed, and who and how have approach to seek external assistance?
- To what extent have you improved your business operations after attending government-led training sessions, and on reflection what parts of the business operations have improved, and how?
- To what extent do you think that the training programs are gender focused, and do they target specific gender, age, and sector of the economy?

Appendix 5: Evidence of NVivo Analysis

NVIVO
Pilot Study.nvp (Saved)

Quick Access

IMPORT

Data

- Files
- File Classifications
- Externals

ORGANIZE

Coding

- Codes
- Relationships
- Relationship Types

Cases

Notes

- Memos
- Framework Matrices
- Annotations
- See-Also Links

File **Home** **Import** **Create** **Explore** **Share** **Modules**

Clipboard **Item** **Organize** **Query** **Visualize** **Code** **Autocode** **Range Code** **Uncode** **Case Classification** **File Classification** **Workspace**

Codes

Name	Files	References	Created on	Created by	Modified on	Modified b
Trust building	2	4	28/08/2024 1	EPM	28/08/2024 19:4	EPM
Training demographic	5	18	28/08/2024 1	EPM	29/08/2024 19:4	EPM
Perception of trainings	5	28	28/08/2024 1	EPM	03/11/2024 12:3	EPM
Owner manager's Internal capabilities	5	27	29/08/2024 2	EPM	29/08/2024 23:0	EPM
Monitoring and evaluation	0	0	28/08/2024 1	EPM	28/08/2024 19:5	EPM
Length of training	4	7	28/08/2024 1	EPM	29/08/2024 19:4	EPM
Government objectives	4	10	28/08/2024 1	EPM	29/08/2024 19:3	EPM
Financial Intervention	4	12	17/06/2024 0	EPM	29/08/2024 20:0	EPM
Challenges to government objectives	2	5	28/08/2024 2	EPM	29/08/2024 20:0	EPM
Challenges faced	2	5	28/08/2024 1	EPM	29/08/2024 19:4	EPM
Benefits of the Training intervention Progra	5	25	28/08/2024 1	EPM	03/11/2024 12:3	EPM
Export Promotion	2	7	28/08/2024 1	EPM	29/08/2024 19:5	EPM
Empowerment	2	14	17/06/2024 0	EPM	28/08/2024 21:0	EPM
Employment	2	7	28/08/2024 2	EPM	29/08/2024 20:0	EPM
Collaboration	4	30	28/08/2024 0	EPM	29/08/2024 20:0	EPM
Agricultural Value Chain	3	7	17/06/2024 0	EPM	29/08/2024 19:3	EPM
Agricultural incentives	4	7	28/08/2024 0	EPM	29/08/2024 20:0	EPM

EPM 29 Items

Type here to search

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NVIVO
Main Study.nvp

Quick Access

IMPORT

Data

ORGANIZE

Coding

- Codes
- Relationships
- Relationship Types

Cases

Notes

Sets

EXPLORE

- Queries
- Visualizations
- Reports
- Formatted Reports

File **Home** **Import** **Create** **Explore** **Share** **Modules**

Clipboard **Item** **Organize** **Query** **Visualize** **Code** **Autocode** **Range Code** **Uncode** **Case Classification** **File Classification** **Workspace**

Codes

Name	Files	References	Created on	Created by	Modified on	Modified b
Type of Agric business area	8	11	31/08/202	EPM	07/09/2024	EPM
Training demographic	7	18	31/08/202	EPM	02/12/2024	EPM
training awareness	3	6	31/08/202	EPM	02/12/2024	EPM
Perception of Training	7	18	01/09/202	EPM	02/12/2024	EPM
Owner manager's internal capabilities	8	53	31/08/202	EPM	18/10/2024	EPM
owner manager's entrepreneurial and managerial ca	8	59	31/08/202	EPM	07/09/2024	EPM
Influence of training intervention on female owner	8	86	31/08/202	EPM	07/11/2024	EPM
government objectives	5	12	01/09/202	EPM	02/12/2024	EPM
Challenges of the business	6	31	31/08/202	EPM	28/10/2024	EPM

EPM 47 Items

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