EFFECTS OF FINANCIAL LITERACY ON THE FINANCIAL PERFORMANCE OF ARTISANAL FISH TRADERS IN MARINE FISHERIES: A CASE OF KILIFI COUNTY

JANNET KALUWA CHEA

A RESEARCH PROJECT SUBMITTED IN FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS IN BUSINESS ADMINISTRATION OF PWANI UNIVERSITY

MAY 2023

DECLARATION

This Research project is my original work and has not been presented in any other University or any other award.

Jannet Kaluwa Chea BG20/PT/16023/2016

Signature ……………………………… Date 28th September, 2023

Supervisors Approval

We confirm that the work reported in this Project was carried out by the candidate under our supervision

Dr Flaura Kidere Juma

Signature ……………………………… Date 28th September, 2023

Lecturer

PWANI UNIVERSITY

Dr Abdullah Ibrahim Ali.

Signature ……………………………… Date 28th September, 2023

Senior Lecturer

PWANI UNIVERSITY

DEDICATION

I dedicate this project to my loving Mum Mrs. Mary Kapendezo Katana.

ACKNOWLEDGEMENTS

I give thanks to the Almighty God for the ability to undertake this research project. Special thanks to my Supervisors Dr. Flaura Kidere and Dr. Abdullah Ali for the insights and guidance in the conduct of this project. I also wish to appreciate all others who played a role in contributing to the success of this project.

ABSTRACT

Over the years the financial performance of SME has been viewed from financial, strategic and structural development dimensions. Financial performance is a critical factor in the SME success and sustainability despite the myriad of challenges they face globally. Kilifi County experiences the problem of SME failure and the study intended to fill the gap on the perceived level of financial information of marine artisanal fish traders in terms of financial behavior, knowledge and perceived attitude, and determine its effect on the financial performance of the artisanal fish traders SMEs in the context of Kilifi County. The specific objectives were to assess the effect of financial knowledge, behavior and financial attitudes on the financial performance of artisanal fish traders. This study was guided by the Financial Literacy Theory, Modern Portfolio Theory and the Decision Theories. Descriptive design was used and a sample population of 81 derived from a population frame of 422 fish traders belonging to beach management units in Kilifi County. Primary data was collected using the structured questionnaire and ethical clearance was obtained from Pwani University. Data was analyzed using the SPSS version 25. The study results were presented in form of tables and graphs. Pierson's correlation and Regression analysis were used to determine the relationship of the variables and the statistically significance of the association between the variables. The findings of the study showed that behavior correlated positively while knowledge and attitudes correlated negatively to financial performance. The findings, although all the study variables financial knowledge, attitude and behavior conclusively can be used as predictors of the model they did not all correlate positively. Regression analysis too reflected a weak relationship with the dependent variable of only up to 36.4% while 63.6% of the change could not be predicted. The study findings therefore suggest that there are other factors that affect the financial performance of the artisanal fish traders in marine fisheries of Kilifi county other than the variables investigated in this study. The study therefore recommends further research to be carried out to find out the variables hat affect the financial performance and general sustainability of fishing SMEs to fill in the gap.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

DT	**:**	Decision Theory
FAO	**:**	Food and Agriculture Organization
FLT	**:**	Financial Literacy Theory
GDP	**:**	Gross Domestic Product
MPT	**:**	Modern Portfolio Theory
SDG	**:**	Sustainable Development Goals
SME	**:**	Small Micro-Enterprise
SPSS	**:**	Statistical Package for Social Sciences

DEFINITION OF TERMS

Financial Literacy: Financial literacy is the exhibition of sound financial knowledge and applying that knowledge and skills to effectively make decisions and pursue actions that lead to good financial management practices. These practices are inclusive, but not limited to budgeting, planning, investing and debt controlling amongst other related skills and actions (Anshika & Singla, 2022).

Financial Knowledge It is the conscious awareness of having the correct information regarding financial issues that one may experience in the course of undertaking business activities and management of business finances. This knowledge is vital in resolving business financial challenges particularly in the context of this study's cope of Small Micro-Enterprises and small-scale entrepreneurs.(Loke, 2015)

Financial Attitude Financial attitudes refer to the collection of beliefs, ideas and behaviors that predispose people to indulge and exhibit financial behaviors. Attitudes provide a pointer how people may respond to their financial challenges. (Anshika & Singla, 2022)

Financial behavior: Financial behaviors are the outcomes of financial knowledge and attitudes and are the manifestations of the actions, skills,

	and competencies that are used as a response to resolving financial challenges that individual small-scale traders may face. (Zhang & Lucey, 2022)
Financial Performance:	Financial performance can be construed as that subjective way in which businesses can determine the level at which the assets and finances at their disposal sustained the realization of revenues and profits within a specific time period.(Mutai & Miroga, 2023)
Small and Medium enterprises:	These are businesses that do not operate with massive capital investments, usually employ less than 50 workers and do not need a lot of bureaucratic requirements to establish. They may exist either as formal or informal entities in the rural areas in which the study was undertaken. In Kenya, an SME is a small business with annual sales lower than Ksh. 1 million with employees less than ten.
SME survival:	This is the continued sustainable existence of a small business entity that is able to realize profits despite the competitive environment in which it operates and the challenges and limitations that need to be overcome are surmounted.(Katare et al., 2021)

Artisanal Fish trader This is someone (in the context of the study) who is engaged in fishing activities and or trade and whose source the fish is the area near-shore marine ground. They usually use traditional methods or may use limited motorized and modern technologies to obtain fish from the marine environment near or close to the shore and present the product in the market at either predetermined price of prices controlled by the market. Some may equally have retail fish outlets while others sell their produce to either mama Karanga or other middle men(Crona et al., 2020)

CHAPTER ONE

INTRODUCTION.

1.1 Background of the Study

Financial literacy is the capability of an individual or entity to apply financial skills and knowledge in the management of their financial resources. Financial literacy can be construed as the ability of an individual in actualizing well thought out decisions that guide their conduct in management of financial resources through "effective and efficient utilization of money" (Rai et al., 2019). It provides an individual with the tools necessary for making effective decisions in regard to the utilization of financial resources at their disposal in profit and wealth creation and maximization. In this way it generates a platform for the long-term survival of a business entity as it encompasses strategic tools in the organized and effective use of financial resources and safeguarding the financial strength of an entity (Eniola & Entebang, 2015).

Financial literacy for small-scale fishermen is an important factor in sustaining the small-scale artisanal fishing industry by increasing their options in acquiring financial services, products and credit instruments in the management of their cash flows and business investments (Pomeroy et al., 2020). Financial literacy encompassing issues related to financial knowledge of fishermen, their financial behavior and attitudes affects the performances of their fish businesses right from the individual level to a group level. It is therefore imperative that these factors be interrogated in developing a proper understanding of the dynamics of these variables on the business outcomes in terms of value creation, wealth generation and profit maximization. It should be noted that entrepreneurial financial literacy and financial access do have an effect on the SMEs performances within the aquaculture industry globally (Layaman, 2022). With new trends in digital finance developing in many countries, the role of financial literacy in SME performance cannot be underestimated (Frimpong et al., 2022). This happens within the backdrop of difficulties of meeting daily family needs with sustaining healthy business financial requirements, where there is “no priority scale for future needs due to lack of understanding” of financial management practices and discriminating between business and family finances (Indawati & Tuti, 2021). It should be noted that financial literacy for small-scale fisher families is heavily reliant on their interaction with others, exposure to financial information and practices that lead to effective and efficient utilization of resources for both family and business prosperity.

The management of artisanal fisheries within the small-scale entrepreneurship models is in line with attainment of the Sustainable Development Goals that seek to promote and secure equal access to resources, services, economic growth and decent work (SDGs 1, 8, 12, and 14), From this dimension fishermen need to have some basic financial literacy in order to improve the financial health of their fishing businesses for purposes of achieving the intended SDGs. Further the SDGs envisage the attainment of sustainable, effective and efficient use of “marine aquatic resources for responsible consumption and production” (FAO, 2022)

Many governments have made efforts to improve financial literacy among the common people. Financial literacy provides business people with a prism for comprehending financial and economic factors at play in the utilization of resources, and how financial behaviors impacts on their business’ performance. It must be noted that the balance of financial assets, education and the applying financial information to business operations are positively related, whilst occurrence of financial troubles is negatively associated to financial behavior, attitudes and knowledge (Kadoya & Khan, 2020). In another study, financial literacy from a globally perspective was determined to be generally low, yet, it improves the business performance of an entity (Arya & Singla, 2022). The same study further demonstrates that the growth and survival of a business entity are hinged on factors such as access to formal credit facilities, financial policies used by lending institutions, training programs and the ease in which business firms are able to conduct business (Arya & Singla, 2022). Within the context of financial literacy, government support is a critical external businesses' factor that can influence business people and small-scale fishermen to improve on their financial literacy in enhancing good business performances (Lestari, 2022).

The combination of formal financial training in school and informal financial upbringing at home create the impetus for socializing roles that aides the acquisition of financial knowledge of the youth, young adults and women, defining and shaping their financial attitudes and behaviors positively based on knowledge they acquire (Khawar & Sarwar, 2021; Shim et al., 2009). For instance, in Japan, the financial education programs in schools are not well designed and implemented neither are they taught by well-trained teachers who are financially competent in terms of knowledge and content leaving a loophole for government intervention (Kadoya & Khan, 2020). The financial education programs via the mainstream media and the use of financial experts in building up financial literacy knowledge in people can significantly impact the whole process of financial management for many small-scale entrepreneurs. Poor financial management skills and knowledge contribute to global financial catastrophes in which businesses are encumbered with problems, crisis and eminent collapse if not salvaged. This has led to financial literacy campaign drives in some countries that are intended to improve financial literacy levels for the sole purpose of improving welfare options and guarantee continued prosperity.

The fishing sector in Ghana has witnessed tremendous growth in recent past where it accounted for 4.5% of the country's GDP and created 210,000 jobs directly within the sector (Amenuku, 2018). Within Ghana, the financial literacy of the Elmina Fishing Community is reported to be low and highly underperforming (Amenuku, 2018). (Amenuku, 2018) demonstrated that fishermen with low financial literacy and wellbeing are the leaders in exhibiting the inability to access credit facilities from micro-financial organizations. The study recommends the establishment of programs aimed at improving the financial literacy and the long-term financial outcomes of the small-scale fishermen in their decision-making matrix in regard to business finances.

The fishing industry in Africa has a huge potential for growth where it is approximated that 200 million people derive low-cost high quality proteins from fish and fish products (Obiero et al., 2019). In line with that, fishing SMEs include traditional fisheries involving fishing households with limited access to financial sources, which are highly constrained in terms of availability. These fishing families and individuals do not have large vessels and complicated fishing gear at their disposal, and access to sustainable financing is usually a setback in expanding these opportunities. Secondly, small-scale fisheries are indicated by low production volumes and use of non-mechanized fishing gears and traditional-based boats are a common feature (Smith & Basurto, 2022). This brings to fore the concern of many stakeholders such as economists, entrepreneurs, financial institutions et cetera requires these concerned parties to develop a shared understanding of attainable goals based on sound financial management practices and effective resources utilization. To safeguard the financial performance of these SMEs, financial literacy becomes a tool that determines the proper use and management of resources prudently for the fisheries (Lusardi, 2019). A significant obstacle to sound financial performance by many SMEs is attributed to inadequate knowledge, insufficient financial management skills, poor attitude and lack of awareness to cope with financial transparency in a professional way.

Deficiencies in financial knowledge result in inappropriate, wrong or ineffective financial decisions as entrepreneurs have no or little time to learn and adopt personal financial management skills and by being caught up in the web of complexities of financial regulations. Simple business management skills and acumen when in short supply may amplify the problem especially when barriers to financial credit facilities are prominently witnessed for SMEs in the fishing industry. The fish industry requires investment activities and this presents a daunting task to the financial knowledge, acumen and performance of the fishermen as actors in the industry if their financial literacy is wanting. The economic advantages of using marine fisheries resources for economic growth of communities, and as a contribution to national GDPs, are many yet highly underdeveloped in developing countries (Mang'Unyi, 2011).

In terms of income from fishing activities, a study conducted in Lamu Kenya, and Bagamoyo, in Tanzania, showed that the average income per day from fishing was below US $20 a day (Thoya et al., 2022). This is because fish and fish products are highly sought after yet do not net in sufficient income for artisanal fishermen, hence the huge disparity in the expected and actual income levels witnessed (Arthur et al., 2022). This technically affect the attitude of the fishing practitioners and influence their financial behaviors, attitudes and practices. Consequent to this, income volumes when are pathetic for fishermen and tends to discourage sound financial management as they engage for survival and taking care of households at the expense of business growth and sustainability, which leads to a reduction in the investments allocated for sustaining the fishing businesses for small scale entrepreneurs. It is in light of these circumstances that this study sought to assess the effects of financial behavior, financial knowledge and attitudes of artisanal fish traders in Kilifi County and their financial performances relating to business outcomes.

Kilifi County has a greater part of its eastern border bordering the Indian Ocean. Kilifi County fishing Sector has a clear organization in the Beach activities in that records of the fishermen and types of fishing activities is being monitored by the department. Beach management units have mapped out the areas as landing sites therefore harvest is being monitored. Due to the proximity naturally fishing is a basic activity in the County. The Fisheries sector has a potential to contribute significantly to the county's economy through employment creation, foreign exchange earnings, poverty reduction and food security support. through innovation, modernization and orientation towards commercialization in both aquaculture and capture fisheries. For instance, an average of 2,885 m tons of fish worth KShs.554 million land every year in the county. According to a recent Frame Survey, 2016, the county had a total of 4,713 artisanal fishermen operating along the county shoreline. The total number of fishing vessels is estimated at 1,057. Covering deep sea and artisanal vessels A myriad of marine fisheries activities are carried out within the county leading to different categorization namely Artisanal Fishery confined in the inshore and near shore areas using fishing gears and crafts used, operating motorized fishing boats with up to 5 nautical miles reach from the shore., Sport fishery associated with gaming and tourism a major of the hospitality industry, Marine Ornamental Fishery. Exporting up to 0.5M pieces of marine ornamental fish's worth approximately KShs. 28million. Other types of fishery are Semi Industrial and Industrial Fishery. Semi industrial prawn fishery is a species-specific fishery in the Malindi Ungwana Bay area involving medium size trawlers to fish for prawns. Every year, there are 4-5 semi commercial trawlers involved in Prawn fishery in the3-5 nautical miles stretch along the Kilifi County shoreline in the Malindi Ungwana Bay. There are up to 7 semi commercial and industrial vessels operating in the EEZ from foreign countries fishing under licensing agreements with Kenya.

Fisheries activities are actively carried out during the Northeast Monsoon wind (Kasikazi) which starts from October to March each year. Low fish production is mainly realized during Southeast Monsoon Winds (Kusi) which fall within the months of April to September. The high demand of fish in the hotel industry has transformed fishing into a lucrative industry.

The landing sites are under co-management of Beach Management Units (BMU). Kilifi South subcounty is represented by 3 landing sites including Mtwapa, Kanamai and Kuruwitu. Takaungu, Mnarani, Bofa, Wesa, Roka, Uyombo, Watamu falls under the jurisdiction of BMUs in Kilifi North Sub-county. Mayungu and Malindi are in Malindi sub-county with Ngomeni, Marereni and Fundissa under co-management of Beach Management Unit (BMU) in Magarini. Fishing of live fishing Kuruwitu, Kanamai, Mnarani, Kilifi, and Bofa fishing grounds are mainly done by Tropical sea harvest. (Kilifi County Integrated Development Plan 2018 -2022)

The vast coastline that measures several hundreds of kilometers in lengths with a highly rich and indeed under exploited Exclusive Economic Zone renders the County the most magnificent for deep sea fishing. However, the low adoption of advanced fisheries technology limits the fishing activities by local fishermen within the onshore waters. This situation leads to over-exploitation of fisheries resources within the shallow waters where fishing activities are carried out throughout the year both during the Northeast Monsoon wind (Kasikazi) and Southeast monsoon winds (Kusi).In Kenya and Kilifi County in particular, deep sea fishing is mainly a preserve of distant nations such as Japan and China who use highly sophisticated modern technologies for fishing with the Kenyan Exclusive

Economic Zone, often leading to over exploitation, exacerbating pressure on marine resources and also causing significant environmental degradation. There exist opportunities for development of the fisheries sector such as the Low level of utilization of Kenya's territorial waters and 200 nm on fisheries exploitation, large areas within tidal flats and tidal swamps for development Mari culture and availability of large sea water reservoirs in salt pans in Ngomeni. Low adoption of fishing technology by tradition artisanal fishermen, infringements in fisheries resource development protocols, increase conflicts on fishing grounds, limited data on stock status in the county, dumping of waste into sea waters, Low level of adoption of Mari culture techniques, Low value addition for fisheries products and Intrusion of salt mining companies into mangrove grounds are key challenges that need to be addressed to leverage the exploitation of fisheries resources. In this regard therefore, increasing access and uptake of modern fishing technologies by fishermen, improving value addition, investing in the establishment of fish process factories, conducting of surveys to update available data on stock level, enhancing proper coordination and institutional support for BMUs on technology improvement are critical for ensuring that the sector impacts positively on the livelihoods of the communities in the County. (Kilifi County Integrated Development Plan 2018 -2022)

1.2 Problem Statement

According to the department of fisheries, Kilifi County's entire eastern border is on the Indian Ocean. Naturally, this makes the County population have access to the source of fish in the coast of Kenya. The fisheries department of Kenya asserts that there is unrestricted access to the Indian ocean by communities living on land bordering the Indian Ocean, and unrestricted access to the natural resource (fish). There is an unsatisfied local demand for fish therefore a ready market. There is also in existence modern fishing gear yet, Kilifi County's fishing sector is very small and unrecognized. Marine fishery capture in Kenya contributes insignificantly to the overall fish production nationally at 4% (Tesfaye & Wolff, 2014). While the market for fish is very huge in the coastal areas of Kenya, there are very few fishermen and fisher fork in the county. Plenty of the fish and sea food consumed in the county is obtained from other areas. The Central Bank of Kenya reports (Gichuki et al., 2019) puts access to finance by the entire population in Kenya at 84% to mean that finance is available for investment to fish traders. Despite all these favorable conditions the fishing SMEs output is meagre. Studies show that borrowing increases capital availability hence a significant role in entrepreneurship depending on how financial literacy is at play affecting financial performance of the fishing SMEs. Fishing SME entrepreneurs who have a good understanding of basic interest calculation and the ability to determine project feasibility status for their businesses flourish. A majority however startup ventures which are short lived and soon collapse. Various empirical studies have been carried out to find out the challenges of the fish traders and all these studies have particularly picked some variables that affect the fishing sector. The financial literacy of artisanal fish traders however has not been well documented, particularly along the Kenyan coast of Kilifi County.

1.3 Research Objectives

1.3.1 The General Objective

The aim of this study is to interrogate financial literacy in assessing its effects on the financial performance of artisanal small-scale fish traders in Kilifi County.

1.3.2 Specific objectives

The specific objectives of the study are to;

i. Determine the effect of financial knowledge on the financial performance of artisanal fish traders in Kilifi County.
ii. Find out the effect of financial behaviors on the financial performance of artisanal fish traders in Kilifi County.
iii. Examine the effect of financial attitude of artisanal fish traders and their financial performance in Kilifi County.

1.4 ResearchQuestions.

The study was guided by the following research questions

i. What is the effect of financial knowledge of artisanal fish traders on their financial performance in Kilifi County?
ii. How does financial behavior affect the financial performance of artisanal fish traders of Kilifi County?
iii. What are the effects of financial attitude of artisanal fish traders on their financial performance in Kilifi County?

1.5. Assumptions of the study

The study's assumptions are artisanal fish-traders are aware of the possibility of access to financial services or credit in the financial institutions both in micro finance and banking sector. Accurate information on the research questions was available and the respondents selected were representative of the population the researcher had intended to refer to.

1.6 Significance and justification of the study

The fishing industry is among sectors that contribute positively to the GDP in a country. Fishing entrepreneurship provide one of the tools for food security, poverty eradication and unemployment. The low adoption of advanced fisheries technology limits the fishing activities by local fishermen within the onshore waters. This situation leads to over-exploitation of fisheries resources within the shallow waters where fishing activities are carried out throughout the year both during the Northeast Monsoon wind (Kasikazi) and Southeast monsoon winds (Kusi). In Kenya and Kilifi County in particular, deep sea fishing is mainly a preserve of distant nations such as Japan and China who use highly sophisticated modern technologies for fishing with the Kenyan Exclusive Economic Zone. The study wished to find out why the local fisher folk were not investing in new fishing technologies like Japan and china harvesting from Kenyan waters to beef up economic growth That is why financial literacy as variables under study is very important to financial performance of the fish traders.

1.6.1 The **Fishing Community**

The findings seek to explain the existing poor financial performance whether it is attributed to absence of financial literacy among the artisanal fish traders or other factors. This study findings provided an opportunity to the artisanal fish traders to actually improve their financial performance through financial knowledge, attitude and behavior as they give them an insight in understanding financial reports, asset allocation, debt asset ratio and their cost benefit analysis which are key in entrepreneurship.

1.6.2 Researchers and Academicians

The study findings added to the existing repository of knowledge as literature review. This was critical in adding value to what is already known in relation to issues of financial knowledge, behaviors and performance of artisanal fisheries that are SME in nature. Further to that, the study pointed out areas for further research that would provide the scholarly and research community with insights into new areas for interrogating existing knowledge and build it more.

1.6.3 The Government.

The Government and Financial regulators will actively advocate for policies aimed at fostering economic prosperity. These policies that will encompass awareness campaigns, poverty alleviation, eradication of financial illiteracy, and the enhancement of economic success for fishing entrepreneurs. Finance regulation on access to credit and other financial benefits.

1.6.4 Investors

Investors and Financial institutions will find benefits to their firms through financial literacy i.e. proper financial management skills hence financial performance.

1.6.5 Research Gap

Several empirical studies have been carried out to find out the challenges of the fish traders and all these studies have particularly picked some variables that affect the fishing sector. The financial literacy of artisanal fish traders however has not been well documented, particularly along the Kenyan coast of Kilifi County. This study has been being carried out to fill this gap.

1.7 Scope of the study.

According to the department of fisheries Kilifi County has been subdivided into four zones according to the sub counties namely Kilifi south, Kilifi North, Malindi and Magarini. Each subcounty has several landing sites totaling to seventeen. Beach management units have constituted to manage the activities of the landing sites. There are many artisanal fish traders classified into many categories like traders with shops, brokers, wholesalers, mongers and many others found in the study. This study was limited to artisanal fish traders who included boat owners and other fish traders who engaged in fishing using small non-motorized boats and crafts operating close to the shore harvesting fish for consumption and local marketing. Two of the landing sites in each sub County were picked for the study. In Kilifi south the researcher picked Mtwapa and Kuruwitu, In Kilifi North Kilifi Central and Watamu, in Malindi Shella and Mayungu and Magarini Ngomeni and Kichwa cha Kati. The reason for such picking is that out of the seventeen landing sites this is where a majority of the category of artisanal fish traders under study are found.

1.8 Limitations of the study

The study focus was limited to entrepreneurs who are fish traders dealing with marine artisanal fish in Kilifi County. By focusing only on artisanal fish traders, the generalizations that are drawn from this study may not be applicable to small-scale fishermen along the coast and those who actively undertake aquaculture in the hinterland in fish ponds along freshwater bodies like lakes and rivers. Secondly, the inferences may not apply to large-scale fish traders operating in the other counties along the Kenyan coast and in the interior regions of the country.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines the theoretical review their relevance to the study, empirical review, an overview of the empirical literature, the variables under study, the intervening variables and the conceptual framework, research gaps and critiques of the literature reviewed and the ethical consideration.

2.2 Theoretical Framework

The theoretical construct that guided this study is the Financial Literacy Theory (FLT) as the key theory anchoring the study within existing theoretical underpinning. This theory will be supplemented by the Modern Portfolio Theory (MPT) and the Decision Theory (DT)

2.2.1 Financial Literacy Theory.

The concept of financial literacy can be traced back to Benjamin Frankline in the year 1737 who advocated for individuals to be prudent in their personal financial behaviors and save more (Samantha 2022). However, as a theoretical construct, it can be traced to 1992 when the National Foundation for Education Research in Poland defined it as “the ability to make informed judgments and take effective decisions” where issues of financial resources utilization and management are concerned (Świecka, 2019). In this way, it follows that financial literacy is a composite of having individuals as investors who had the requisite financial knowledge that informs the financial decisions they make based on their rational choices (Atkinson, A & Messy, 2011)

As a theory, it was advocated for by the Jumpstart Coalition for Personal Financial Literacy (JCPFL) in its inaugural survey of high school students' financial literacy levels in 1997 (Świecka, 2019). It proposed financial literacy as the ability to engage in lifelong decision-making practices that lead to sound financial management practices by individuals by equipping them with relevant financial management skills and knowledge for financial security. The scholarly community has construed financial literacy as the general knowledge of finances, concepts like inflation and credit scores and skills, numerical and mathematical competencies that allow one to engage in financial decision-making activities such as planning and budgeting

The theory posits that financial knowledge in itself is a critical investment in human capita and that the extent of what people know clearly qualifies them as informed in the sphere of financial literacy (Gallery et al., 2011). Furthermore, as an investment factor in human capital, it undeniably impacts on economic outcomes as it is shaped by the dual processes of intuition and cognition. The key is to understand that financial literacy theory explains how individuals make up financial decisions as rational human beings capable of making choices, based on the platform of empowerment, educating investors, as individuals who can make their own choices, with the understanding that they had the correct knowledge to evaluate options. In this theoretical construct, financial knowledge and literacy permit the fishermen and fish traders of Kilifi County to overcome barriers in the ever changing landscape of advanced credit markets (Sajuyigbe et al., 2020).

The FLT constructs a microeconomic perspective of evaluating savings and consumption decisions where it provides that the rational individual who is well conversant with financial skills and knowledge will consume less during moments of abundance and this will be used to buffer their economic status during moments of low income and revenues (Lusardi, 2019). The microeconomic nature of the FTL assumes that people can develop and implement saving plans and schemes after acquiring the potential and ability to indulge in complex economic maneuvers that can sustain their financial overtures for business purposes. This includes budgeting for resources, acquiring the finances and planning on debts uptake for business purposes, and also calls for financial key players and security experts in financial fields to design and come up with regulations and policies that aim at improving the efficiency and quality of their financial base of players within the financial markets (Falicov, 2001)

2.2.2 Modern Portfolio Theory

The Modern Portfolio Theory (MPT) came into existence in 1952 when Harry Markowitz advanced as a theory of risk aversion in management of assets for business entities and portfolio selection. He advocated for the idea that an investor should diversify their investment portfolio and spread out the risks so that the expanded investment options reduce the overall risk on the entire portfolio ('Harry Markowitz's Modern Portfolio Theory', 2021). This idea was antagonistic to the then prevailing assumption that risks in one asset were better managed than when diversified in reducing adverse effects of risks to investment options. The MPT posits that a conservative investor performs much better when they rationally select a portfolio of mix of investment options with low risks, instead of undertaking single huge riskier investments (Omisore et al., 2011).

MPT provides a pragmatic approach for investment selections aimed at maximizing returns on investments within a range of low-risk levels that is reasonably acceptable (Westfall & Kvilhaug, 2021). With adequate financial literacy, this postulate allows an individual investor to use simple mathematical predictions as a framework for building an investments portfolio to maximize returns on the rational choices aimed at reducing the collective risks as much as possible (Westfall & Kvilhaug, 2021). MPT provides this study with a conceptual construct that may be used to examine risk behaviour of individual fish traders as they try to maximize their returns with minimum risk attached to their investment returns.

MPT requires that an investor should put in actions that lead to maximization of the portfolio pool mixed in a manner in which the individual risks emanating from each asset is greatly reduced., where the aggregate asset risk is much lower, higher safety margins is guaranteed for returns while giving the individual options for choice of the various proportions of the assets' compositions. This is best achieved by the mathematical formulation that provides a predictive insight to the mechanizations of rationally choosing a collection of investment assets where risks are lowered in aggregation of all assets rather than individually. This certifies the general assumption that investment decisions are typical trade-offs between expected returns on investments and the inherent risks thereto (Giva, 2015).

This theory is very essential for this study as the Fishing SMEs understanding of risk and return and portfolio formation guides their investment in the assets to be used in the activity. The fishing activity is very risky due to its nature and environment in which is conducted. The expected returns cannot be predetermined, very minimal and unanticipated. This makes the investors very not convinced about heavy capital investments in the activity.

2.2.3 Decision Theory.

This theory was originally proposed by Leonard Savage in 1954 in his treatise "*The Foundations of Statistics"* in order to explain how economic choices are made under uncertainty (Steele & Stefánsson, 2021). Decision-making should be interpreted as a series of steps and actions that involves problem recognition, pursuit of information, defining and exploring other options and finally the choosing of an option from a ranked pool of alternative preferences (Nitisha, 2015).

On the basis of the DT, it is a composite of "mathematical strategies for optimal decision-making" revolving around two or more options with a weighted risk assigned to each choice that can be made resulting in either a profit maximization or loss emanating from the effect of a choice made. The basic underlying factor about this theory is that it seek to explain how individuals, who are considered rational beings, are able to exhibit their financial behaviors on the basis of risk evaluation and uncertainty (Nitisha, 2015)

The decisions theory has two dimensions embedded in it. The prescriptive aspect and descriptive facets, where the prescriptive version advances the notion that the individual ought to make a choice that enforces action "that maximizes expected utility" (Warner & Havens, 1968). The theory places a decision support system that adds value to the reduction of risk of realizing potential losses if erroneous investment decisions are arrived at (Musundi, 2014). Secondly, it should be noted that people exhibit differential behaviors when making investment decisions based on evidences and make a judgment based on the variables that will influence their decisions. These variables may have complex details inclusive of factors such as risk assessments, choice overload and others which may be ambiguous in the way they lie within the available options giving challenges to financial professionals or analysts.

2.3 Empirical literature

2.3.1 Financial Literacy and its Interplay with Financial Performance of Artisanal Fish Traders

Financial competence can only be achieved when financial literacy is deeply ingrained in the business financial management aspects of business people (Eniola & Entebang, 2016). It therefore calls for development and sustaining knowledge of financial matters even for small scale entrepreneurs in attempts to ensure they have financial management capabilities (Rachapaettayakom et al., 2020). In an empirical study conducted in the USA examining the impact of financial literacy on low cost borrowers, the study findings demonstrated that high-cost borrowers displayed insufficient and low degrees of financial literacy. This was premised on the fact that lack of a good grasp of financial concepts by business entrepreneurs ultimately led to dismal business performance (de Bassa Scheresberg, 2013). Another study corroborates the findings by Al-Tamimi (2009) who showed that the scope of business activities is positively impacted by the levels of financial literacy of the investors. In addition to that, the findings also demonstrated that male gender usually possess higher levels of financial awareness, literacy and have wider choices in making their financial decisions (Al-Tamimi, 2009).

According to Enola et al (2015), the results of their study indicated that organizational and entrepreneurial learning are determinants of sound investment decisions which occurs through experiential learning without using formal channels (Enola et al., 2015). The aspect of experience and knowledge provides a timeframe to capitalize on opportunities. Secondly, financial literacy projects the individual’s ability to take advantage of financial opportunities as strategic moves towards entrepreneurial growth. Further studies indicate that financial literacy has a significant impact on sustainability of businesses growth and operations and access to financial information, plus the ability to take advantage of the said information (Zaniarti et al., 2022). In Nairobi, new study findings demonstrate that financial literacy is critical in consumer protection and develops more options in which digital financial access is improved; debt management literacy and financial product choice knowledge become more prominent in the management of financial resources for SMEs (Musau et al., 2022). The underlying importance to this is that the ability to make informed decisions in relation to sustaining good financial health of SMEs is promoted aggressively. Further studies in Kenya have also shown that financial literacy combined with access to credit and tax issues have a statistically significant role to play on the financial factors that affect the way SMEs perform in Kenya (Arthur et al., 2021). It is within this understanding that the same study by Arthur et al. (2021) recommends that the government should step up efforts to develop the business environment for the growth of SMEs through use of favorable tax regimes and exemptions, which can only be more realistic if the entrepreneurs have high levels of financial literacy.

Potential resources are grouped into various typologies based on the financial, physical, legal, informational, relational and human aspects (Dickson, 1996). A business entity’s resources comprised of business capabilities, assets, and organizational processes and the knowledge of the workforce and information are catalysts that lead to strategies being developed that improve business efficiency and effectiveness (Barney & Hesterly, 2015). Factors such as value, scarcity of resources, presence of non-substitutable elements vital for business operations assuage that the faucet human capital resources is inclusive of aspects like training… attitude” and managers’ knowledge provide the structure upon which financial awareness and literacy is built on (Barney & Hesterly ,2015). Lenders, on the other side, play a part in the financial health of an SME. Firms must be able to develop and nurture these relationships with lenders in order to promote their own competitive advantage by safeguarding their financial health (Balakrishnan & Fox, 1993; Ndung'u, 2012).

A study conducted amongst the Dutch households showed that financial literacy when aligned to advanced financial knowledge leads to better business performances (Van Rooij et al., 2007). In the USA, similar results showed that 'advanced' and 'sophisticated' metrics of financial literacy remain trained exclusively on aspects of knowledge and comprehending investment products, financial behaviors of business organizations and individual ,(Lusardi & Mitchell, 2007). From the United Kingdom, financial capability was determined to be construed of various domains, where financial capability is centered on managing finances, planning, making choices and remaining informed on the business opportunities that they needed to capitalize (Atkinson et al., 2006). This when applied to marine fisheries and fishery management provides the potential to expand small-scale artisanal fisheries output capacities. In this way, artisanal fishing moves from subsistence economic activity towards commercialization (Tunje et al., 2017).

2.3.2 Effect of Financial Knowledge on the Financial Performance of Artisanal Fish Traders

Financial knowledge is the blue-chip to building a successful business. It is the ability of an SME fish trader to act independently based on their self-defined principles within their own best financial interests. The capacity to use that knowledge and skills in making financial decisions is a manifestation of financial literacy, and this choice making is within the operations of the financial societies, which informs the issues of access and inclusion in the financial systems and institutions. The aim of financial literacy is to empower SME traders such as fishermen to use their financial acumen to solve business financial problems based on the knowledge they have acquired. Financial knowledge designates to an individual the power to monitor and evaluate their financial behaviors and attitudes while targeting the achieving of their business and personal goals.

Empirical study conducted in the United States showed that there is a connection between financial knowledge and reflective economic outcomes for small scale entrepreneurs and their financial wellbeing (Puelz & Puelz, 2022). Financial knowledge has been determined to be studied based on the subthemes of performance, access to finance, risk management and attitude of the SME business persons (Molina-García et al., 2022). The reasons for this is that financial knowledge must safeguard business performance, and offer the entrepreneur a window to locating and accessing financial services and products while balancing off risks through effective portfolio management. Financially knowledgeable people tend to run successful businesses and overcome financial-related challenges easily. The depth in terms of differences in the profitability, growth and survival of SMEs is explained by financial knowledge that allows a business to navigate through interest rates negotiations, financing terms and the related conditions by anchoring their business vision and mission to the best available options. Emphasis must be placed on the fact that shortage of collateral is balanced off by knowledge of the best available options that are geared to meet the specific needs of business

Technological factors such as the use of ICT in financial management should not be underrated. Digital literacy expands the options for small scale entrepreneurs to self-educate themselves on the best financial management methods they can use for their business survival and growth (OECD, 2020). Technologies provide valuable means of diversifying and enhancing the efficiency of financial operations when the business community is adequately informed and knowledgeable of the financial requirements they need, and the best finance management techniques that suits the specific needs of their businesses. Studies also show that financial knowledge has a strong nexus with financial attitudes and behaviors, leading to better administrations and control of finances (Siswanti & Halida, 2020). Technological uses in financial management is a function of the knowledge that individuals possess and the depth of information they hold. In Kenya, studies showed in addition to the above scenario, an example is the insurance industry where insurance managers have high levels of education, predisposing them to knowledge that plays a role in shaping their personal financial management behaviors and attitudes (Mwarangu, 2022). What this portends for this study is to examine the same issues of knowledge to influence artisanal fish traders and SMEs related to this industry in Kilifi County along the Kenyan coast.

2.3.3 The effect of financial Behavior on financial performance.

The concept of financial behavior cannot be detached from financial knowledge and attitudes, as these two interacting concepts generate the behavior that individuals display. Behavioral finance accentuates strongly the idea of adequate planning and undertaking planned actions in a timely manner after serious considerations are undertaken in the decision making processes (M. Rahman et al., 2021). Financial market irregularities need to be well checked in ensuring that goal-oriented financial behavior is directed towards positive financial results for businesses and individuals. The idea of implementing haphazard and unplanned decisions may have long-term adverse outcomes to the survival and growth of a business. Finance-seeking behavior is informed by the knowledge of financial products and the ability to access them from the various sources to sustain business financing (Muli & Wachira, 2019).

An empirical study by (Wati et al, 2022) provided evidence of the positive and significant effect of financial knowledge on financial behaviors, where again, financial behavior was determined to mediates the nexus of association to a firm's performance (Wati et al., 2022).. Additionally, financial behavior is comprises of those activities that deal with the planning, acquisition and application of financial resources to achieving business objectives (Nilsson, 2008). Financial management leads to financial behavior where someone seeks to maximize on the limited financial resources to safeguard consumption or enhance business operations during periods when financial resources are scarce.

Financial behaviors are largely dominated by debt reduction tendencies, savings, and in portfolio diversification. The issue of debt reduction is aimed at reducing the business reliance on non-owner capital as a way of reducing external liabilities. Businesses rarely employ the concept of savings the way individuals can do, but they can diversify the investment options and create capital and profit reserves which technically serve the same purpose as savings in the way individuals save. The aim of these is to create assets that can be re-used when earnings are low or when the business is experiencing financing difficulties. A business that does not have enough resources that can be liquidated faces an ominous and daunting task of maintaining good financial health during periods when performance is susceptible to easy influence from risks factors that are either micro or macro economical in its business operating environments.

Confusion still abounds on the way people interpret financial behaviors. Financial behaviors are not business outcomes but constitute the interaction of organizational culture, business knowledge and workforce actions whose ultimate result is to produce the desired business outcomes (Fishbein et al., 1980). At a very personal level, outcomes are a confluence of individual thoughts and self-directed actions which are focused towards either the organizational or individual goals or both. Business financial outcomes, therefore, are the results of a combination of business and individual organizational cultures, thoughts, and financial value systems that are combined with actions intended to maximize the financial assets of a business entity. This leads to securing its vision and mission statements during times when financial shortages arise or access to financial sources becomes difficult. It is from this perspective that one can appreciate the idea that financial behaviors that a business adopts have a big impact on its financial outcomes (Fishbein et al., 1980). For example, a business financial behavior can be equated to portfolio diversification and the outcome is reduced risks on the aggregate portfolio assets regardless of how many diversified assets exists in favor of a business.

2.3.4 The effect of financial attitude on financial performance.

Financial attitude is defined as the prevailing moods and thoughts that refer to the opinions and judgment of an individual on the way they manage their finances (Ameliawati & Setiyani, 2018). This is captured in the interrelationship between one’s behavior, and the financial environment they operate and the inner events (regards to values and norms) that affect its perception of financial issues and situations that finally shapes their monetary-related actions. It suffices to say, that financial attitudes predispose individuals to adopt particular financial behaviors.

The propensity of an individual to display a particular set of actions in regard to their financial situations is dictated by the attitudes they harbor. How they are likely to adopt or cope with issues like financial risks, subscribe to either short- or long-term financial decisions is determined by their attitudes. Here, emphasis is laid on the fact that financial decisions are not made in a vacuum but within a framework of existing conditions. Financial seeking is determined by the attitudes and knowledge people have towards the financial products that lenders offer, and the perception of ease or difficulty levels of obtaining those products is a construct of the attitudes that financial service product seekers have towards what they can find in the market.

Consequent to the above, research study by Baumann et al. 2011 suggest that the predictors of financial behaviors are also aligned to variety seeking based on the attitude's individuals possess. These attitudes, it determined their approach to changes in financial markets by rejecting new conditions that they perceived as increasing barriers to financial products (Baumann et al., 2011). Attitude explain why people exhibit variety seeking behaviors when trying to source for financial products as it "predicted current behavior and future behavioral intention" (Ameliawati & Setiyani, 2018; Baumann et al., 2011; Mwarangu, 2022)

Individuals have characteristic tendencies predisposing their approach towards a financial product, practice or action. Studies examining financial behaviors of SMEs and banks' lending patterns in Nigeria demonstrated that government involvement in seeking to control the financial sector , through passing regulations and enforcing rules of lending to access credit facilities expose robust banking systems losses and this makes SMEs a poor attraction to them.(Ogunmokun et al., 2022). This limits the financial seeking behaviors of SMEs entrepreneurs in using mainstream banks as sources of debt financing and credit facilities. It is possible that this may be factor that is affecting fish-based SMEs in Kilifi County. The subsisting relationship between financial knowledge and financial attitudes and behaviors has been determined to have a mediating role in the actions of individuals. A good perceptive view of financial issues is heavily pegged on a positive attitude and sound knowledge of financial practices, systems, and products that one can access. In order to strengthen the attitudes regarding financial behaviors in individuals, their knowledge of financial matters and operations needs to be beefed up (Çoşkun & Dalziel, 2020).

2.3.5 The relationship between financial literacy and financial performance

The FLT validates the nexus between financial literacy and financial performance within the sphere of management. The metrics of evaluating performance of a business are many but they all point to how good or badly a business entity is being run (Jennings & Beaver, 1997). Knowledge content needs to be validated within the confinements of financial literacy and differences in organizational culture, business philosophies and situations, where the differences result in varied responses to financial challenges as an effect of financial literacy, solutions should be sort in terms of sustainable growth and performance of SMEs.

The use of qualified and trained financial personnel in the management of SMEs is still problematic in the developing countries, particularly in regard to the SMEs operating in rural areas. Studies demonstrate that financial literacy and the use of qualified financial personnel to manage the finances of SMEs significantly improves the continuity of the business due to good financial decisions being made (Mustafa et al., 2022). However, resource constraint highly affects the quality of personnel SMEs in rural areas can get, and hence what remains is the entrepreneurs have to apply their financial knowledge in the realization of financial organizational goals of their businesses despite the obvious incompetency they may exhibit. Financial literacy, in that sense, negates positive gains for businesses as inappropriate financial decisions may be arrived at. OECD global survey report in the year 2016 demonstrated that low levels of financial literacy and challenges of grasping financial discipline result in poor financial performances of SMEs due to poor quality financial decisions being made (OECD, 2016, 2020) In Nigeria, studies indicate that the overall attitudes of small-scale entrepreneurs to insurance and savings issues was generally low, this was made worse by the fact the entrepreneurs exhibited inadequate financial knowledge and a negative attitude towards interest rates estimation and financing sources (Banjo & Sofoluwe, 2022). The conclusion that one arrives at from these studies is that there is need to improve financial literacy among business owners to sustain the growth and contribution of the SME sector to national development and economic growth outcomes of many countries.

Scholars opine that the question of low financial literacy has resulted in making economies vulnerable to economic shocks. This is because financial literacy encourages savings and minimizes consumptions during periods of high earnings. For individuals in business, this creates extra capital through savings, and when no savings is evident, investments volumes remain low leading to low growths of SMEs. It is in this context of wealth creation that SMEs exist to create value, income and sustain economic outcomes of individuals (Neelappa, 2022). In Mombasa county of Kenya, a research study determined that there is a strong relationship between growth of start-up business and high financial literacy levels of business owners (Nyale & Omari, 2020). What this portends for this study is that it informs the study's assumption that there are low financial literacy levels amongst fish traders in the county which may account for their low business growth rates.

2.4 Conceptual framework

The conceptual framework derived for this study in explaining the relationship between financial attitudes, knowledge and behaviors as independent variables and the business performances of the fish traders as dependent variables is illustrated in the figure 2.1

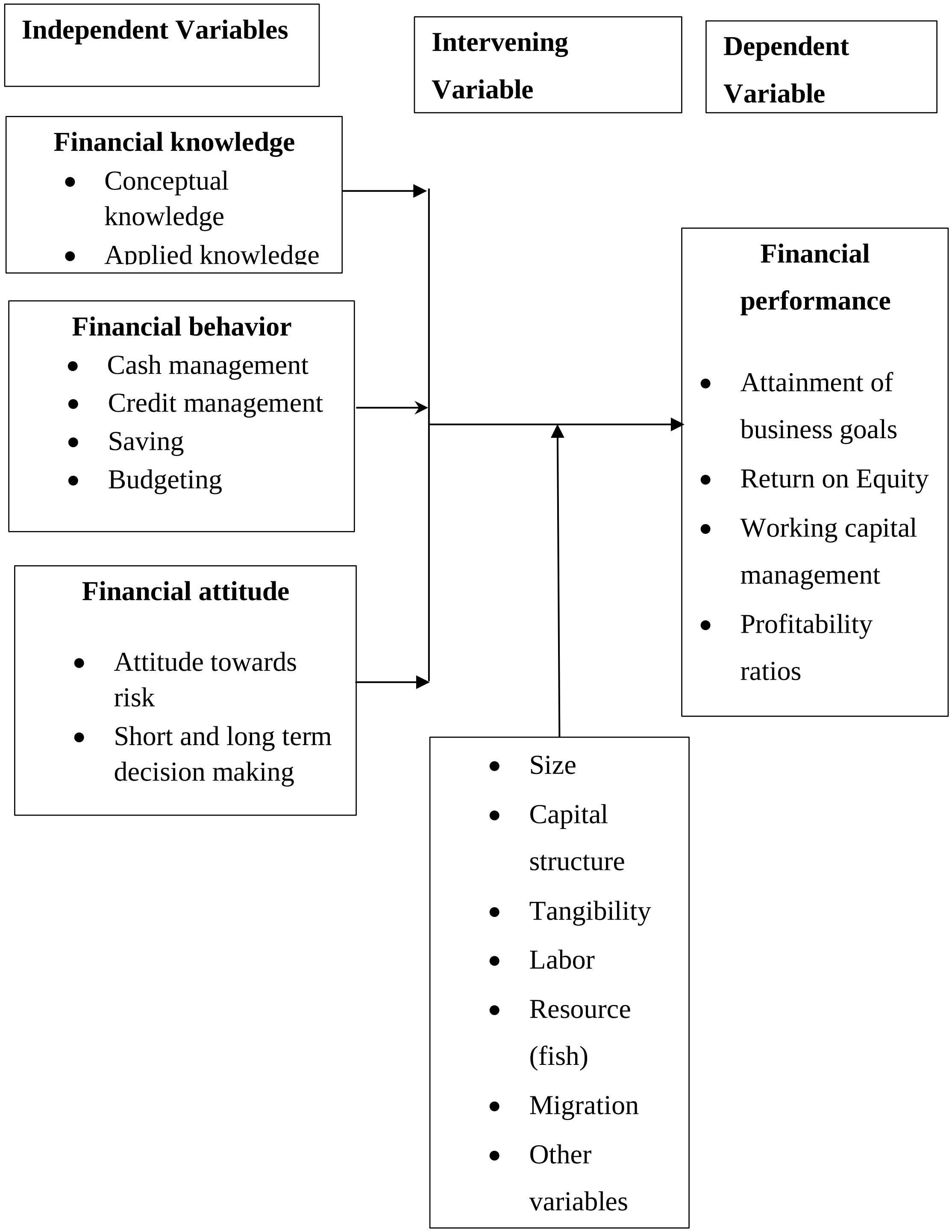


Figure 2.1: Conceptual Framework **Source (Author 2022)**

2.4.1 Independent Variables

- **Financial Knowledge**

  Financial knowledge is the state of being aware of, and being able to understand financial information and concepts as they apply to the individual or business entity decision-making practices and actions. This as an important independent variable helps a business apply conceptual knowledge procedural knowledge and applied knowledge, these put together helps the business owners make the right decisions.

- **Financial behavior**

  Is an independent variable that deals with the overall impact of financial decisions related to cash management, credit management, savings and budgeting when it comes to personal, family, and community finance.

- **Financial attitude**

  That is the inclination towards undertaking a certain behavior. For instance, attitude towards risk, long tern or short decisions. This affects decision making hence directly affect financial performance of the business

2.4.2. The Dependent variable.

Financial performance being the measure of good or indifferent management reflects whether the firm has attained its objectives. Correct management will be attained if it registers growth, success, survival and general competitiveness of the enterprise in the existing market. Therefore, with right financial knowledge behavior and attitude as inputs model results in measurable dependent variable the financial performance.

2.4.3 Intervening variables

Intervening variables in this study are those variables that do not have a cause-effect relationship with the dependent and independent variables but are responsible for influencing the changes that occur between the two sets of variables. These variables inclusive of, but not limited to resources, risk competence, innovation, sustainability tangibility and growth. For effective fishing to take place the fish as a resource must be present in their natural habitat which is the sea, capital, labor and market are also variables among others that affect the economic activity.

2.5 Research Gap and a brief critique.

Research outputs from empirical studies demonstrate that there is a link between financial literacy and business performances. In this study, a survey of available literature indicates that there is a strong correlation between financial knowledge, attitudes and behaviors and their interaction sets the pace and the outcome of the financial performance. In view of this, the studies do not explicitly address how these variables relate with the financial performances of artisanal fishermen and fish traders in Kilifi County along the Kenyan coast. This study has identified this as a research and knowledge gap in the existing body of literature concerning financial literacy in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section is a presentation describing the research design, provides details of the study site and elucidates the characteristics of the target population. Details relating to the sample size determination and sampling techniques are explained. The data collection tools and issues of validity and reliability are presented alongside a description of how data was collected and analyzed. Ethical considerations are highlighted in this chapter.

3.2 Research Design

This study used cross-sectional survey design because it sampled respondents across various study sites at a single point in time and drew generalizations from the findings. It should be noted that this design was appropriate as it allowed the researcher to collect data, and thereafter make inferences at a single point in time (Lavrakas, 2008). Secondly, the design is justifiable for this study because the respondents were selected from a cross section of the population of interest (Wang & Cheng, 2020). |Third reason is that it impossible to interview everybody within the population universe and this justifies selecting a small sample across that population of interest (Taherdoost, 2016). Lastly, in line with the issue of measuring variables, this was done at the same time within the data collection period and only once for every single unit sampled (Wang & Cheng, 2020).

3.3 The Target Population

The department of fisheries in Kilifi County has a record of all beach activities. The beach has been classified into seventeen BMU where each BMU has and manages the landing units within the area. They have record of all the fish traders according to the landing sites.

The research was guided by the statistics given by the department of fisheries as tabulated in Table 3.1.

Table 3.1: The study Population

Sub County	BMU	No of traders
Kilifi South	Mtwapa	67
	Kuru witu	9
	Kanamai	6
Kilifi North	Takaungu	14
	Mnarani	30
	Kilifi Central	27
	Bofa	9
	Wesa	6
	Uyombo	5
	Roka	2
	Watamu	17
Malindi	Shela	73
	Mayungu	88
Magarini	Ngomeni	30
	Gongoni	16
	Kichwa cha Kati	4
	Marereni	19
Total Population		**422**

Source, Department of fisheries Kilifi County (2022)

3.4 Sample Size, Sampling Technique and Proportions

The sample size for the study population was derived using the formula proposed by Yamane in 1967 based on the desired confidence levels to be achieved (Chaokromthong & Sintao, 2021)this formula, provides a means through which the sample size needed to attain a confidence level of 95% was done based on the risk levels that may affect confidence in the findings of the study (Saunders et al., 2012).The formula used is shown below:

$$n = (N) / (1+Ne^2)$$

In the formula, n represents the desired sample size and N is the aggregate population of the universe where the sample will be extracted from, while e denotes the probability of error of 5%. Based on this formula, the sample size is calculated as follows;

Therefore, $n= \{(422) / [1 + (422*0.1^2)]\} = 80.84$ giving approximately 81 respondents

Proportionate simple random technique was used to select the actual sample units to be involved in the study. This was appropriate because the various BMUs have different population sizes who need to be proportionately represented in the aggregate sample for the whole study (Taherdoost, 2016).

After the proportionate sample per BMU was determined, the study randomly selected every 5^{th} person as a respondent included in the study. This ensures that biasness in the selection of the sample units is highly limited or eliminated (Latpate et al., 2021). Simple random sampling used in this was due to the fact the population of interest within each BMU had similarities in terms of characteristics and behavioral attributes that are of interest to this study (de Vries, 1986). Many fish traders collect fish from landing sites, transport it to different trade areas where they operate retail outlets. Hence stratified sampling helped reach these respondents randomly in each landing site and business premises thus the sample was representative.

The sample size for this study was therefore 81 respondents as tabulated in Table 3.2

Table 3.2: Sample Size, Sampling Technique and Proportions

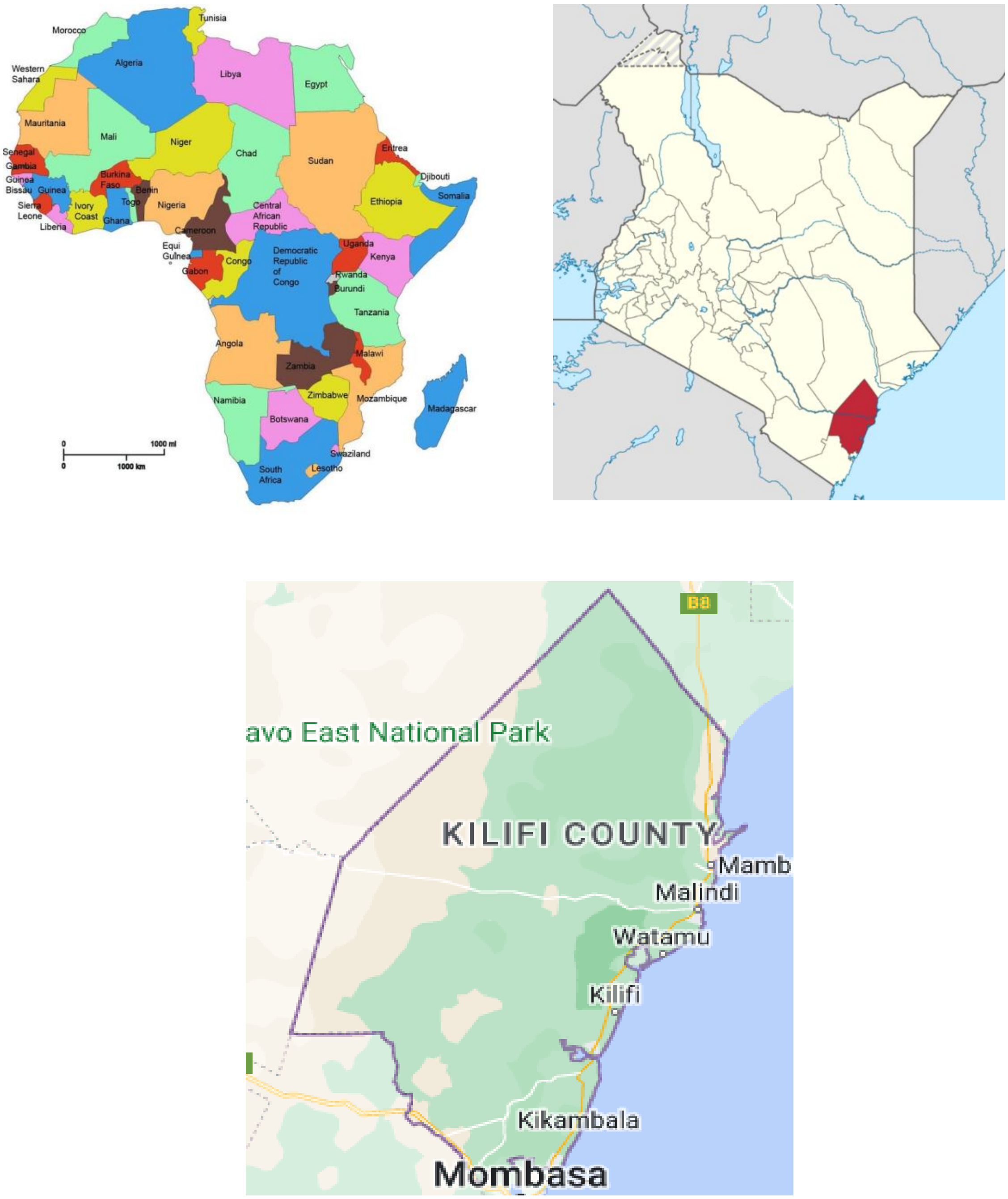
Subcounty	Landing site	population	Sample size
Kilifi South	Mtwapa	67	14
	Kuruwitu	9	3
Kilifi North	Kilifi central	27	10
	Watamu	17	8
Malindi	Shella	73	15
	Mayungu	88	18
Magarini	Ngomeni	30	11
	Kichwa cha Kati	4	2
Total			**81**

Source; Field Survey 2022

3.5 Study Area

The study was concentrated on the beach landing sites of the Sub Counties viz Kilifi South subcounty at Mtwapa and Kuruwitu. In Kilifi North subcounty Kilifi Central and Watamu. Malindi subcounty in Shella and Mayungu and Magarini subcounty at Ngomeni and Kichwa cha Kati. At least two landing sites in every subcounty with a coast line gave a representative sample of the total population of the study. This study area is as shown in figure 3.2

Figure 3.1: A map showing Kilifi County



3.6 Scope of the study

This covered the artisanal fish traders who were directly involved with the fishing as an economic activity. Some being boat owners with retail outlets and traders who collected fish from the fishermen for onward delivery to other fish markets

3.7 Data Collection Instruments

The study used the interview schedule as a data collection tool. which allowed the researcher to interview respondents directly. The interview schedule contained a series of open-ended, structured and semi-structured questions. The questions were grouped in line with the specific objective. Interviews were guided through an enumerator who explained the questions first the respondents gave their responses and finally primary data was collection from the artisanal fish traders.

3.8 Data collection Procedure.

The process of Data collection started from approval from the Pwani University Ethics review committee. The researcher then coordinated the data collection process by visiting the sampled sites the data through group interviews and questionnaire administration. The researcher introduced herself to the respondents and explained of the intention of the study. This was to allow them make informed choices to be participants in the study.

3.9 Reliability test

During the pilot phase of the study, a reliability test was undertaken on the research instruments to assess whether the questionnaire effectively gauged its intended dimensions. The objective was to determine the extent to which the same instrument consistently yielded comparable outcomes when applied to measure the study's variables. The Test-Re-Test method was utilized, resulting in a coefficient measure of 0.76. This finding aligns with Bardhoshi's 2017 assertion that a coefficient measure of 0.7 or higher indicates the reliability of an instrument for measuring study variables (Bardhoshi & Erford, 2017). This assessment ensured that the research instruments were dependable and aligned with their intended purpose.

3.10 Validity test

Validity is a fundamental pillar of robust research, encompassing the appropriateness, meaningfulness, and convenience of the deductions made by an analyst based on the information gathered. It signifies the degree to which the inferences drawn accurately reflect the underlying reality of the subject under investigation. In the context of this study, the validity of the findings was rigorously assessed using the Kaiser-Meyer-Olkin (KMO) measures. These measures provide a quantitative assessment of the suitability of the data for the intended analysis, offering insights into the adequacy of the dataset for drawing accurate conclusions. By subjecting the research data to the scrutiny of KMO measures, the researcher aimed to ensure that the deductions drawn from the collected information were reliable and pertinent, contributing to the overall robustness and credibility of the study's outcomes.

3.11 Ethical Consideration

The researcher undertook to create awareness among the fish traders about the research and its importance as an economic activity. Names and other demographics were handled with confidentiality. The researcher trained local enumerators on the right approach to ensure that the respondents were comfortable in giving their supposedly confidential information without fear. Corvid 19 protocols were observed. Ethical consideration such as privacy and confidentiality of the respondents was highly safeguarded during the data collection phase of the study.

3.12 Data processing and Data analysis.

The raw data in the questionnaires were first edited in the field and then data coding and capture was undertaken on Microsoft Excel. The data was then processed using SPSS Statistical Package Social Sciences (SPSS) version 25 for data processing and analysis. The Pearson's Correlation Coefficient was used to test the significance of the linear relationships between the key independent and dependent variables of the study. A Coefficient measure of 0.5 or above demonstrated that there was a significant relationship between the variables measured. The key independent variables of financial knowledge, attitudes and behaviors were measured to determine their significance relationship with the dependent variable of financial performance of fish traders in Kilifi County Beach Management Units.

CHAPTER FOUR

DATA ANALYSIS , INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents and discusses the results of the study on the effects of financial literacy on the financial performance of artisanal fish traders in marine fisheries a case of Kilifi County.

4.2 Study Sites

Research is conserned with collecting accurate information that answers the research objectives. Studies provide an opportunity to solve global , regional and local problems which normally evolve over time. Research findings have suggested novel ways of solving issues with history suggesting that research has contributed to civilization. Multiple study sites avail large and diverse views from the target pupulation ensuring that the data in generalizable (MacKinnon et al., 2002). Further, this aids in translating the findings into practive and policy which bolsters the intergation of research findings. This study selected 8 study sites within Kilifi County where data was collected. This sites were; Watamu, Ngomeni, Mtwapa, Mayungu, Kwa Shella, Kuruwitu, Kilifi and Kichwa Cha Kati.

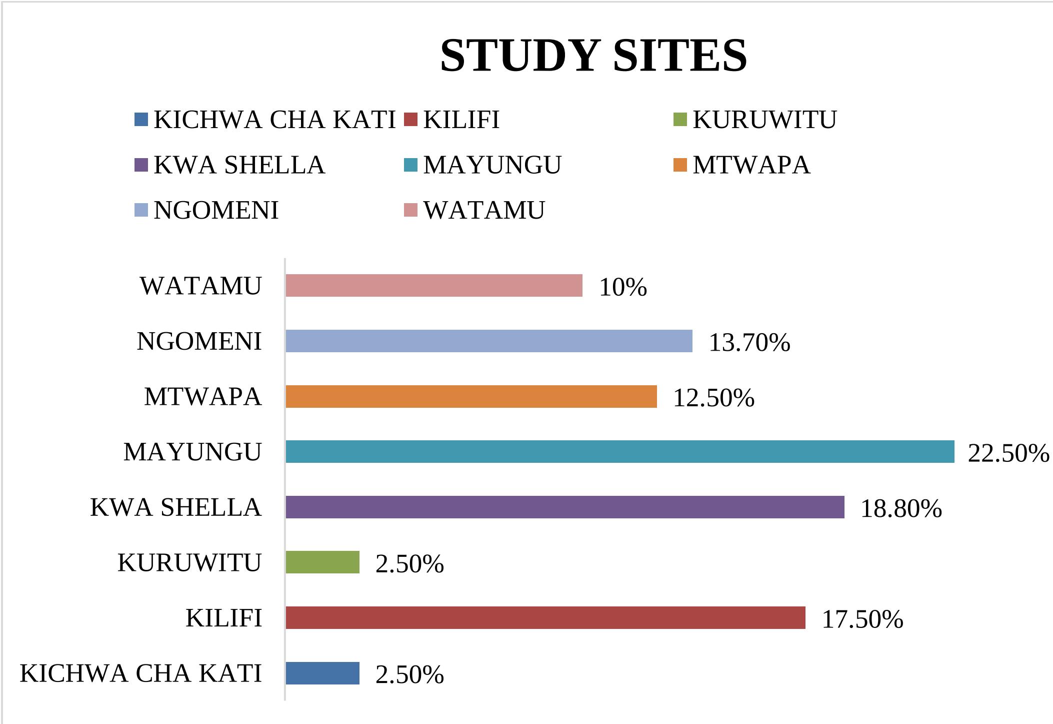


Figure 4.1: Study Sites

Source: field Survey, May 2022

Research findings indicated in Figure 4.1 reveal that a majority (22.5%) of the respondents were from Mayungu with a few (2.5%) were from Kuruwitu and Kichwa Cha Kati . Kwa Shella attained 18.8% , Kilifi 17.5%. Ngomeni gannered 13.7% and Mtwapa 12.5%

The Kilifi County Integrated Development Plan (2013) describes Kilifi as majorly Fisheries Dependent Area (FDA). This is supported with an estimate of over 5,085 families relying on fisheries as their main source of livelihood. It was also worth noting that respondents from Kilifi (17.5%) and Mtwapa (12.5%) revealed to being attached to the Beach Management Units (BMUs) which act as the basic governance structures recognized by the County Government. BMUs aid in the management of fishing site while the current BMU offices in Kilifi at Old Ferry linking the fishers to the market as buyers come to buy fish. This corresponds with the findings of (Degen et al., 2010) that the fishing sites have been structured and being managed by beach management units (BMU) with the head office located at Kilifi Old ferry.

4.3 Response Rate

The data was collected from artisanal fish traders from the seven selected sites, namely Mayungu, Kuruwitu, Kichwa Cha Kati, Kwa Shella, Kilifi, Ngomeni, and Mtwapa. The recorded response rate was 98.7%, as 80 out of the 81 respondents consented to the study and completed the interviews.

4.4 Gender

Gender by definition are the characteristics of women, men, girls and boys that are socially contructed. The research intended to collect views of all gender which guaranteed representation of all.. The chart below is a summary of this information relating to gender results of the study as follows;

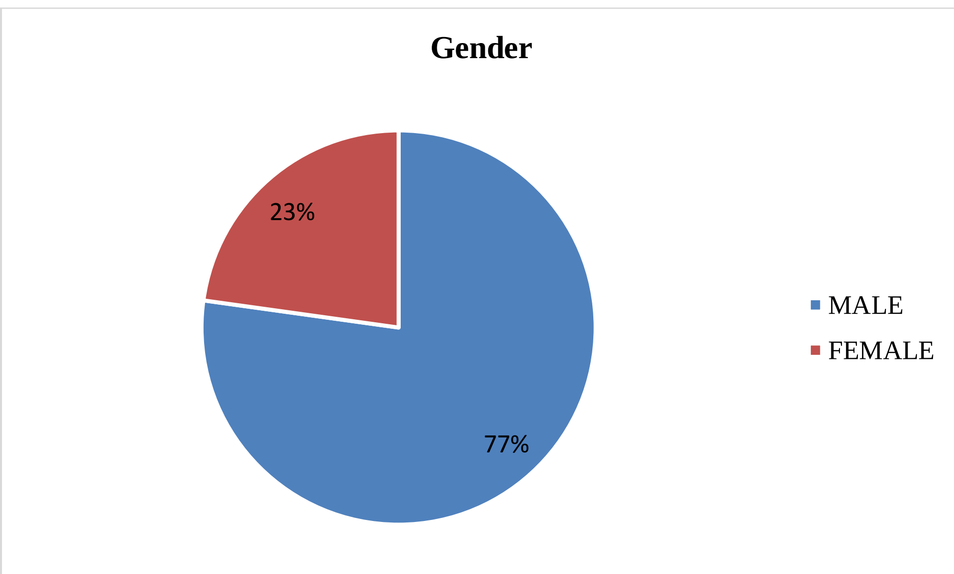


Figure 4.2: Gender of respondents

Source: Field Survey, May 2022

From the summary presented in figure 4.2, more than 77% stated that they were males while 23% were females. Women play a significant role in fish trade with a majority serving as *mama karanga* who engage in post-production of fish and fish products after fishermen deliver the fish at landing sites located within the BMUs. This involves the preparation of the fish, distribution, sales and marketing of the fish and fish products. The production processes involve removing the fish scales and offals, frying, drying and marketing where the women derive a profit margin slightly higher than the fishermen. This implies that although there is female participation in the trade it is a male dominated economic activity. It was an opportunity to document challenges faced by women in the sector as well as answer the research questions. This study finding is in concurrence with the results of a study conducted by Matsue et al (2014) that showed that small scale female fish vendors (*Mama Karanga)* are an important bridge between the fishery trade industry and the household consumers yet their contribution to the commercial aspects of the domestic fish industry has not been well documented.

In the value chain creation from fish production to consumption, there is a need to integrate all the key players regardless of their gender by capitalizing on their contribution in sustaining the fishing industry. This calls for having a broader overview of the role women play in this industry and addressing the gender-barriers that they face in the value creation chain. These small-scale female fish vendors have a magnanimous role to play in expansion of the marine fisheries sector as they are the conduit for which fish distributary channels allow the fish and fish products to reach the household consumers who are basically the main key market targets for them. They link the fishermen and re-package their products for the domestic consumer which qualifies them as implicit sales and marketing agents for the fishermen.

4.5 Demographics of Respondents

The age of respondents varied depending on the target population. In research, it is important to collect views from a majority from different age brackets. This includes collecting views from both the youth and the elderly covering different study sites. The researcher categorized the ages of respondents into five categories with the youngest being at 18 years and Above 55 as the maximum age bracket.

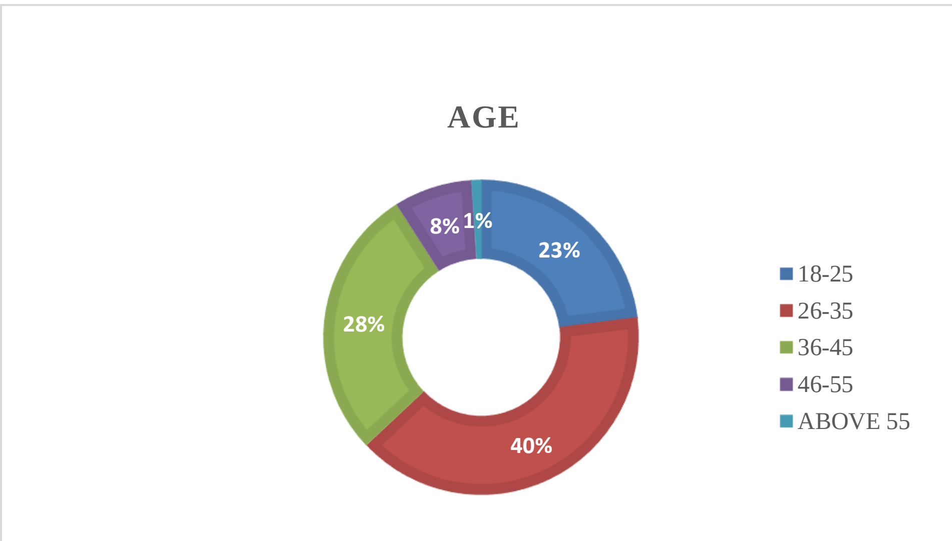


Figure 4.3: Age Distribution of Respondents

Source: Field Survey, May 2022

As summarized in Figure 4.3, a majority (40%) were between the ages of 26-35 while only 3% were above 55 years. Less than One-third (28%) indicated aged between 36-45 while slightly above one-fifth (22%) were aged between 18-25. Only 7% indicated to be aged between 46-55. Research findings revealed that a majority of the respondents were between 26-35 engaging in fishing activities as their source of income. This period is characterized as their peak when they engage in economic activities to cater for their family needs which are varied in nature including basic and physiological, requiring stable resources.

4.6 Religious Affiliation

Religious affiliation plays a significant role in influencing the social, political and economic activities that members engage in (Fernando & Jackson, 2006). In Kenya, the major religious groups are Christianity, Islam and Hinduism. Most importantly, religion develops an ethical framework and also regulates values in day to day life. Occasionally religion also determines the dressing code of people and also the social and economic activities they are to participate in. The distribution of respondents according to their religious affiliation is summarized Figure 4.4

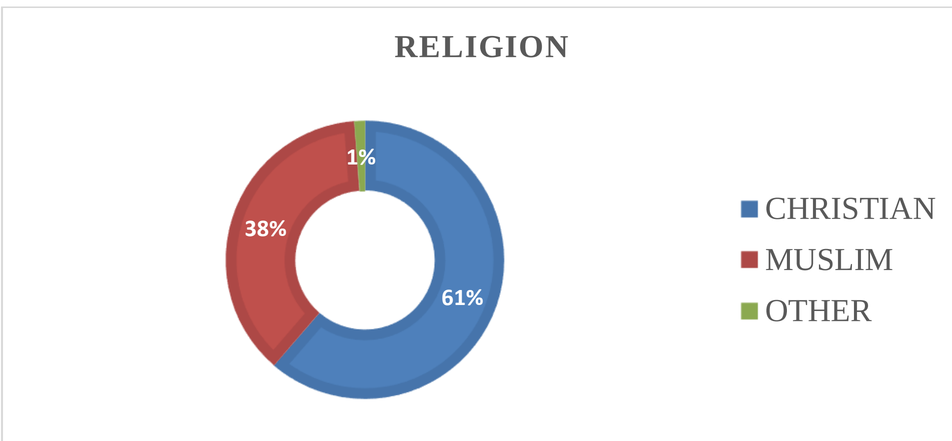


Figure 4.4: Religious affiliation

Source Field Survey, May 2022

Research findings summarized in Figure 4.4 reveal that a more than half (61%) of the respondents were Christians while 38% were Muslims. A few 1% indicated to belong to other affiliations apart from the listed two. The findings reveal that Christians are the majority in the county evidenced from the sample derived from the study sites. In addition, more than half of the population is either Christians or Muslims. Previous studies have confirmed this finding, where religion has been proved as a major determinant , formation and shaping of the worlds' leading major civilization (Akanbi & Beyers, 2017) From the findings, the religious practices of the Kenya coastal people do not prohibit them from undertaking the fishing activity as an economic activity.

4.7 Level of Education

The level of education determines the literacy levels of a nation which translates to the economic output. A nation with skilled labor enjoys higher GDP with most job opportunities available to the population. Education empowers an individual and increases the chances of accessing economic opportunities as well as enables business operators to manage their businesses effectively (Maina, 2013). The study sought to examine level of education in relation to having is as a pointer to the levels of financial knowledge and proficiency handling financial matters. This information is presented in figure 4.5

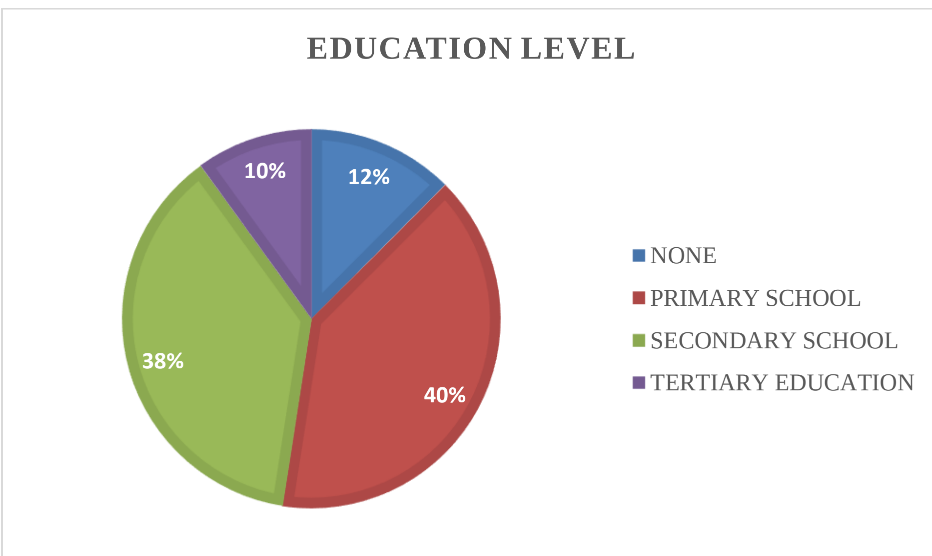


Figure 4.5: Level of education

Source Field Survey., May 2022

As summarized in Figure 4.5 research findings indicate that slightly less than half (40%) of the respondents attended primary school followed closely with more than one-third (38%) who attended secondary school. Exactly 12% indicated to have not received any formal of education while a few (10%) indicated to have attended to a tertiary education. Research findings reveal that more than half of the respondents have either attended primary school or secondary school. This implies that although the respondent has received formal education their basic literacy levels are not advanced to technical levels of understanding business logistics and entrepreneurial skills in the business environment. The respondent's inadequacy of value of his economic activity makes him carryout the activity as a survival activity. This result adds value to the research findings of Maina (2013) who determined that entrepreneurship knowledge and information be inculcated into the formal education curriculum where learners will be able to acquire financial knowledge and financial literacy which plays a very important role enhancing the financial performances of start-up business that are of a small-scale in nature.

4.8 Duration in business

Businesses encounter different challenges which hinder their daily operations and may lead to closure. Studies conducted by the Kenya National Bureau of Standards (KNBS 2016) shows that the failure rate for start-up business is 60% within the first few months of operations. The duration of business determines the capability of the business to withstand both internal and external forces in order to remain operational. This includes the integration of strategies and personnel who steer the business to its success. This study confined itself to determining the duration in which the artisanal fish businesses had been in operation from the time they were set up. This ranged from as low as less than 2 years to those that had been in existence for over a decade. The data is presented as shown in figure 4.6.

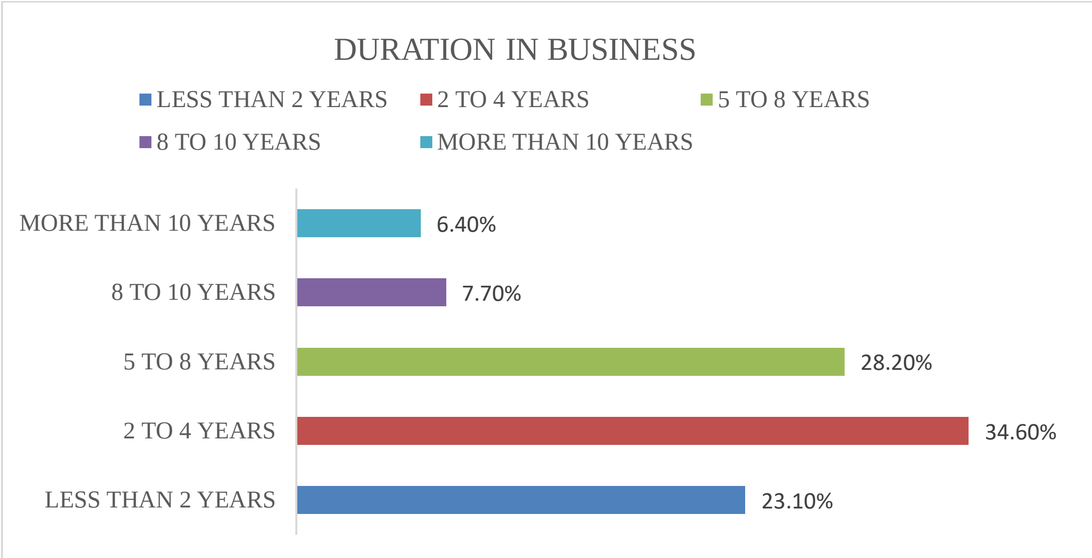


Figure 4.6: Duration in Business

Source: field Survey, May 2022

Research findings summarized in Figure 4.6 reveal that more than one-third (34.6%) have been operational between 2 to 4 years. This was followed by slightly above one-fifth (28.20%) who indicated the duration of their business to be between 5 to 8 years. Less than one-quarter (23.1%) indicated less2 than years. The results showed that 7.7% of all the respondents reported that their businesses had been in operation for a period of 8-10 years while another 6.4% reported that their businesses had been operating beyond a decade. This low report of long-term business survival is an indictment to the fact that many of the respondents may be lacking financial knowledge. The findings revealed that business survival in this sector is low.(Rahman et al., 2022)

4.9 Number of Employees

Data from the KNBS report of (Kimathi, 2020) shows that SMEs in Kenya account for 98% of all the business in the country, where they contribute to 30% of the jobs annually while contributing 3% to the country's GDP. These SMEs employ workforce populations ranging from as low as two employees to more than 50 depending on their size and scale of operations (Douglas et al, 2017). Figure 4.7 provides the average ranges of employees employed by the SMEs located within the study sites sampled in the study as follows;

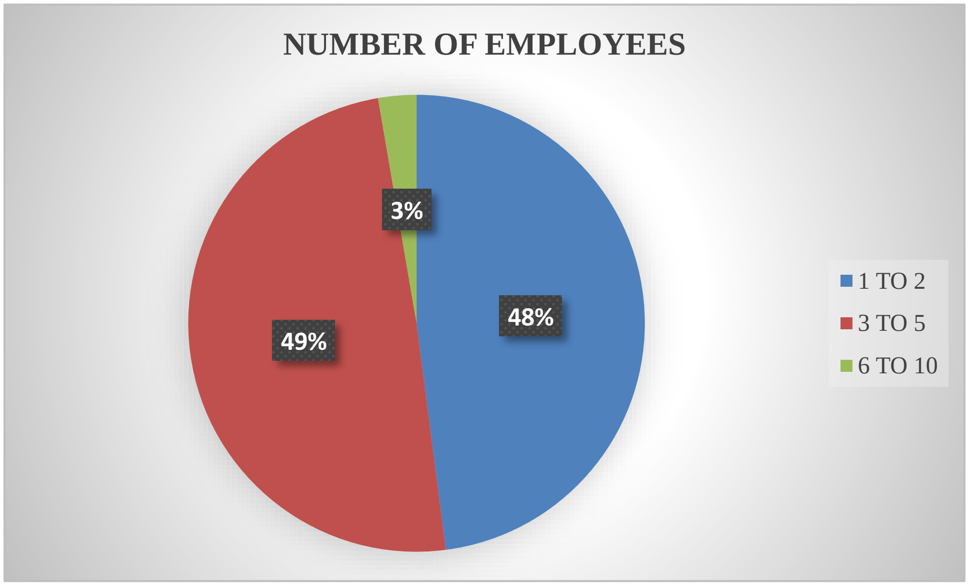


Figure 4.7: Number of Employees

Source: Field survey, May 2022

Data summarized in Figure 4.7 indicate that nearly all of the selected respondents indicated to have employed between 1 to 5 workers. There was a slight difference between the two majority with exactly (49%) having employed between 3 to 5 workers while 48% having between 1 to 2 employees. Only 3% indicated to have between 6 to 10 employees. Notably some of the delegated duties of the employees were to help in catching the fish, preparing fish, assist in buying fish from the fishermen. Some of the workers were responsible for keeping records of the sales daily and account for the daily income and spending. Meaning the small number of workers indicated either stagnated growth of the business.

4.10 Determination of Selling Price

The selling price of a commodity is a function of various factors such as cost of raw materials and overheads that go into production and the desired profit margin targeted. The sale of fish attracts various stakeholders including fishermen, middle-men or brokers and retailers who avail the product to the consumer. Notably, the brokers earn more than the fishermen who risk their lives at sea to obtain the commodity. Numerous complaints have been forwarded by fishermen who feel short-changed after their labor is taken advantage earning less as compared to their effort (Jabarzare & Rasti-Barzoki, 2020). Despite its availability, fish is still expensive to purchase from the fishermen though the season is high and they sometimes negotiate prices so that they can also make profit. A kilogram of fish retailed at between sh. 250 and sh. 300,

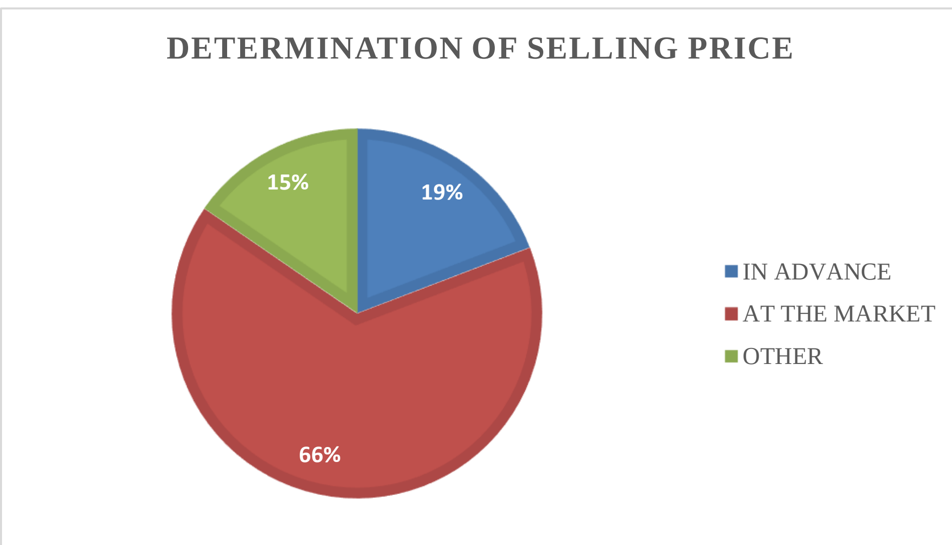


Figure 4.8: Determination of selling price

Source: Field Survey, May 2022

Research findings as shown in figure 4.8 indicate that more than half (66%) stated that they decide on the price of the fish at the market. In most cases fish traders sell fish according to the number kilogram with the pricing varying depending on also type of fish.

The norm in the market is that the demand and supply curve dictate the price of fish. Notably some of the traders highlighted that the supply of fish has decreased limiting income derived from trading the commodity. Slightly less than one-fifth (19%) indicated that they determine the price of fish in advance while the rest (15%) indicated they check on other aspects including the type of fish. This implies a majority of the artisanal fish traders dispose their catch at the show at prices determined by the market. Under normal circumstances its is the business owner who considers expenses and finally determines the price of the commodity. In this case the artisanal fish trader is a price taker and not and not a price giver hence exposed to an exploitative business environment.

4.11 Financial Training

Financial literacy involves having the know-how of handling money especially in businesses ensuring the income derived and expenses balance. This also provides as an avenue to gauge the successes or growth of the business from its inception. Lenders in most cases check on the capability of the business to manage resources before providing financial assistance(Karlan & Zinman, 2011). The study investigated whether artisanal traders have received financial training while responding either yes or no. The findings were summarized in the figure below.

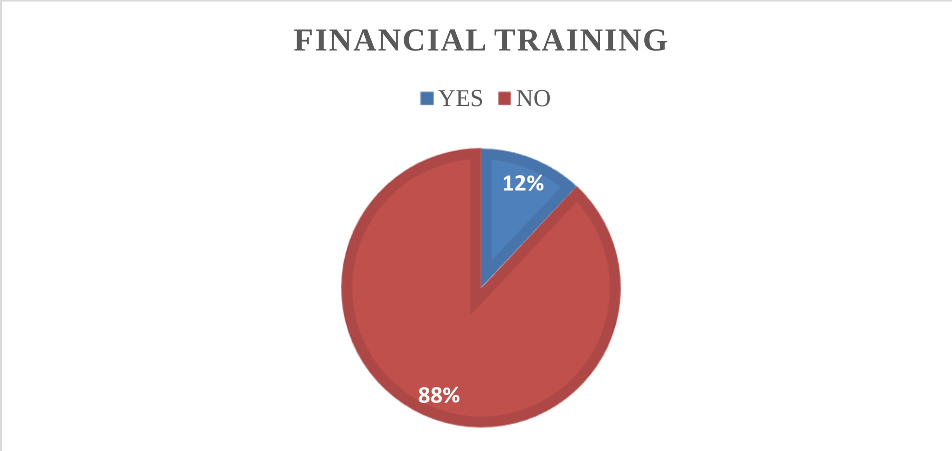


Figure 4.9: Financial Training

Source: Field Survey, May 2022

Data reflected by figure 4.9 indicated that more than half (88%) of the respondents had no financial training while the rest (12%) stated have received financial training. The few (12%) constitute of traders who either received training from non-governmental organizations or trainers who avail their services some charging while others on pro-bono. During data collection it was noted that a majority of traders are members of Beach Management Unit (BMU) which organizes financial trainings for members. Other organizations listed to have organized financial training include blue safety. KMSEL Marine organization, Malindi fisheries and Umoja. Accordingly, the (12%) the training lasted between 1 to 2 days depending on the topics covered. Examples of topics highlighted included business management, fishing and safety. Slightly above a quarter (26.9%) indicated to have witnessed changes in their businesses after the financial training. Meaning although a minority confirm training the areas covered have not extensively covered crucial financial matters, matters record keeping, budgeting, credit advantages among others. This finding does not stand in isolation as it reflects what has been discovered in other studies, where a deficit of financial knowledge does not constitute as a barrier to access to bank finance although it definitely adversely affects the survival chances of SMEs and low success rates due to lack of sound financial management knowledge.

4.12 Credit Acquisition by Respondents

An individual’s access to multiple financial pools is a significant determinant of their capacity to invest and make profit, and operate their business consistently(Liu & Wilson, 2010). For a further understanding of the financial diversification tendencies amongst the respondents, the researcher requested them to reveal their credit sources. The respondents were provided with the mainstream credit sources in the study area, and asked to divulge whether they borrowed from the sources. The responses generated are as illustrated in table below.

Table 4.1: Credit Acquisition by Respondents

	Yes	No
Credit from family and friends	93.30%	6.70%
Credit from informal savings	8.80%	92.20%
Credit from personal savings	2.50%	97.50%
Credit from microfinance	3.80%	96.20%
Credit from commercial bank	7.50%	92.50%
Other credit sources	2.60%	97.40%

Source: Field Survey, May 2022

As table elaborates, most of the respondents (93.3%) attested to borrowing from family and friends. The rest of the respondents indicated that they sourced money from other sources, including commercial banks (7.5%), microfinance (3.8%), personal savings (2.5%), and informal savings (8.8%). The results indicate that the respondent has the knowledge of the existence of funding but deliberately avoids it or has an attitude about its availability to him as sites long procedures or ignorant about the means to reach it. This means that 93.3% of the respondents have a negative attitude towards risk meaning they do not use credit to expand their business hence low growth and slim chances of survival. This correspond with another research study which showed that the attitudes of potential borrowers within the population of Bali farmers did not exhibit full faith and confidence to credit benefits and targets, were distrustful of the procedures of securing credit facilities and credit risk scoring systems (Habaora et al., 2019)

4.13 Financial Records

Financial records comprise of documents stored either electronically or offline that are used to provide evidence or summarize business transactions. In most cases, financial records include invoices, banking record, cash book records, creditor records, debtor's records, tax invoices, record of expenses, and receipts. A financial record acts as evidence of an enterprise's financial activities mostly transactions and explains the financial position and performance of a business (Pettit & Singer, 1985) Having financial records that are up-to-date and accurate is the best indicator of determining the soundness of the financial status of a business entity. It facilitates business managers to carefully manage their cash-flow and obtain suitable interest rates from lenders. This study analyzed whether artisanal fish traders had financial records of their businesses. Research findings were summarized in the figure below. Participants were questioned on whether they have a sales financial record, purchase record, operation expenses financial record and profit account financial record.

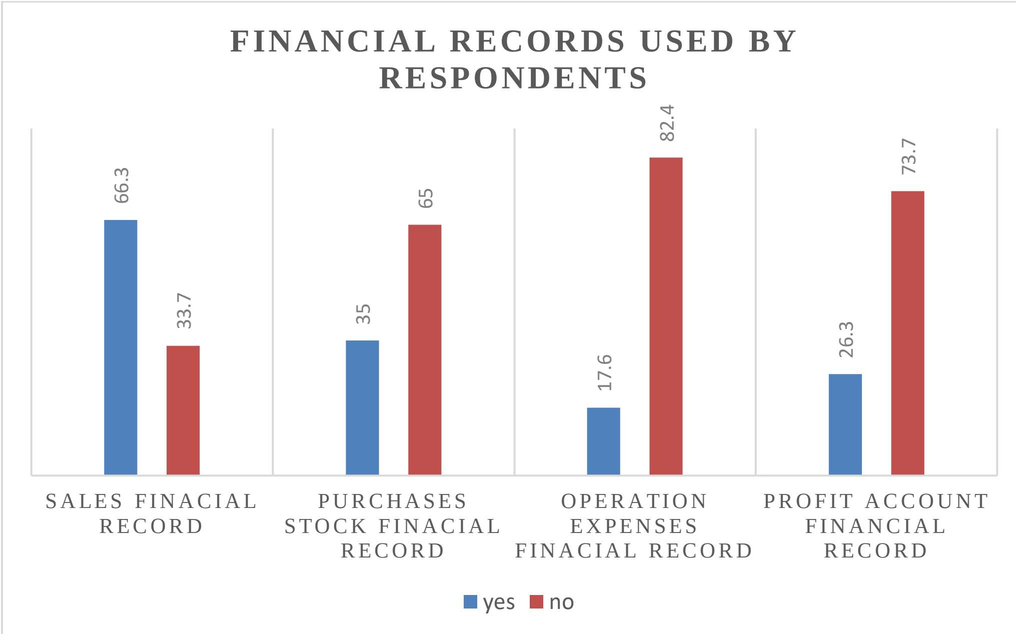


Figure 4.10: Financial Record

Source: Field Survey, May 2022

Data obtained from the study was summarized in Figure 4.10 which indicated that, more than half (66.3%) of the respondents have a sales financial record as compared to less than one-fifth (17.6%) who indicated to have operational expenses record. A majority (82.4%) of the respondents did not record any operation expenses record as compared to slightly more than one-third (33.7%) who had no sales record. The study findings demonstrated that the respondents have a sales financial record and purchase stock financial record with participants responding yes by 66.3% and 35% respectively. On the other hand, few have operation expenses (17.6%) and profit account financial records (26.3%). The findings reflect a situation where incomplete business financial records are maintained i.e. just partial records. this results in the exclusion of other business operation costs. The absence of business records results in difficulties in ascertaining profits, track costs and ultimately business growth. A similar research finding in Nigeria showed that keeping of proper accounting records has a role in influencing business growth, yet, just like the findings of these study relating to Kilifi County, lack of basic accounting knowledge and skills was a serious setback to the businesses (Solanke et al., 2015).

4.14 Attitude Towards Credit Utilization

Positive financial behavior enables an entrepreneur to establish measurable financial goals and realistic plans to achieve them(Collins & O'Rourke, 2012). This may see the business owner set aside an emergency fund or budget for finances that ensures the business remains afloat in the instance of unprecedented circumstances. This also leads to financial well-being where a business owner is in position to meet all financial obligations hence securing its financial future. The study investigated three aspect of credit variables namely; willingness to expand, loan status of the business and ease of repaying of loans.

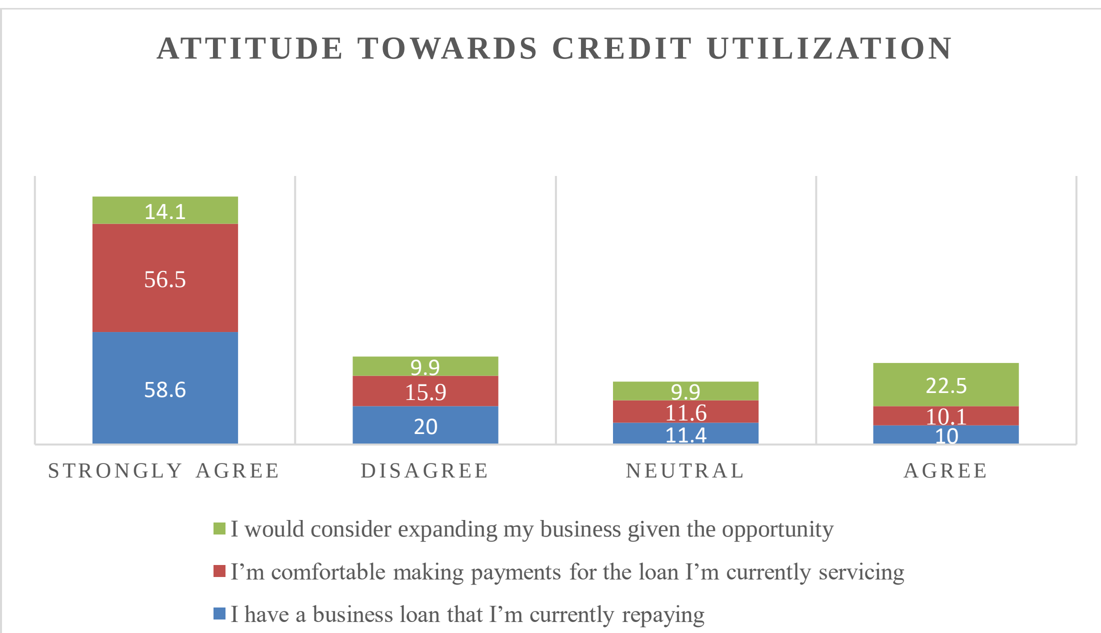


Figure 4.11: Attitude Towards Credit Utilization

Source: Field Survey, May 2022

Data obtained was summarized in Figure 4.11 above. Research findings indicate that a majority (58.6%) of the few who have loans strongly agree that they have a business loan currently paying. In comparison, only 20% of the participants disagree on having a business loan while 11.4% were neutral. Similarly, more than half (56.5%) strongly agreed on their ease of making payments of the loan they are currently servicing. Slightly above one-tenth (11.6%) of the respondents were neutral of the same statement. Less than one-quarter (22.5%) agree that they would consider expanding their business when given the opportunity. In comparison, exactly 9.9% disagreed and equally neutral. The findings indicate that they have the desire to expand the business but they have not explored extensively how they can use business loans to expand the business exposing their ignorance about entrepreneurship skills.

4.15 Ratings for Credit Services

According to (Memba et al., 2012), access to credit has a big role to play in securing the financial status and development of SMEs. Small enterprises often are constrained in the number of options that they have in seeking alternative solutions to their financial needs, which makes them rely more on their retained earnings to address their investment needs. Kenya has continued to witness a rise in demand for credit by SMEs based on an increase in the interest of the youth in starting small businesses to apply the knowledge and skills they obtained in school. Business owners consider different factors before seeking credit facilities This research investigated the ratings for credit services using variables such as interest rates, access to credit services, loan repayment period and the effects of loan repayment to business operation. Participants responded either bad, poor, average or good.

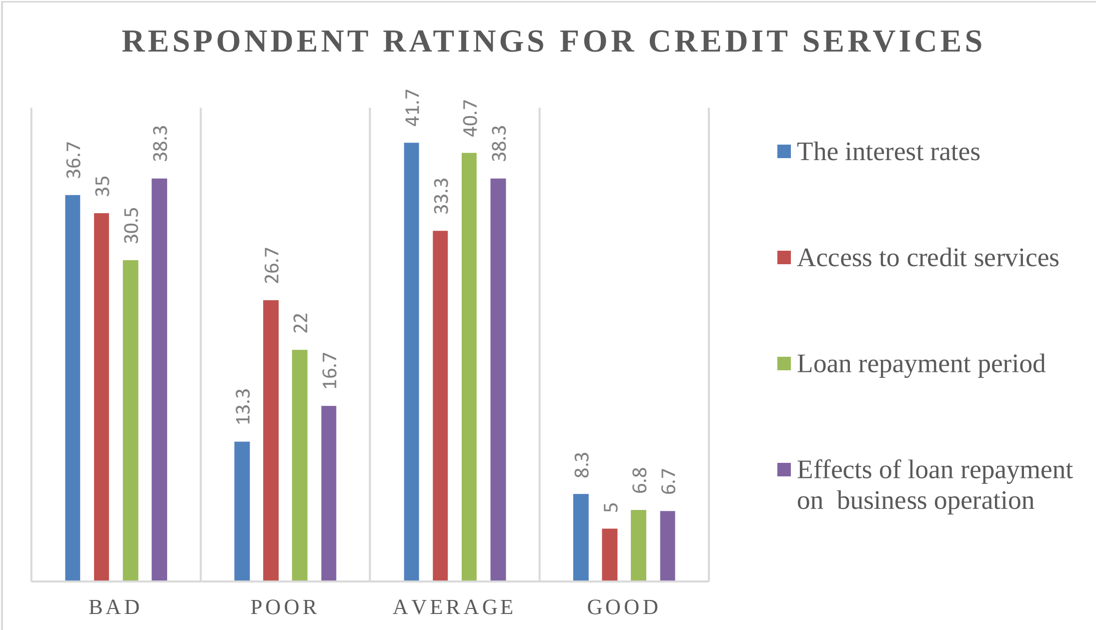


Figure 4.12: Ratings for credit services

Source: Field Survey, May 2022

As indicated in Figure 4.12 research findings reveal exciting results from the study. Ratings on the interest rates indicate that 41.7% were average 8.3% were ok with interest rates. Slightly above (36.7%) indicated bad when asked about the interest rates while exactly (13.3%) responded poor. Slightly above one-third (35%) indicated bad on the access to credit services while only 5% responded good. Only 33.3% indicated average in the same category. Slightly less than half (40.7%) indicated average as their ratings on the loan repayment period. In comparison only 6.8% indicated good on their ratings on the same statement. Finally, slightly above one-third (38.3%) responded both average and bad equally on the effects of loan repayment to business operation. In the same category a few (6.7%) indicated good on the same category. This implies that the respondent is not very excited about the availability of credit and its effects on the growth and size of the business and avoids it. The variables under study therefore does not make any meaning in business but their attitude towards credit is more for consumer loans than for investments. Loan option was not a preference by most respondents. This is supported by research findings that demonstrated that competition and shortage of credit facilities for SMEs is a major constraining factor arising due to low financial literacy levels of small-scale entrepreneurs (Masaka, 2022). It suffices to say that for SMEs, financing is one of the major challenges that the sector faces, despite having several commercial banks and the non-banking financial institutions. Worse still, a survey of available literature in this field shows that small businesses have serious challenges in accessing credit facilities compared to large firms, like multinational corporations(Maengwe & Otuya, 2016)

4.16 Attitude towards Business Expansion

The study was interested in the financial attitude of the respondents, and one of the primary indices sought was business expansion prospects amongst the respondents. Financial attitude is collective, and consists of varied indicators, and how individuals think of them or interact with them (Garðarsdóttir & Dittmar, 2012). Respondents were requested to reveal the considerations they would make for select business aspects in their future expansion prospects. The responses provided are as elaborated in table 4.2.

Primary factors to consider for business expansion	Consideration	Percentage (%)
Primary consideration for business on customers	Many customers	70.20%
	More customers	29.80%
Primary consideration for business on capital	High capital	80%
	More capital	20.00%
Primary consideration for business on competition	High competition	4.50%
	Low competition	78.20%
	No competition	17.30%
Primary consideration for business on financial management	Loan availability	12.90%
	Good management	87.10%
Primary consideration for business on record keeping	Good record keeping	88.50%
	Modern technology for record keeping	11.50%
Primary consideration for business on operational cost	Downsizing human resource	1.30%

Table 4.2: Attitude towards Business Expansion

Source: Field Survey, 2022

As table 4.2 illustrates, the respondents attested to being aware of multiple considerations associated with business expansion. However, respondents, for the most part, revealed that they would consider customer base (70.2%), High Capital (80%), low competition (78.2%), good management (87.1%), and good record keeping (88.5%). The least cited primary considerations were downsizing human resource (1.3%) and high competition

(4.5%).. this demonstrated their desire to expand business in the thought but practically avoiding the exercise reflecting a very poor business behavior.

4.17 Time Value for Money

Capital investments are necessary during the start of a business and definitely when planning to expand. Business owners look at the available resources that can be chipped into the business in order to ensure the business thrives (Johnson et al., 2008). This may entail opting to save for the business or seeking credit facilities for the business. This research analyzed the general perception of artisanal fish traders on whether they would opt for saving or borrowing for trade expansion. The responses were categorized into two as illustrated in the figure 4.13.

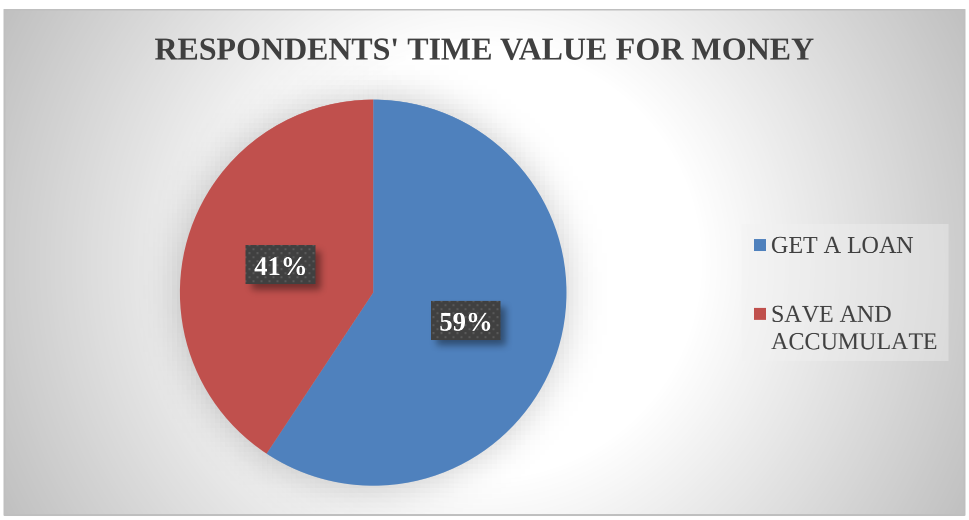


Figure 4.13: Time value for money

Source: Field Survey, May 2022

Research findings summarized in Figure 4.13 shows that the two variables had a marginal difference of 18%. Notably, more than half (59%) of the respondents cited that they would consider taking a loan for their business. The rest (41%) indicated that they would save and accumulated for their business. Interestingly most of the respondents have the knowledge that they can take loans since loans provide an opportunity for the business owners to carry out the intended activity but not putting it in practice because the loans would tie them to the lender. These findings indicate they understand the time value for money.

4.18 Respondents' Financial Performance Measurement

Financial performance is the outcome of how financial resources are managed and utilized by a given business entity (Eckerson, 2010). Various organizations use various metrics to measure their financial performances based on a set of targets and objectives they establish in their profit maximization activities. Financial performance is measured using various indicators like profit margins, volume of sales, number of employees that the organization employs amongst other indicators. The aforementioned indicators determine whether the enterprise is financially growing, with some businesses using either all of the indicators or some of the indicators. The study set out to find out the performance indicators that these artisanal fish traders used in measuring their business performance and the results are given as follows below;

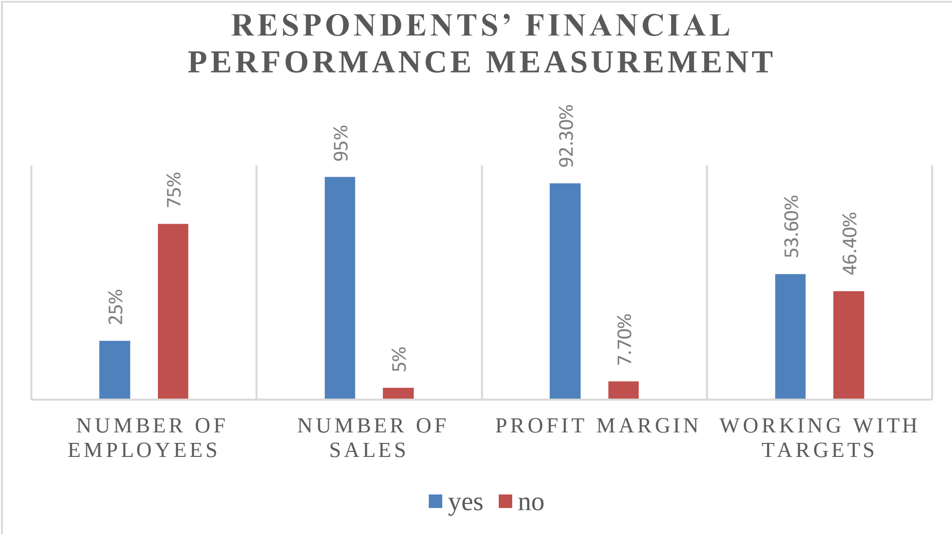


Figure 4.14: Respondents' Financial Performance Measurement

Source: Field Survey, May 2022

As indicated in Figure 4.14 research findings show that a majority (95%) of artisanal fish traders use the number of sales in measuring their financial performance. It should be noted that 25% if all the respondents involved in the study number of employees in measuring their financial performance. This explains more than half (75%) of the respondents who cited no on the category of number of employees. The category on working with targets attained a marginal difference of exactly 7.2% with yes responses attaining slightly above half (53.6%) while no (46.4%). This finding indicate that the artisanal trader is more concerned with sales and not the cost of sales. Financial performance is concerned with profits to monitor its growth

4.19 Formulation of goals

The implementation phase involves the development of strategy necessary in achieving the set goals (Wandersman et al., 2012). The study investigated the goals formulated by artisanal traders by forwarding suggestions of common goals set including recording sales, investigating previous sales, and accumulating savings.

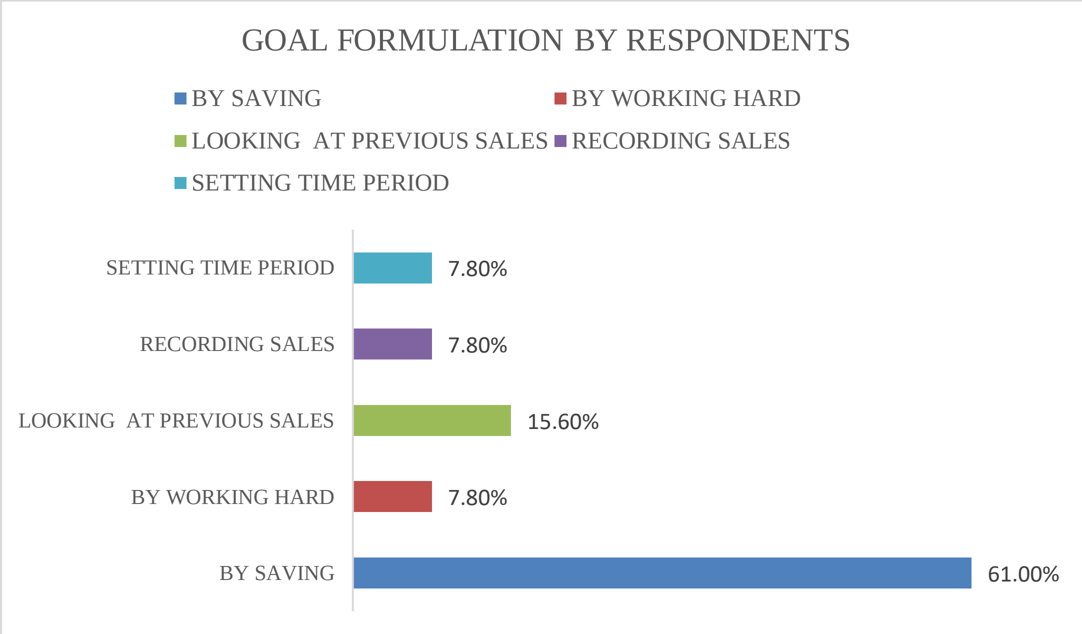


Figure 4.15: Formulation of goals

Source: Field study, May 2022

Research findings summarized in Figure 4.15 indicate that more than half (61%) cited saving as one of the goals set by the enterprise. Less than one-fifth (15.6%) look at previous sales. Interestingly, the rest of the indicators attained (7.8%) which includes setting time period, recording sales and working hard. This implies that the respondents have the desire to save through increased sales but do not have accumulating saving as a goal

4.20 Business growth rates

The study set out to investigate the opinions of the respondents in regard to their perceptions of the growth of their business in relation to the time they commenced business operations. This was sought for a comparison of respondents' financial behavior and attitude to the performance of their businesses. It was also considered determinant of efficacy of the respondents with business operations, which hypothetically, would determine the performance of their businesses especially with environmental factors changing and the effect of the Covid 19 pandemic affecting businesses. The responses generated are as elaborated in figure 4.16.

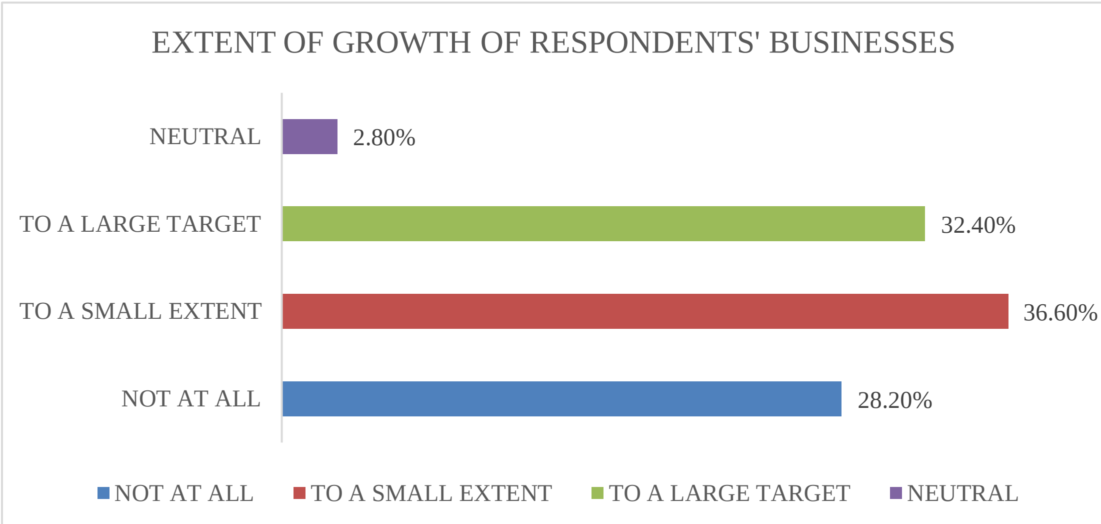


Figure 4.16: Growth of the Business

Source: Field Study, May 2022

The extent of business growth as was revealed by the respondents depicted slow growth. As figure 4.16 illustrates, 28.2% of the respondents claimed that their businesses had not grown at all, most of whom added that growth was negative. 36.6% revealed that their businesses had grown to a small extent, while 32.4% echoed that their businesses had grown to a large extent since initiation. The remaining 2.8% of the respondents were neutral about the extent of growth of their businesses implying that they could not tell whether or not their businesses had grown since initiation. The later could be explained by the confessed tendency by some of the respondents to only measure performance using profitability, at the expense of other indicators such as portfolio growth, customer base and capital gain.

4.21 Challenges in acquiring financial knowledge

Financial literacy in this study showed that it is two dimensional in nature, in the sense that there is the acquisition of the knowledge content and the ability to apply that knowledge in the context of business operations. The study noted that acquisition of financial knowledge has inherent challenges in it especially to small and medium enterprises with business owners expressing their desire for financial literacy. The research listed limited resources, weak structural features and lack of personal will as some of the challenges witnessed by artisanal fish traders in accessing financial knowledge.

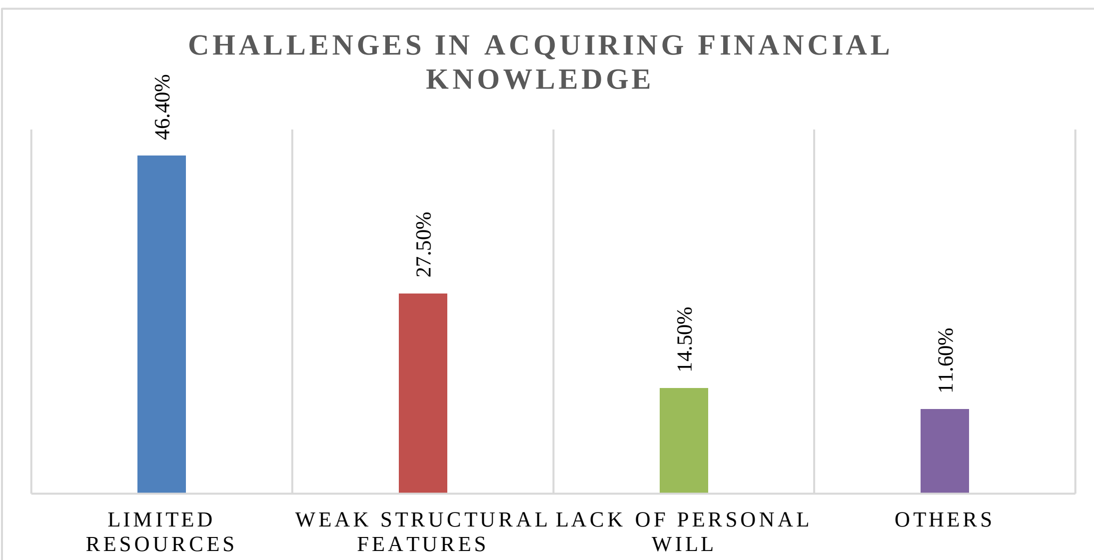


Figure 4.17: Challenges in acquiring financial knowledge

Source: Field Survey, May 2022

Research findings summarized in Figure 4.17 indicate than slightly less than half (46.4%) indicated inadequate resources as a barrier in accessing financial knowledge. On the other hand, exactly 14.5% indicated lack of personal will as a barrier on accessing financial knowledge. Nearly one-third (27.5%) cited weak structural features as a barrier limiting their access to financial knowledge. Notably, the 27.5% highlighted leadership wrangles as a major contributor of experiencing weak structural features. Some of the participants highlighted that before witnessing leadership wrangles at the Beach Management Unit (BMU), the support group was organizing financial training for the traders (Mohamed & Lashine, 2003)

4.22 Alternative Income Generating Activity

Income Generating Activities (IGA) entail a list of other businesses carried out by an entity aside their main source of income. The aim of subsidiary income generating activity is to support the operations of the organization and ensure its sustainability. The researcher investigated whether the artisanal fish traders engaged in income generating activities and the types of Income Generating Activities (IGAs) conducted by the traders.

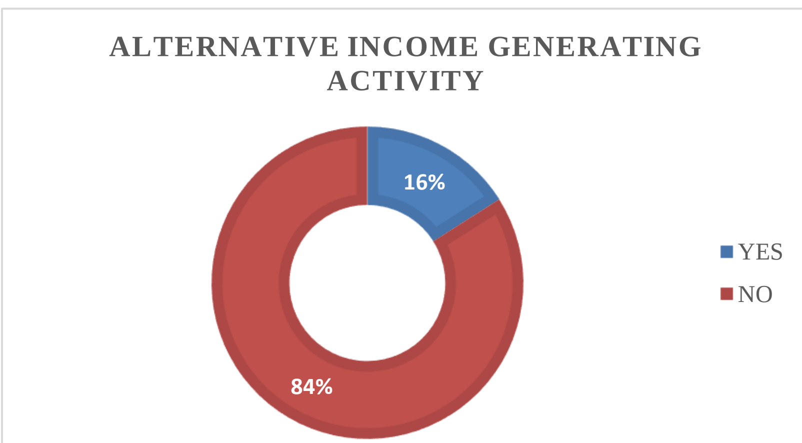


Figure 4.18: Alternative Income Generating Activities

Source: field Survey May 2022

Research findings summarized in Figure 4.18 indicate that a majority (84%) of the respondents stated they did not have alternative income generating activities while the rest (16%) had alternative income generating activities. The following are some of the responses of the 16% who have alternative income generating activities. *"I also sell firewood besides engaging in the trade of fish," "I currently own a butchery where I sell* *meat products apart from sell fish, this helps me diversify my source of income especially when the supply of fish decreases," "I sell charcoal just aside from my area of selling fish."*. This means that a majority i.e. 84 % of artisanal traders have their eggs in one basket indicating their understanding of diversification is highly narrow. They fail to tap in on portfolio diversification and hence increase the risks associated with relying on only one product mix without diversifying the investment options that one may be exposed to. This also signifies a severe lack of financial knowledge hence the inclination to one economic activity ignoring diversification increasing risk, and shortening business cycles and leading to non-vibrant micro economic climate for the fish traders (Amit & Livnat, 1988)

4.23 External Forces in Business

All businesses are highly affected by both the external and internal factors which significantly contribute to either the success or collapse of the business enterprise (Abebe, 2012). Internal forces are caused from within the organization and include aspects such the organization structure, current technology and capital. External forces are mostly fueled by market players and may include instances such fluctuation in taxation, changes in the prices of the commodities and levies by the government. The above-mentioned indicators of external forces were measured by researcher while interviewing artisan fish traders.

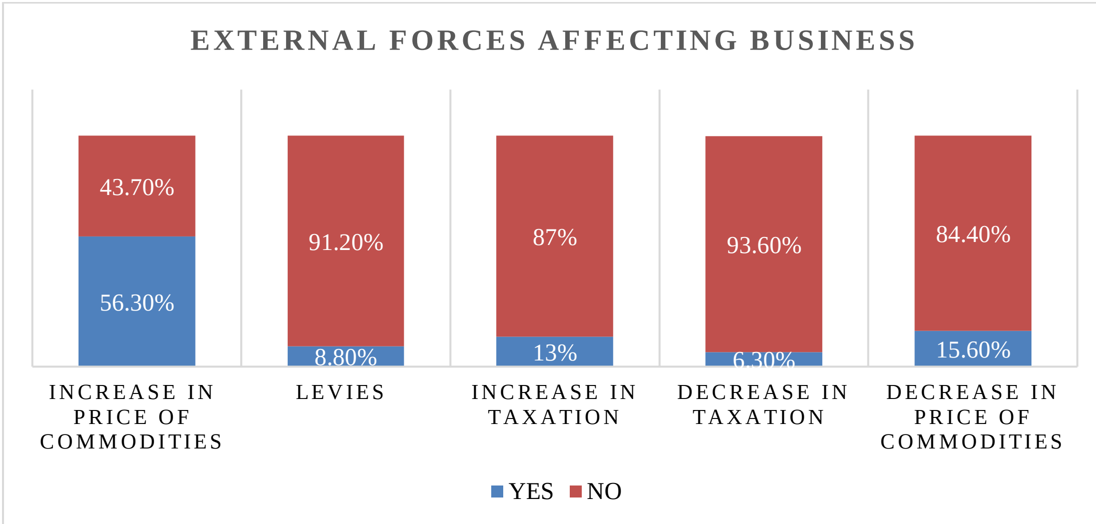


Figure 4.19: External Forces in Business

Source: Field Survey May 2022

Research findings as summarized in Figure 4.19 indicate that more than half (56.3%) asserted increase in price of commodities as an external force affecting their commodities. Over the recent past the price of fuel has increased leading to traders incurring additional costs especially in the transport. Participants cited that commodities have become more expensive while others stated that the prices of commodities are increasing daily. One of the respondents stated that, “It is hard to make profit with the price changes.”

In addition, another stated, “The price of fish and fuel has increased.” In comparison only 6.3% indicated an decrease in taxation as an external force affecting their business. The increase in taxation by the Government directly affects the price of commodities. Exactly 13% cited increase in taxation as an aspect affecting their business. Nearly all (91.2%) disagreed on whether levies affected their business. The findings indicate that the fish trader does not have a comprehensive understanding of the environmental factors that affect their businesses, they only experience the effect but are devoid of the explanation relating to inflation (Tur-Porcar et al., 2018).

4.24 Business Assets

An asset is a resource utilized by a business or institution which is expected to result in future economic value. A business asset therefore is an item of value possessed by a company. There are different categories of business assets including physical or tangible whose examples include tables, chairs, vehicle, land and computers. Intangible business assets include copy right or intellectual property. The study investigates the examples of assets owned by artisanal fish traders while interviewing them. The research findings were categorized into three including mobility, fishing equipment and operating space as shown in figure 4.20.

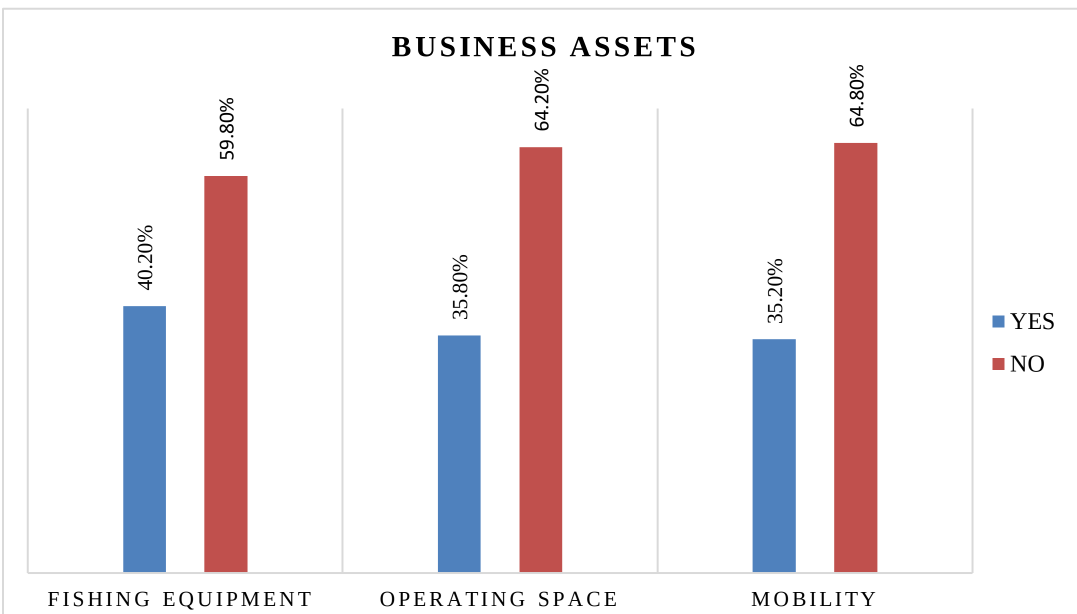


Figure 4.20: Business Assets

Source: Field Survey May 2022

Research findings presented in Figure 4.20 shows that slightly less than half (40.2%) cited fishing equipment. Artisanal fish traders depend on their fishing equipment such as nets to carry out their trade with most of the respondents highlighting the quality of fishing net affects the volume of fish harvest. A majority (64.2%) responded no on whether they had an operating space. Majority of artisanal fish traders sell fish by the roadside with some selling just by their compound. A few (35.2%) indicated to possess mobility assets including bicycles and motorbikes. The findings show that the fish traders do not have business assets because of the reluctance of incurring business expenses like licenses transport taxes and the like hence in the process of avoiding this there is value reduction of their produce making them loose a profit in the long run.

4.25 Loan Experience of Respondents

(Abdullah et al., 2021)opines that lending services improves business borrowers' capacities to come up with coping strategies during hard economic times in positively influencing their wellbeing. In addition to this, microcredit programs provide small scale traders with an avenue to a larger pool of informal financial networks that may handy for experienced individuals. This explains the upward trend in borrowing witnessed from 2006 with individuals taking loans to start businesses (Gitonga, 2012). Individuals have different experiences with loans especially when it comes to the repayment of loans. The study investigates the experiences of participants after taking loans.

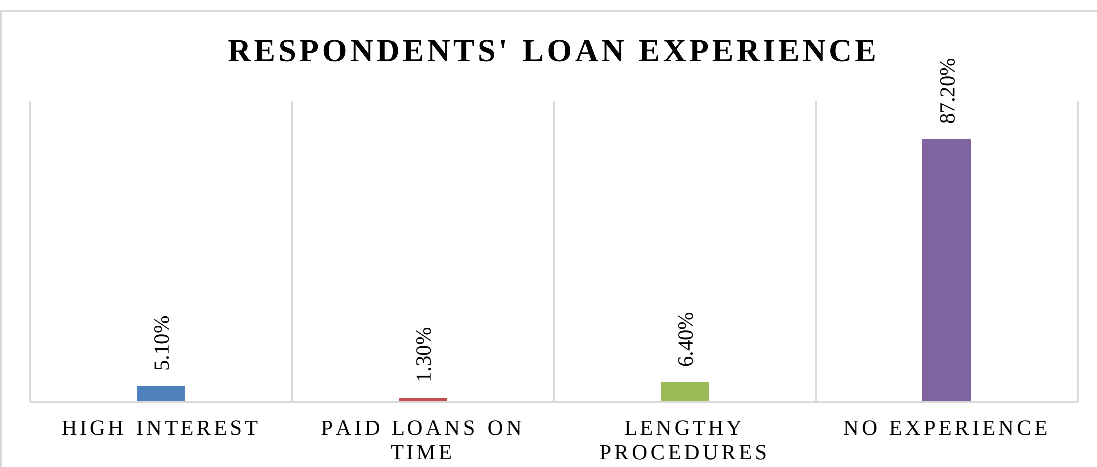


Figure 4.21: Loan experience

Source: Field Survey, May 2022

Data obtained from the field was summarized in Figure 4.21. A majority (87.2%) had no experiences with loans. This most likely represents the group that has not acquired a loan for their business. Exactly 6.4% cited lengthy procedures in acquiring a loan while 5.1% indicated that the interest rates were high. Only 1.3% of the respondents stated that they paid the loan in time. This means that the respondents are aware of the availability of credit but have little experience because the credit is inaccessible in their point of view.

4.26 Challenges faced by artisanal fish traders

Lastly, the successful assessment of the financial literacy against the performance of small-scale entrepreneurs would not have been complete without inquiring into their challenges regarding financial literacy. The index would provide a concrete explanation for the situation and provide hints on possible areas for improvement. The challenges were segmented into two, general business challenges that could be associated with performance, and therefore, financial literacy, and direct challenges to financial literacy. The direct challenges with financial literacy cited by the respondents included limited capital, challenges with savings, unfavorable working conditions, high competition, high fish prices, and unfavorable market trends. It is possible that these challenges could be significant determinants and indicators of financial literacy amongst the respondents, and therefore influence the performance of their businesses.

4.27 Correlation analysis of the study variables.

The significance of the correlations between the variables is a function of the Pearson's Correlation Coefficient tests. The study sought to evaluate the effect of financial literacy on the financial performance of artisanal fish traders in marine fisheries. Selected independent variables, including time value for money, loan for business, debt management, saving for the future, and spending money for the intended purpose were correlated against diversification, comparison to other businesses, comparison of business with state at initial investment, and extent of goal attainment. The relationships were sought using the formula;

$$r = Cov\frac{(x, y)}{\sqrt{var}(x) \times \sqrt{var}\,(y)}$$

Where;

r = correlation coefficient

Cov (*x*, *y*) = Sample covariance of *x* and *y*

Var (*x*) = Sample variance of *x*

Var (*y*) = Sample variance of *y*

The correlation coefficients are as elaborated in table 4.3, at a significance level of 0.05

Table 4.3: Correlation analysis

		More than one business	Comparison of business to others	Comparison of business with initial investment	Extent of goal achievement	Time value for money	Loan for business	Debt management	Saving for the future	Spending money for intended purpose
Comparison of business with initial investment	**R**	.128	**.373**	1	-	-	-	-	-	-
	SIG	.279	.001							
Working with targets	**R**	.133		**.356**[x]	**.319**[x]	-	-	-	-	-
	SIG	.286		.004	.013					
Time value for money	**R**	-	**.234**[x]	-	-	1		-	-	-
	SIG		.055							
Debt management	**R**	.310	-	-	-	.276	.246	1		-
	SIG	.011				.031	.044			
Saving for the future	**R**	-	-	-	-	**.504**	-	.333	1	-

	SIG					.000		.007		
Spending money for intended purpose	**R**	**.203**^{x}	**.274**^{x}	-	-	**.494**	-	**.499**	.073	1
	SIG	.092	.020			.000		.000	.000	
Monthly income saved	**R**	-	**.385**^{x}	**.250**^{x}	**.360**^{x}	.305	-	.250	**.587**	**.457**
	SIG		.001	.045	.004	.004		.045	.000	.000
Financial training	**R**	-	-	-	-	.247	-	.034	**.381**	.252
	SIG					.047		.013	.002	.032

The coefficients for the select independent variables against financial performance of artisanal fish traders in marine fisheries demonstrated moderate to strong positive correlations. Notably, as table 4.3 elaborates, correlation coefficients ranging from **0.356** to **0.587** demonstrated generally strong correlation between, loan for business, debt management, saving for the future, and comparison to other businesses, comparison of business with state at initial investment, and extent of goal attainment. Nonetheless, the table highlights weak positive correlations between spending money for the intended purpose, monthly income saved, time value for money, and diversification, comparison to other businesses, and comparison of business with initial investment ranging from **0.004 – 0.276.**

4.28 Regression Analysis of the study variables

The data was verified for reliability and a further suitability of the selected independent variables as predictors of variations in financial performance of artisanal fish traders in marine fisheries was sought. The index was considered essential to evaluating the presence or absence, and extent of relationship between the study's dependent and independent variables. Regression modeling was therefore carried out, to evaluate the suitability of selling price determination, financial training, saving for future, spending money for the intended purpose, comfortability with loan repayment, and time value for money as predictors of variations in financial performance of artisanal fish traders in marine fisheries in the study area. This was done on the basis of the following formula

X (predicted) = Constant (C) + $\sum$ y

Where;

X = regression coefficient

C = value at y intercept

$\sum$ y = summation of unstandardized regression coefficients

An initial model suitability evaluation revealed a strong positive correlation of 0.603 between the independent and dependent variables. The R Square value (0.364 (36.4%)), showed that the model is moderate and moderately suitable as a basis for the inference of a relationship between the dependent and independent variables

4.28.1 Coefficients of the regression Model

The regression coefficients at a 0.05 significance level are elaborated in table 4.6

Table 4.4: Coefficients of the regression Model

Predictors	Unstandardized coefficients (B)	Standardized coefficients	Sig
Constant	2.368	-	0.015
Determination of selling price	0.293	0.198	0.173
Financial training	-0.360	-0.128	0.339
Saving for future in the business	-0.137	-0.190	0.292
Spending money for the intended purpose	0.345	0.447	0.004
Comfortability paying loan	-0.158	-0.248	0.112
Time value for money	-0.049	-0.028	0.856

As table 4.4 elaborates, all the select independent variables except time value for money and saving for the future in the business could be relied on as predictors of variations in financial performance of artisanal fish traders in marine fisheries. A unit change in the two unreliable independent variables could only predict -0.049, and -0.137-unit changes in financial performance of artisanal fish traders in marine fisheries. However, a unit change in selling price determination, financial training, spending money for the intended purpose, and comfortability with loan repayment could predict 0.293, -0.360, 0.345-, and -0.158-units changes in financial performance of artisanal fish traders in marine fisheries.

The regression equation is then as represented below

$$\mathbf{Y=2.368+0.293X_1 +-0.360X_2+-0.136X_3+0.345X_4+-0.158X_5 + -0.049X_6}$$

In grouping the indicators that have an effect on the financial performance the indicator as summarized by the table 4.6 show that

Determination of the selling price. When the artisanal fish traders are left to determine the selling price of their harvest then the financial performance will increase by 0.293 units. This means therefore that due to the control of price by the environment the costs of carrying out the business are not considered hence it is possible that the traders profit margin is heavily reduced affecting their financial performance negatively.

Financial training: when the artisanal fish traders are trained to get financial expertise, financial performance will reduce by -0.360 units. This therefore means that financial training is not the issue here. Many traders could be educated have certificates but the game here is not the knowledge but other factors. They need another game changer not necessarily training.

Savings for the future: when the traders save money for the future their financial performance will be reduced by 0.317 units. This indicates that money received is ploughed back into the business. there is no room to increase their investment. If they save then their financial performance will be reduced.

Spending Money for the intended purpose: when the traders choose to spend money for the intended purpose the financial performance will be increases by0.345 units. This means that the business income has diverse expenditure heads of the artisanal trader’s needs. diversion of funds affects the financial performance.

Comfortability of repaying Loans. If the artisanal traders are comfortable repaying loans then their financial performance would reduce by 0.158 units. This means they are struggling between repaying loans and general survival.

Time Value for money. With the principle of time value of money if everyone understood and act with this knowledge then it would reduce the financial performance by 0.049 units

4.28.2 Multiple regression model

Table 4.5 shows the coefficient of determination with the adjusted r^2 as 36.4%. The value of the adjusted r^2 implies that 36.4 % of the total of financial performance is explained by the model. The variation between the dependent and the independent variables are shown by the table 4.5.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603	.364	.261	.77478

4.28.3 Analysis of Variance (ANOVA) of the study variables

The ANOVA analysis was carried out and the results were positive

Table 4.6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.699	6	2.116	3.526	.007
	Residual	22.210	37	.600		
	Total	34.909	43			

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section presents discussion of findings and anchors the study results within the existing body of literature. It also presents a summary for the study and the recommendations are given in this chapter as follows.

5.2 Summary of findings.

Artisanal fishing is a male dominated economic activity represented by 77% of the respondents with a small minority of females at 23% playing a very significant role in marketing, a majority in the age bracket 25-35 years of age. The respondents are equally moderately literate having acquired basic prerequisite education and a minority of 10% with tertiary education. Most businesses have been operational between 2-4 years at 34.6% with those that have survived more than 10 years being only6.4%. they are however poor employers which have only managed to employ between 1-2 at 49% with a minority 0f 3% who have managed to employ 6-10 workers. The selling price of the fish is determined by the environmental forces at 66%. 88% artisanal fish traders however have not received any form of financial training making their risk attitude very averse. 93.3 % of them would not seek credit for investment, they do not maintain business records and for those that do is partial only sales at 66.3% and few for profits at leaving out operational costs. They are aware of the existence or credit but if they go for any its consumer loans and not for business because they cite loans to be bad because of high interest rates, rigorous processes, repayment period and the effect of loan repayment on the business. On growth the traders feel that an increase in customers at 70.2%, low competition 78.2 % ,80% high capital are good indicators for growth. They acknowledged that their businesses vary between no growth at all at 28.2%. small extent growth at 36.6% and to a large extent at 32.4% but on a general trend majorly business was down.

The respondents expressed many challenges in acquiring financial knowledge due to absence of resources. They have not managed to diversify their business for subsidiary income with a majority of 84% relying solely on this business and a minority of only 16% having other small businesses. Many of them expresses that external forces affected their business with inflation being major at 56.3% levies 8.8% and taxation at 13%. Their businesses equally have no value addition since a majority do not have business assets. Only 40.2% have fishing equipment.35.6% have operating space and 35.2 have mobility to move the fish. The respondents concluded by citing challenges including limited capital lack of savings, working environment. Competition and unfavorable market trends which are significant determinants of financial literacy indicators.

In the outcome of the Regression analysis, the coefficient of determination with adjusted r2 was 36.4%. The adjusted r2 value implies that the model could be used to explain up to 36.4% of change in the dependent variable when alterations are made to the independent variables. On the one hand, increasing selling price determination or spending money for the intended purpose by one unit each could be a function in an increase in better financial performance by 0.293 and 0.345 respectively. On the other hand, increasing financial training, saving for future in the business, comfortability paying loan, or time value for money by one unit each could predict reductions in financial performance by -0.36, -0.137, -0.158 and -0.049 units, respectively.

5.3 Conclusion

The study concludes that financial behavior correlates positively with financial performance since. savings, price determination and spending for intended purpose being indicators of behavior hence giving a moderate positive correlation. Knowledge and attitude on the other hand correlated negatively to financial performance.

However as per the regression analysis the study further asserts that financial knowledge, behavior and attitude can be used as predictors of financial performance, albeit up to 36.4% of the time. It could therefore be said, that the 63.6% of the change that could not be predicted by the study's variables could be explained by factors beyond respondents' control, including commodity price changes and levies and taxes. Further, business performance was assessed in a broad spectrum in the study, and some determinants of success that could not be assessed for regression modeling could also suffice to explain the 63.6% of the outcomes that could not be explained by the model. These include assets owned, which could have effect on volume of production, age, duration in business, number of employees, and level of education, which, culminative, could be essential determinants or predictors of success.

5.4 Recommendations

From the study findings, the following recommendations are made in regard to practices and programs to alleviate the financial performance of artisanal fish traders, and further research to enrich knowledge on the determinants of financial performance of artisanal fish traders:

1. The study recommends that financial literacy training be enhanced for artisanal fish traders in the study area to increase the overall financial literacy index and drive financial performance therein. Further, the findings pointed to the existence of training, that albeit broad, was very brief and largely ineffective for participants. It is recommended, therefore, that financial training be intensified, and that financial training periods be extended for effectiveness and practicality

2. The study also recommends an increase in loan options for artisanal fish traders. It emerged that over 90% of the traders did not use loans from financial institutions, which meant very low loan uptake amongst artisanal fish traders. It would suffice, therefore, for financial institutions to provide loan options for the traders with favorable terms that acknowledge the nature of their businesses.

5.4 Suggestion for further research

The study also recommends further research into external determinants of financial performance amongst artisanal traders. From the study, it emerged that factors beyond the traders could be consequential in the financial performance of their enterprises. It is therefore integral that further research be carried out to evaluate factors beyond artisanal fish traders that could influence the financial performance of their businesses.

REFERENCES

Abdullah, W. M. Z. B. W., Zainudin, W. N. R. A. B., Ismail, S. B., Haat, M. H. C., & Zia-Ul-Haq, H. M. (2021). The Impact of Microfinance on Households' Socioeconomic Performance: A Proposed Mediation Model. *Journal of Asian Finance, Economics and Business*.

Abebe, J. (2012). *Environmental Factors affecting Business*. Nairobi: University of Nairobi.

Akanbi, S. O., & Beyers, J. (2017). The church as a catalyst for transformation in the society. *HTS Theological Studies*, *73*(4), 1–8.

Al-Tamimi, H. A. H. (2009). Financial literacy and investment decisions of UAE investors. *The Journal of Risk Finance*.

Ameliawati, M., & Setiyani, R. (2018). The Influence of Financial Attitude, Financial Socialization, and Financial Experience to Financial Management Behavior with Financial Literacy as the Mediation Variable. *KnE Social Sciences*, (Oct 22) 811–832. https://doi.org/10.18502/kss.v3i10.3174

Amenuku, M. A. (2018). *Financial literacy, microfinance, and performance of artisanal fishermen in Elmina fishing community* (Doctoral Dessertion]. University of Cape Coast.

Amit, R., & Livnat, J. (1988). Diversification strategies, business cycles and economic performance. *Strategic Management Journal*, *9*(2), 99–110.

Anshika, A., & Singla, A. (2022). Financial literacy of entrepreneurs: A systematic review. *Managerial Finance*, *48*(9/10), 1352–1371.

Arthur, B., Gitonga, J., Agyeman, A., & Kyei, B. (2021). Financial determinants of SMEs performance. Evidence from Kenya leather industry. *Small Business International Review*, *5*, 389. https://doi.org/10.26784/sbir.v5i2.389

Arya, A., & Singla, A. (2022). Financial literacy of entrepreneurs: A systematic review. *Managerial Finance*, *48*, Feb 4 ((9/10) 1352–1371. https://doi.org/10.1108/MF-06-2021-0260

Atkinson, A., & Messy, F.-A. (2011). Assessing financial literacy in 12 countries: An OECD/INFE international pilot exercise. *Journal of Pension Economics & Finance*, *10*(4), 657–665.

Atkinson, R., Crawford, L., & Ward, S. (2006). Fundamental uncertainties in projects and the scope of project management. *International Journal of Project Management*, *24*(8), 687–698.

Balakrishnan, S., & Fox, I. (1993). Asset specificity, firm heterogeneity and capital structure. *Strategic Management Journal*, *14*(1), 3–16.

Banjo, H., & Sofoluwe, N. (2022). Financial Knowledge, Attitude and Management Practices among small business entrepreneurs in Nigeria. *Modern Management Review*, *27(1)*, 33–41. https://doi.org/10.7862/rz.2022.mmr.03

Bardhoshi, G., & Erford, B. T. (2017). Processes and Procedures for Estimating Score Reliability and Precision. *Measurement and Evaluation in Counseling and Development*, *50*(4), 256–263. https://doi.org/10.1080/07481756.2017.1388680

Barney, J. B., & Hesterly, W. S. (2015). *Strategic management and competitive advantage: Concepts and cases (Global Edi)*. Edinburg: Pearson Education Limited.

Baumann, C., Elliott, G., & Hamin, H. (2011). Modelling customer loyalty in financial services: A hybrid of formative and reflective constructs. *International Journal of Bank Marketing*, *29(3)*, 247–267. https://doi.org/10.1108/02652321111117511

Chaokromthong, K., & Sintao, N. (2021). Sample size estimation using Yamane and Cochran and Krejcie and Morgan and green formulas and Cohen statistical power analysis by G* Power and comparisions. *Apheit International Journal*, *10*(2), 76–86.

Collins, J. M., & O'Rourke, C. M. (2012). The Application of Coaching Tech-niques to Financial Issues. *Journal of Financial Therapy*, *3*(2).3

Çoşkun, A., & Dalziel, N. (2020). Mediation effect of financial attitude on financial knowledge and financial behavior: The case of university students. *International Journal of Research in Business and Social Science (2147-4478)2020 march 14,*, *9*(2), 01–08.

Crona, B. I., Pomeroy, R. S., & Purcell, S. W. (2020). Small-scale and artisanal fisheries: Insights and approaches for improved governance and management in a globalized context. In *Frontiers in Marine Science* (Vol. 7, p. 455). Frontiers Media SA.

de Bassa Scheresberg, C. (2013). Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy*, *6*(2), 5.

de Vries, P. G. (1986). Stratified random sampling. In *Sampling theory for forest inventory* (pp. 31–55). Springer. Berlin Heidelberg.

Degen, A., Hoorweg, J., & Wangila, B. (2010). Fish traders in artisanal fisheries on the Kenyan coast. *Journal of Enterprising Communities: People and Places in the Global Economy*, *4(4)* , 296–311. https://doi.org/10.1108/17506201011086101

Dickson, P. R. (1996). The static and dynamic mechanics of competition: A comment on Hunt and Morgan's comparative advantage theory. *Journal of Marketing*, *60*(4), 102–106.

Eckerson, W. W. (2010). *Performance dashboards: Measuring, monitoring, and managing your business*. John Wiley & Sons.

Eniola, A. A., & Entebang, H. (2015). SME firm performance-financial innovation and challenges. *Procedia-Social and Behavioral Sciences*,2015 July 3*195*, 334–342.

Eniola, A. A., & Entebang, H. (2016). Financial literacy and SME firm performance. *International Journal of Research Studies in Management*, *5*(1), 31–43.

Falicov, C. J. (2001). The cultural meanings of money: The case of Latinos and Anglo-Americans. *American Behavioral Scientist*, *45*(2), 313–328.

FAO. (2022). *Improving fisheries management*. FAO. https://doi.org/10.4060/cc0461en

Fernando, M., & Jackson, B. (2006). The influence of religion-based workplace spirituality on business leaders' decision-making: An inter-faith study. *Journal of Management & Organization*, *12*(1), 23–39.

Fishbein, M., Jaccard, J., Davidson, A. R., Ajzen, I., & Loken, B. (1980). Predicting and understanding family planning behaviors. In *Understanding attitudes and predicting social behavior*. Prentice Hall. Englewood Cliffs.Nj.

Frimpong, S. E., Agyapong, G., & Agyapong, D. (2022). Financial literacy, access to digital finance and performance of SMEs: Evidence From Central region of Ghana. *Cogent Economics & Finance*, *10*(1), 2121356. https://doi.org/10.1080/23322039.2022.2121356

Gallery, N., Newton, C., & Palm, C. (2011). Framework for assessing financial literacy and superannuation investment choice decisions. *Australasian Accounting, Business and Finance Journal*, *5*(2), 3–22.

Garðarsdóttir, R. B., & Dittmar, H. (2012). The relationship of materialism to debt and financial well-being: The case of Iceland's perceived prosperity. *Journal of Economic Psychology*, *33*(3), 471–481.

Gichuki, E. M., Mwaniki, G., & Ogolla, D. (2019). Interest rate capping by the central bank of Kenya on loans uptake. *International Academic Journal of Economics and Finance*, *3*(5), 33–44.

Gitonga, T. M. (2012). *A Research Project Submitted to the School of Accounting and Economic, BA (HONS) Financial Services of Napier Edinburgh University*.

Giva, S. I. (2015). *The relationship between risk and return for firms listed at the Nairobi securities exchange* [PhD Thesis]. University of Nairobi.

Habaora, F., Fuah, A. M., Abdullah, L., Priyanto, R., Yani, A., & Purwanto, B. P. (2019). Attitude analysis of Bali cattle farmers toward credit programs based on agroecosystems in Timor Island. *International Journal of Innovative Science and Research Technology*, *4*(9), 769–776.

Harry Markowitz's Modern Portfolio Theory. (2021). *Guided Choice*. https://www.guidedchoice.com/video/dr-harry-markowitz-father-of-modern-portfolio-theory/

Indawati, J. N., & Tuti, S. E. K. (2021). Household Financial Management in Phenomenology Perspective: A Case Study on a Fisherman Family in Kupang City. *Advances in Social Science, Education and Humanities Research,*Icast-SS2021 *647*, 661–667.

Jabarzare, N., & Rasti-Barzoki, M. (2020). A game theoretic approach for pricing and determining quality level through coordination contracts in a dual-channel supply chain including manufacturer and packaging company. *International Journal of Production Economics*, *221*, 107480.

Jennings, P., & Beaver, G. (1997). The performance and competitive advantage of small firms: A management perspective. *International Small Business Journal*, *15*(2), 63–75.

Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, *86*(12), 57–68.

Kadoya, Y., & Khan, M. S. R. (2020). Financial Literacy in Japan: New Evidence Using Financial Knowledge, Behavior, and Attitude. *Sustainability*, *12*(9), Article 9,3683. https://doi.org/10.3390/su12093683

Karlan, D., & Zinman, J. (2011). Microcredit in theory and practice: Using randomized credit scoring for impact evaluation. *Science, 332*(6035)2011, 1278–1284.

Katare, B., Marshall, M. I., & Valdivia, C. B. (2021). Bend or break? Small business survival and strategies during the COVID-19 shock. *International Journal of Disaster Risk Reduction*, *61*, 102332.

Khawar, S., & Sarwar, A. (2021). Financial literacy and financial behavior with the mediating effect of family financial socialization in the financial institutions of Lahore, Pakistan. *Future Business Journal*, *7*(1), 27. https://doi.org/10.1186/s43093-021-00064-x

Kimathi, B. M. (2020). *Entrepreneurial Mindset and Performance of Small and Medium Enterprises in Kenya* [PhD Thesis]. JKUAT-COHRED.

Latpate, R., Kshirsagar, J., Gupta, V., & Chandra, G. (2021). *Simple Random Sampling* (pp. 11–35). https://doi.org/10.1007/978-981-16-0622-9_2

Lavrakas, P. (2008). Cross-Sectional Survey Design. In *Encyclopedia of Survey Research Methods* (pp. 173–173). SAGE Publications, Inc. https://doi.org/10.4135/9781412963947

Layaman, L. (2022). The Strategic Role Of Entrepreneurial Financial Literacy, Proactive Seeking Financial Access And Their Impact On SME Performance. *Al-Amwal : Jurnal Ekonomi Dan Perbankan Syari'ah*, *14*(1), Article 1. https://doi.org/10.24235/amwal.v14i1.10930

Lestari, E. (2022). The Effect of Financial Literacy, Cost of Technology Adoption, Technology Perceived Usefulness, and Government Support on MSMEs'

Business Resilience, GATR-Global. *GATR Global Journal of Business Social Sciences Review*, *10,3(3)*, 132–147. https://doi.org/10.35609/gjbssr.2022.10.3(3)

Liu, H., & Wilson, J. O. (2010). The profitability of banks in Japan. *Applied Financial Economics*, *20*(24), 1851–1866.

Loke, Y. J. (2015). Financial knowledge and behaviour of working adults in Malaysia. *Margin: The Journal of Applied Economic Research*, *9*(1), 18–38.

Lusardi, A. (2019). Financial literacy and the need for financial education: Evidence and implications. *Swiss Journal of Economics and Statistics*, *155*(1), 1. https://doi.org/10.1186/s41937-019-0027-5

Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement planning: New evidence from the Rand American Life Panel. *Michigan Retirement Research Center Research Paper No. WP*, *157*.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*(1), 83.

Maengwe, J. O., & Otuya, W. I. (2016). A critical review on micro-financing of small businesses in Kenya. *Pyrex Journal of Business and Finance Management Research*, *2*(2), 6–11.

Maina, S. (2013). The role of entrepreneurship education on job creation among youths in Nigeria. *International Letters of Social and Humanistic Sciences*, *15(4)*, 87–96.

Mang'Unyi, E. E. (2011). Ownership structure and Corporate Governance and its effects on performance: A case of selected Banks in Kenya. *International Journal of Business Administration*, *2*(3), 2.

Masaka, V. (2022). Challenges Being Faced by Small and Medium Enterprises in Accessing Credit Facilities in Lusaka Province, Zambia. *CECCAR Business Review*, *3*(5), 49–61.

Memba, S. F., Gakure, W. R., & Karanja, K. (2012). Venture capital (VC): Its impact on growth of small and medium enterprises in Kenya. *International Journal of Business and Social Science*, *3*(6), 32–38.

Mohamed, E. K., & Lashine, S. H. (2003). Accounting knowledge and skills and the challenges of a global business environment. *Managerial Finance*.29(7),3-16

Molina-García, A., Diéguez-Soto, J., Galache-laza, T., & Campos-Valenzuela, M. (2022). Financial literacy in SMEs: A bibliometric analysis and a systematic literature review of an emerging research field. *Review of Managerial Science 17(3),787-826*. https://doi.org/10.1007/s11846-022-00556-2

Muli, D., & Wachira, K. (2019). Effect of access to finance on financial performance of processing Smes in Kitui county, Kenya. *International Journal of Finance and Accounting, 4(1),* 75–89.

Musau, salome M., Muathe, S. M., & Mwangi, L. W. (2022). Financial literacy and consumer protection: a road map to digital financial access by Smes in Kenya. *The Journal of Entrepreneurial Finance, 24*(2), 103–127. https://doi.org/10.57229/2373-1761.1412

Mustafa, N. H., Jaffar, R., Mohd Fadhil, N. F., Shaharuddin, S., & Taliyang, S. M. (2022). The Antecedents of Financial Literacy and The Impact on SMEs' Performance: A Conceptual Paper. *International Journal of Academic Research in Business and Social Sciences*, *12*(12), Pages 2698-2710. https://doi.org/10.6007/IJARBSS/v12-i12/16062

Musundi, K. M. (2014). *The effects of financial literacy on personal investment decisions in real estate in Nairobi County* [PhD Thesis]. University of Nairobi.

Mutai, G., & Miroga, J. (2023). Financial management practices and financial performance of commercial banks in Kenya. *International Academic Journal of Economics and Finance, 3 (9), 31*, *78*, 2.

Mwarangu, F. W. (2022). *Financial Literacy and Personal Financial Management among Finance Insurance Companies in Kenya.* [Thesis]. Kenyatta University.

Ndung'u, C. W. (2012). *Distribution Strategies and Competitive Advantage in Kenya Commercial Bank Limited* [Thesis]. University of Nairobi.

Neelappa, S. N. (2022). Financial literacy and other factors moderating street vendors' financial decision making. *Journal of Tianjin University of Science and Technology*, *55*(2), 2022. https://doi.org/10.17605/OSF.IO/4MQG2

Nilsson, J. (2008). Investment with a conscience: Examining the impact of pro-social attitudes and perceived financial performance on socially responsible investment behavior. *Journal of Business Ethics*, *83*(2), 307–325.

Nitisha, T. (2015, May 8). Decision-Making Theory: Definition, Nature and Theories. *Political Science Notes*. https://www.politicalsciencenotes.com/articles/decision-making-theory-definition-nature-and-theories/743

Nyale, A., & Omari, N. (2020). influence of Financial Literacy on growth of start-up businesses in mombasa county. *Strategic Journal of Business & Change Management*, *7*(1), Article 1 1589. https://strategicjournals.com/index.php/journal/article/view/1589

Obiero, K., Meulenbroek, P., Drexler, S., Dagne, A., Akoll, P., Odong, R., Kaunda-Arara, B., & Waidbacher, H. (2019). The Contribution of Fish to Food and Nutrition Security in Eastern Africa: Emerging Trends and Future Outlooks. *Sustainability*, *11*(6), Article 6. https://doi.org/10.3390/su11061636

OECD. (2016). *OECD/INFE International Survey of Adult Financial Literacy Competencies*. OECD.2016 https://www.oecd.org/finance/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf

OECD. (2020). *Small Business, Job Creation and Growth: FActs, Obstacles and Best Practices*.

1997 OECD.

Ogunmokun, O. C., Mafimisebi, O., & Obembe, D. (2022). Bank lending behaviour and small enterprise debt financing. *Journal of Entrepreneurship in Emerging Economies*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/JEEE-02-2022-0043

Omisore, I., Yusuf, M., & Christopher, N. (2011). The modern portfolio theory as an investment decision tool. *Journal of Accounting and Taxation*, *4*(2), 19–28.

Pettit, R. R., & Singer, R. F. (1985). Small business finance: A research agenda. *Financial Management*,1085 Oct,1 47–60.

Pomeroy, R., Arango, C., Lomboy, C., & Box, S. (2020). Financial inclusion to build economic resilience in small-scale fisheries. *Marine Policy*, *118*, 103982. https://doi.org/10.1016/j.marpol.2020.103982

Puelz, D., & Puelz, R. (2022). Financial Literacy and Perceived Economic Outcomes. *Statistics and Public Policy*, *9*(1), 122–135. https://doi.org/10.1080/2330443X.2022.2086191

Rachapaettayakom, P., Wiriyapinit, M., Cooharojananone, N., Tanthanongsakkun, S., & Charoenruk, N. (2020). The need for financial knowledge acquisition tools and technology by small business entrepreneurs. *Journal of Innovation and Entrepreneurship*, *9*(1), 25. https://doi.org/10.1186/s13731-020-00136-2

Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, *7*(1), 52. https://doi.org/10.1186/s43093-021-00099-0

Rahman, M. M., Dana, L.-P., Moral, I. H., Anjum, N., & Rahaman, M. S. (2022). Challenges of rural women entrepreneurs in Bangladesh to survive their family entrepreneurship: A narrative inquiry through storytelling. *Journal of Family Business Management*.

Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach. *FIIB Business Review*, *8*(1), 51–60. https://doi.org/10.1177/2319714519826651

Sajuyigbe, A. S., Odetayo, T. A., & Adeyemi, A. Z. (2020). Financial Literacy and Financial Inclusion as Tools to Enhance Small Scale Businesses' Performance in Southwest, Nigeria. *Finance & Economics Review*, *2*(3), 1–13.

Samantha Rose. (2022). *The History of Financial Literacy*. OppLoans. https://www.opploans.com/oppu/articles/history-of-financial-literacy/

Saunders, M., Lewis, P., & Thornhill, A. (2012). Research methods for business students (6. Utg.). *Harlow: Pearson*.

Shim, S., Xiao, J. J., Barber, B., & Lyons, A. (2009). Pathways to Life Success: A Conceptual Model of Financial Well-Being for Young Adults. *Journal of Applied Developmental Psychology*, *30*, 708–723. https://doi.org/10.1016/j.appdev.2009.02.003

Siswanti, I., & Halida, A. M. (2020). Financial knowledge, financial attitude, and financial management behavior: Self–control as mediating. *The International Journal of Accounting and Business Society*, *28*(1), 105–132.

Smith, H., & Basurto, X. (2022). Defining Small-Scale Fisheries and Examining the Role of Science in Shaping Perceptions of Who and What Counts: A Systematic Review. *Frontiers in Marine Science*, 2019 May 7 *6*. 236 https://doi.org/10.3389/fmars.2019.00236

Solanke, A. A., Fashagba, P. F., & Okpanachi, J. (2015). Maintenance of accounting records and business growth among small and medium enterprises in North-Central Nigeria. *Journal of Accounting and Finance Management*, *1*(3), 1–7.

Steele, K., & Stefánsson, H. O. (2021). *Decision Theory*. Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/entries/decision-theory/

Świecka, B. (2019). 1. A theoretical framework for financial literacy and financial education. In . *A theoretical framework for financial literacy and financial education* (pp. 1–12). De Gruyter Oldenbourg. https://doi.org/10.1515/9783110636956-001

Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management*, April 10 2018 *5*, 18–27. https://doi.org/10.2139/ssrn.3205035

Tesfaye, G., & Wolff, M. (2014). The state of inland fisheries in Ethiopia: A synopsis with updated estimates of potential yield. *Ecohydrology & Hydrobiology*, *14*(3), 200–219.

Thoya, P., Horigue, V., Möllmann, C., Maina, J., & Schiele, K. S. (2022). Policy gaps in the East African Blue economy: Perspectives of small-scale fishers on port development in Kenya and Tanzania. *Frontiers in Marine Science*, Aug 26 *9,933111*. https://www.frontiersin.org/articles/10.3389/fmars.2022.933111

Tunje, J. G., Tole, M. P., Shauri, H. S., Hoorweg, J. C., & Munga, C. N. (2017). *Assessment of fisheries resource-use conflict management strategies among artisanal fishers of the Kenya coast*. International journal of fisheries and Aquatic studies, 5(5),37-42

Tur-Porcar, A., Roig-Tierno, N., & Llorca Mestre, A. (2018). Factors affecting entrepreneurship and business sustainability. *Sustainability*, *10*(2), 452.*Understanding Decision Making*. (2017). https://open.lib.umn.edu/organizationalbehavior/chapter/11-2-understanding-decision-making/

Van Rooij, M. C., Kool, C. J., & Prast, H. M. (2007). Risk-return preferences in the pension domain: Are people able to choose? *Journal of Public Economics*, *91*(3–4), 701–722.

Wang, X., & Cheng, Z. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. *Chest*, *158*(1, Supplement), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Warner, W. K., & Havens, A. E. (1968). Goal displacement and the intangibility of organizational goals. *Administrative Science Quarterly*, 539–555.

Wati, C. R., Sumiati, S., & Andarwati, A. (2022). The effect of financial knowledge on firm performance: The role of financial risk attitude as moderation. *International Journal of Research in Business and Social Science (2147- 4478)*, *10(5)*, 236–249. https://doi.org/10.20525/ijrbs.v10i8.1450

Westfall, P., & Kvilhaug, S. (2021). *Modern Portfolio Theory: What MPT Is and How Investors Use It*. Investopedia. https://www.investopedia.com/terms/m/modernportfoliotheory.asp

Zaniarti, S., Veronica, S., Arvi Arsytania, R., & Obrenovic, B. (2022). *The Effect of Financial Literacy on the Sustainability of Micro, Small, and Medium, Enterprises* *with Access to Finance as a Mediating Variable*. https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.87.1002

Zhang, D., & Lucey, B. M. (2022). Sustainable behaviors and firm performance: The role of financial constraints' alleviation. *Economic Analysis and Policy*, *74*, 220–233.

APPENDICES

Appendix 1: Questionnaire

You have been randomly selected to participate in a research study on the effects of financial literacy on the financial performance of artisanal fish traders in marine fisheries a case of Kilifi County. The aim of this study is to understand how financial knowledge, financial behavior, financial attitude affects business performance among artisanal fish traders. To achieve that, we need to hear about experiences as regards your financial exposure and how the knowledge affects your business. Ethical approval of the study the protocol for this study was submitted for approval to Pwani University The study has been structured in accordance with the Ethics in business Research Principles, Processes and Structures and other national and international guidelines. A copy of the document may be obtained from the Principal Investigator should you wish to review it. We respect your confidentiality. Your response to the survey questions will be kept confidential to the extent allowed by law. The information you give will not be divulged to any other person outside the study team. Additionally, responses will be aggregated with others in the analysis and will not be singled out for reporting. There will be no direct benefit to you for completing the survey. However, your responses and those with others will be used to improve the content of the study so that artisanal fish traders are able to receive accurate and reliable information to improve the financial performance. It is anticipated that you would not experience any harm by participating in the survey, however, you may feel uncomfortable answering certain questions that may be too personal or that may elicit feelings of stress and trauma. If you may need support or someone to speak to, please contact the principal investigator, Jannet Chea, Tel 0700038710 for additional directions. By agreeing to participate in this survey, you declare that you are 18 years and above. You are free not to participate in the survey and to not answer any question that you don't feel comfortable to answer or to abandon the interview at any point without any consequence.

Do you accept to participate in the survey? *

◉ Yes ○ No

Part 1- Socio-demographic data

1. Study site

…………………………………………………………………………………………

2. Please indicate your gender: *(only one answer)*

Male	◻
Female	◻

3. Please indicate your age *(only one answer)*

18-25	**25-35**	**35-45**	**45-55**	**Above 55**
◻	◻	◻	◻	◻

4. What is your religious affiliation

Christian	◻
Muslim	◻
Other	◻

5. **What is your level of education?** *(only one answer) C*

None	◻
Primary school	◻
Secondary school	◻
Tertiary education/vocational training institution (polytechnics etc.)	◻

6. How long has the business been in operation? *(please tick once)*

Less than 2 years	
2 to 4 years	
5 to 8 years	
8 to 10 years	
More than 10 years	

7. How many employees do you currently have?

Number of employees	
1 to 2	
3 to 5	
6 to 10	

Section Two: Financial Knowledge

8. How do you determine the selling price?

Determinants	**Tick/Indicate**
1) In advance	
2) At the market place	
3) Other (Specify)	

9. Have you ever received financial training?
   Yes ( ) No ( )

If yes, kindly fill the table below

Training Organizers (*Name of the organization/company***)**	**Period** *(when)*	**Topic**

10. Describe the effectiveness of the training *(changes witnessed)*

....
....
....
....

11. Do you have access to credit? *(please tick)*

Yes () No ( )

12. If yes, where do you acquire credit?

Credit Institution	**Tick/Indicate**
Family and friends	
Informal savings (Chamas)	
Personal savings	
Microfinance institutions	
Commercial banks	
Other (Specify)	

13. Describe your experience with loans (*probe for challenges or success story*)
....
....
....
....
....

Section Three: Financial Behavior

14. To what extent do you rate the following statements on management aspects related to financial behavior?

Kindly use a scale of 1 to 5 where 1=Bad, 2=poor, 3= average, 4= good and 5= excellent

Statement	**1**	**2**	**3**	**4**	**5**
I save a portion of my business monthly income					
I keep financial reserves in case of emergency					
I plan to use my savings for future growth of my business					
My debt management skills have enabled me to access various sources of finance for my business					
I can accurately determine the total debt position of my business					
I always spend money for the initial intended purposes					

15. Which kinds of financial records do you use for your business

Financial Record	
Sales record	
Purchase stock	
Operational expenses	
Profit/loss account	

Section 4: Financial Attitude

16. Please express your extent of agreement or disagreement to the following statements, on a scale ranging from 1 (strongly disagree), to 5 (strongly agree)

Statement	Strongly disagree **1**	Disagree **2**	Neutral **3**	Agree **4**	Strongly agree **5**
I have a business loan that I'm currently repaying					
I'm comfortable making payments for the loan I'm currently servicing					
I would consider expanding my business given the opportunity					

17.

18. How would you rate the following aspects related to credit service utilization? Kindly use a scale of 1 to 5 where 1=Bad, 2=poor , 3= average , 4= good and 5= excellent

Statement	**1**	**2**	**3**	**4**	**5**
The interest rates					
Access to credit services					
Loan repayment period					
Effects of loan repayment on business operation					

19. In the event that you decide to expand your business, what are the primary considerations that you would make regarding the following aspects?

Statement	**Explain**
Customer availability	
Capital availability	
Competition	
Financial management	

Record keeping	
Operational costs	

19. Given the chance would you rather source a loan and invest it to your business or would you save and accumulate money for investment. (*explain*)

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

20. Which of the options would you think would be more profitable?

Get a loan ()

Save and accumulate ()

Explain

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

Section Five: Financial Performance

21. How do you measure the business' financial performance?

Number of employees ()

Number of sales ( )

Profit margin----------------( )

Other (specify) ( )

…………………………………………………………………………………

22. Do you work with targets in respect to the performance of your business?

a. Yes ( ) b. No ( )

b. How do you formulate these goals? (probe *for period*)

....

....

....

23. To what extent would you say that you achieve these goals?

a. Not at all ( )
b. To some extent ( )
c. Don't know ( )
d. To a great extent ( )

Please explain your answer in 21a above

....

....

....

24. Which of the following actions would you take in the event of barriers to the achievement of goals?

I pursue the targets anyway ( )

I would strategize and redefine my goals ( )

I would give up on my goals ( )

I do not know ( )

25. To what extent would you confidently say that your business is worth more than your initial investment

a. Not at all ( )
b. To a small extent ( )
c. To a large extent ( )
d. Neutral ( )

Please elaborate your answer in above

....

....

....

……………………………………………………………………………………

26. How would you rate the performance of your business in comparison to other businesses?

Bad ( ) Poor ( ) Average ( ) Good ( ) Excellent ( )

Explain

....

....

....

....

27. What do you find to be the biggest challenge in acquiring knowledge of financial matters

Limited resources ( )

Weak structural features ( )

Lack of personal will ( )

Other(specify).

…………………………………………………………………………………….

28. Do you have any other income generating activity besides your business?

(Yes) (No) ( )

Explain

………………………………………………………………………………………

………………………………………………………………………………………

………...

………………………………………………………………………………………

29. Which of the following aspects of the external environment affect your business?

External factors	**Explain**
Increase in price of commodities	
Decrease in price of commodities	
Levies	
Increase in taxation	
Decrease in taxation	

30. Please list the types of assets of your business in the following categories

Category	**Asset**
Equipment *(fishing)*	
Operating space (*probe for business premises, location and number*)	
Mobility devices (*car, bicycle*)	
Any other assets	

31. What are some of the challenges you have experienced in your business?

....

....

....

……………………………………………………………………………………..

……………………………………………………………………………………..

Appendix 2: Work plan

Activity	**Month 1**				**Month 2-3**				**Month 3-5**			
Preparation of materials												
Pilot testing the Questionnaire												
Collection of data												
Data entry and analysis												
Documentation and report writing												

Appendix 3: Budget

Items required	**Quantity**	**Cost per Unit**	**Total Cost**
Stationery (Printing Paper	2	750	1500
Other stationeries			300
Writing pads	10	100	100
Enumerators	2	5000	10,000
Printing and internet			5,000
Transport			5,000
Refreshments			2,000
Flash disk	1	2000	2,000
Printing & binding			15,000
Data Analysis			3,000
Contingency			5,000
Grand Total			**50.000**