

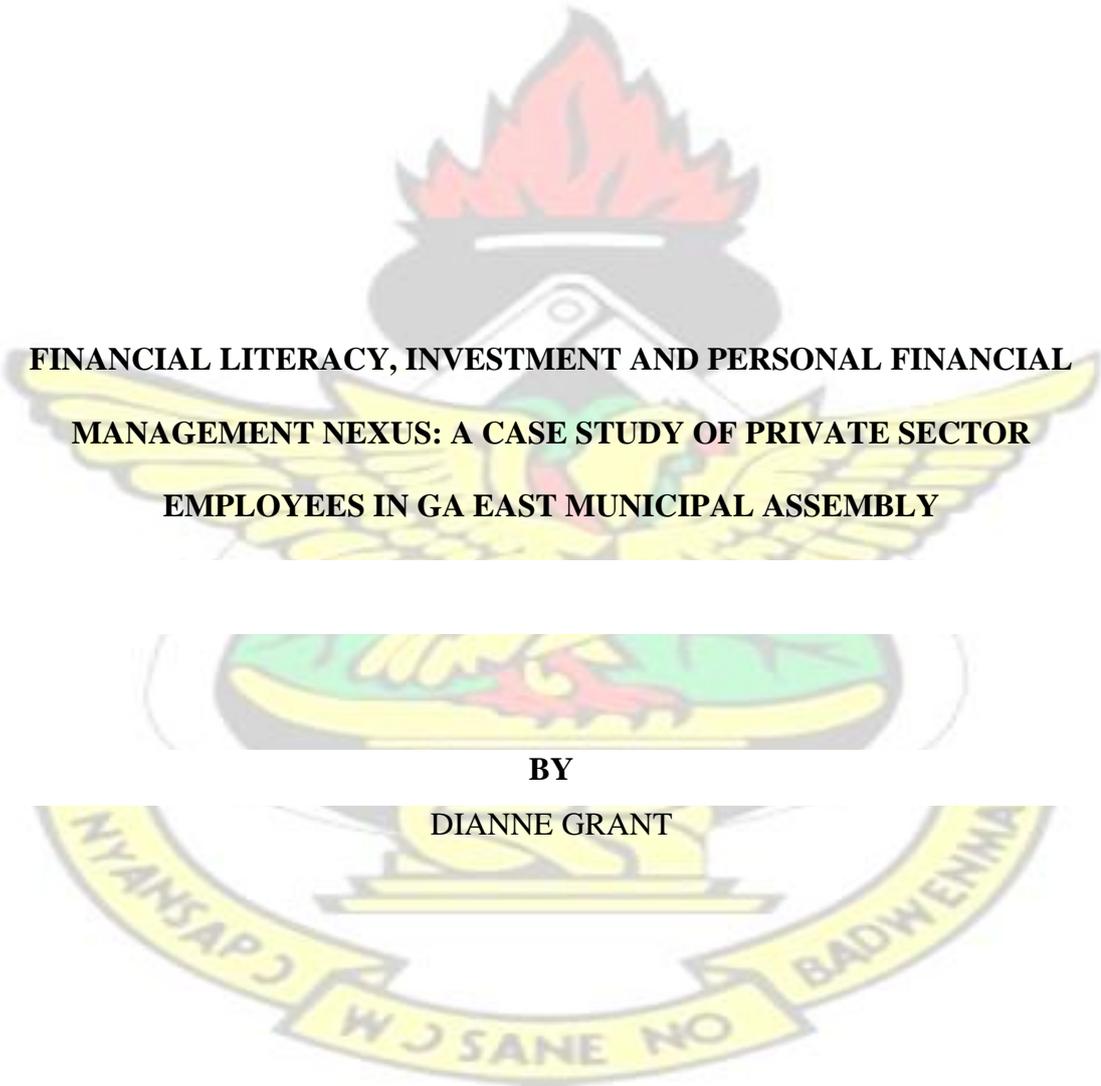
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

KNUST SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING AND FINANCE



**FINANCIAL LITERACY, INVESTMENT AND PERSONAL FINANCIAL
MANAGEMENT NEXUS: A CASE STUDY OF PRIVATE SECTOR
EMPLOYEES IN GA EAST MUNICIPAL ASSEMBLY**

BY

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NOVEMBER, 2023

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MANAGEMENT NEXUS: A CASE STUDY OF PRIVATE SECTOR
EMPLOYEES IN GA EAST MUNICIPAL ASSEMBLY**

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A thesis submitted to the Department of Human Resource and Organizational
Development, School of Business, College of Humanities and Social Sciences,
KNUST in partial fulfilment of the requirements for the degree of

MASTER OF SCIENCE IN ACCOUNTING AND FINANCE

NOVEMBER, 2023

DECLARATION

‘I hereby declare that this submission is my own work towards the award of the **Master of Science in Accounting and Finance** and that, to the best of my knowledge, it contains no material previously published by another person or any material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text’.



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DEDICATION

I dedicate this project to Patrick Osei Kuffour, my mother Ruth Baiden, all my colleagues at work, family and friends, the school of business and the administration at the Kwame Nkrumah University of Science and Technology for being a strong pillar throughout my MSC program. Without their love and support, this project would not have been made possible. I have been deeply humbled by the knowledge acquired and support accorded to me during my studies at the university.



ABSTRACT

The major goal of the study was to better understand how investment decision influence workers' individual financial literacy and their personal financial management. To accomplish the goals outlined in the study, the researcher employed a quantitative technique using a descriptive and explanatory research design. The participants in the study were workers at SMEs in the Greater Accra Region. To gather primary data, the researcher employed a convenience sample strategy. The information was gathered from 400 employees of SMEs in the Greater Accra Region using a well-structured questionnaire. Descriptive statistics and a normality test were performed on the data. The researcher utilised SmartPLS 4 and SPSS version 26 to analyse the data. The study's conclusions showed that investment decisions and personal financial management are significantly and positively impacted by financial literacy. The findings also demonstrated that investment decision significantly affect personal financial management. Additionally, it was shown that investment decision mediates the link between financial literacy and personal financial management. The results imply that people's financial management may be improved by increasing their understanding of financial literacy and investing decision. The study recommended that financial literacy training programmes and their providers give thorough knowledge on borrowing and investments.

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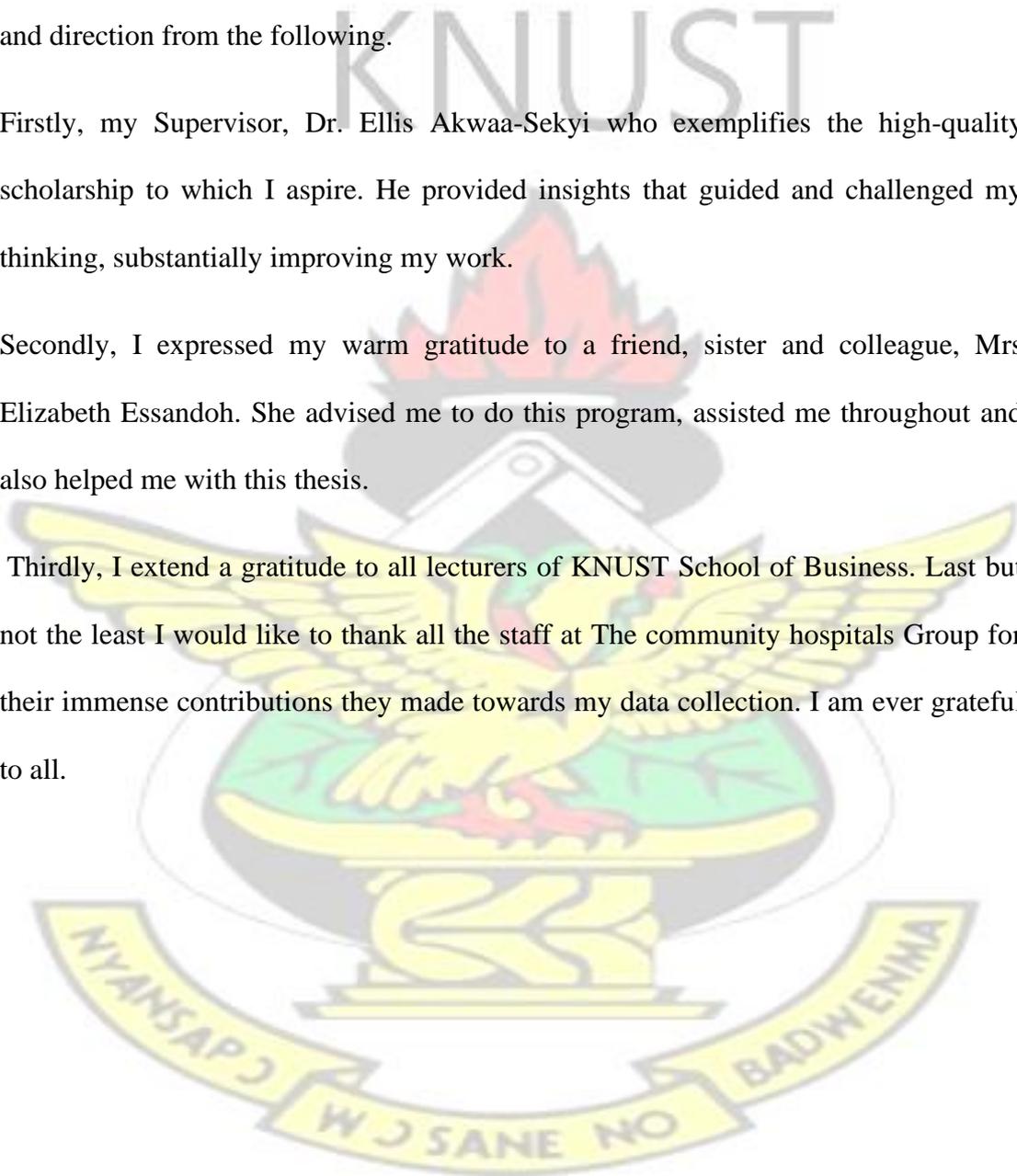


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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the most important issues in periods of a person's life is retirement. Retirement usually depicts a period of rest in a person's or worker's life. This is the period where the person withdraws from the stress and exertion of a job and spends sufficient time with their friends and relatives (Safari et al., 2021; Sarpong-Kumankoma, 2021; Mata, 2021; Gallego et al., 2022). It is expected that after spending between thirty to forty years working for a salary, the worker would have made proper arrangements for financial stability without sole reliance on pension income. It is, however, the opposite case among many people in developing countries Ghana is no exception. In most cases, retired workers are poor, needy and destitute and most times depend on their meagre pension pay (Kwegyiriba et al., 2021; Ahun et al., 2021). According to Aninakwa (2016), beginning retirement could be likened to starting a new job. It comes with so many new things to learn, new rules and regulations, new opportunities and its own challenges. In this regard, it is imperative to face new personal and lifestyle issues which include personal financial management. Retirement is inevitable in both public and private sectors (Kissi, Dai, Boamah, Owusu-Marfo and Asare, 2018), hence there is a need for effective financial management for employees both in the public sector and the private sector.

Because of this, policymakers and financial service providers have focused on initiatives to raise standards of financial literacy and management everywhere. Reasons such as the global economic slump, the need to protect a savings rate that is at risk of falling, and a growing preference for a credit culture all play a significant role in shaping

the way people behave in terms of managing their money (Dhananjay, 2020). (Dhananjay, 2020). Additionally, individual financial knowledge and their desire for investments could play an essential influence in defining their financial management (Bamforth et al., 2018; Croce et al., 2020; Siddiqui et al., 2021). Extensive empirical research has consistently demonstrated a positive association between financial literacy and financial behavior, as evidenced by prior studies by Allgood and Walstad (2016) and Zhao and Zhang (2021). According to Remund (2010, p. 284), financial literacy can be defined as “the extent to which an individual possesses the knowledge of essential financial concepts, coupled with the ability and confidence to manage their personal finances through appropriate short-term decision-making and long-range financial planning, while being mindful of life events and economic conditions.” Moreover, previous research has established that objective financial knowledge is a crucial determinant of investment intention and behavior. Akhtar and Das (2019) found a significant positive relationship between objective financial knowledge and investment intention in stock markets. Similarly, Kim et al. (2019) demonstrated that millennials with superior objective financial awareness are more likely to hold investments. Thus, the findings suggest that objective financial knowledge plays a crucial role in shaping individuals' investment intentions and financial behavior. According to Cibangala (2019), financial literacy has a substantial impact on an individual's financial well-being. Specifically, individuals who come from households with a high level of financial literacy are likely to exhibit superior risk attitudes in relation to financial planning and management. Moreover, such individuals are likely to exhibit positive social attitudes. This suggests that individuals who have been exposed to financial education may possess a deeper understanding of the risks involved in financial decision-making, enabling them to make informed choices and

manage their finances more effectively. Additionally, financial literacy may be associated with positive social attitudes due to the values and skills that are often associated with financial education, such as responsibility, self-discipline, and long-term planning. Prior research by Krische (2019) and Munnukka et al. (2017) has indicated that financial literacy and investing experience play a critical role in shaping individuals' investment-related judgments and decision-making. Nonetheless, the current body of literature has yet to furnish comprehensive, empirically validated evidence on the impact of financial literacy and investment experience on the personal financial management practices of employees working in Sub-Saharan African private sector organizations.

Given the limited knowledge of how financial literacy and investment experience influence personal financial management among employees in this context, it is essential to investigate the extent to which these factors shape financial decision-making in the region. A deeper understanding of the relationship between financial literacy, investment experience, and personal financial management can have significant implications for individuals, businesses, and policy-makers in Sub-Saharan Africa.

To fill the literature gap, the primary goal of this study is to analyze the link between financial literacy, investment decisions and personal financial management.

1.2 Problem Statement

Today, financial future responsibility is a shared responsibility. As a result, employees must be aware of financial issues in order to secure a brighter future when they retire from work. Literacy can heighten anxieties about insufficient pension resources, increasing levels of commitment, and personal disintegration. According to Chowa, le

al. (2010), Ghanaian youth have very low financial literacy rates. A study by the United States Institute for International Development (2009) cited in Oppong-Boakye and Kansaba, 2013, p. 39) found a 44 per cent financial literacy among Ghanaians. Research inequalities are closely linked to literacy among staff and paid employees, especially with regard to savings and investments, the types of financial products to choose from and financial management remains a big problem in Ghana.

Dhananjay (2020) argues that research is needed to better understand the factors that contribute to prudent financial management behaviour. Additionally, policymakers and regulators need to address the concern for an emerging country like Ghana, where the banking industry is facing asset quality issues among both the priority and non-priority segments (RBI Annual Report), as high credit default has been a growing problem in developing countries, particularly in Sub-Sahara Africa, in the wake of the global financial crisis (RBI Annual Report). Moreover, the shift in global finance away from industrialized nations and toward emerging countries is an additional incentive to study this phenomenon of financial management. Several gaps in the existing literature on financial management are filled by this research. First, while many studies have examined how young adults in industrialized countries handle their money, much less has investigated the issue from the perspective of those living in emerging economies. The current study closes a knowledge vacuum by expanding coverage to include private sector workers in Ghana. Second, questions about financial literacy's effectiveness have been highlighted by the real world (Alsemgeest, 2015; Reyers, 2019). Additional study is needed because of the discrepancy in the current evidence regarding the significance of financial literacy initiatives toward appropriate financial management behaviour, especially among young adults (Dhananjay, 2020). Third, the present research considers that financial literacy will influence investment decisions, which will in turn

impact financial management in accordance with the financial management model covering input, personal subsystem, and managerial subsystem, which is an adaptation of Deacon and Firebaugh's (1988) model. The research looks at how locus of control interacts with financial literacy, attitude, and behaviour to predict fiscally sound decisions. Fourth, the financial management scale developed by Fitzsimmons et al. (1993) and Prochaska-Cue (1998) has been widely used in previous research (1993). Subsequently, Dew and Xiao's (2011) developed scale underwent psychometric validation. Because it assesses financial planning in its broadest sense, including savings, investments, cash flow, and credit, the scale can be considered both comprehensive and generic. The research made use of the Dew and Xiao scale (2011). Therefore, the above-mentioned challenges encourage researchers to conduct research to assess whether financial literacy drives both investment and financial management. Though research on financial literacy exists (Kalmi and Ruuskanen, 2018; Nguyen et al., 2019; Lusardi, 2019; Niu et al., 2020; Tan and Singaravelloo, 2020; Setyawan Hutabarat and Wijaya, 2020; Sun et al., 2021; Safari et al., 2021; Gallego-Losada et al., 2022), just a few are conducted in Sub Saharan Africa. Additionally, none of these studies has focused on employees in the private sector, particularly those working in SMEs.

Again, this study envisages that individuals' financial literacy will shape their investment decisions and thus drive the effect of financial literacy on financial management. Hence, this study also seeks to explore the mediating role of investment decisions in the relationship between financial literacy and financial management among employees of private sector firms in the context of developing economies. Few studies use theoretical approaches to understand the role of financial literacy in shaping financial behaviour and financial well-being (Zhao et al. 2021). This study is one of the

first few attempts to unearth how financial literacy and investment could enhance financial management among employees in Sub-Saharan Africa, a developing region. Even though scholars have researched and contributed to the area, the growth in research in the area is still slow, hence, there is a need for more studies in the area (Allsop et al.,2020; Zhao et al.,2021). The outcome of the study will therefore provide relevant information to various stakeholders including government and policymakers on the need to improve financial education and how this could enhance financial management among employees in Ghana.

1.3 Objectives of the Study

The purpose of the study is to examine the effect of financial literacy on personal financial management and how this relationship could be mediated via investment. Specifically, the study intends:

1. To examine the effect of financial literacy on financial management among employees in the private sector.
2. To evaluate the influence of financial literacy on investment decisions among employees in the private sector.
3. To explore the mediating effect of investment in the relationship between financial literacy and financial management among employees in the private sector.

1.4 Research Questions

In order to achieve the main objective of the study, the research seeks to answer the following:

1. What is the effect of financial literacy on financial management among employees in the private sector?

2. What is the influence of financial literacy on investment decisions among employees in the private sector?
3. What is the mediating effect of investment in the relationship between financial literacy and financial management among employees in the private sector?

1.5 Justification of the Study

This study is important for several reasons. Firstly, the research seeks to assess determinants of personal financial management among employees in the private sector. Thus, the findings of this study will be of help to stakeholders and policy makers as it will unveil the various reasons that account for the poor financial management among employees in the private sector.

The study's findings are crucial because they will educate and raise awareness among workers, particularly in the private sector, about government policies about the need to be financially literate.

This study is one of the first few attempts to unearth how financial literacy and investment could enhance financial management among employees in Sub-Saharan Africa, a developing region. Even though scholars have researched and contributed in the area, the growth in research in the area is still slow, hence, there is the need for more studies in the area (Allsop et al.,2020; Zhao et al.,2020). The outcome of study will therefore provide relevant information to various stakeholders including government and policymakers on the need to improve the financial education and how this could enhance financial management among employees in Ghana.

This research will once again be used as current literature for academic reasons. As a result, lecturers can use the findings of this study as reference material, and students can use it as a study book, particularly those interested in financial knowledge and

compliance and associated topics. Furthermore, academics would like to contribute to the advancement of studies on pension administration and related issues, specifically financial knowledge and compliance among employees.

1.6 Scope of the Study

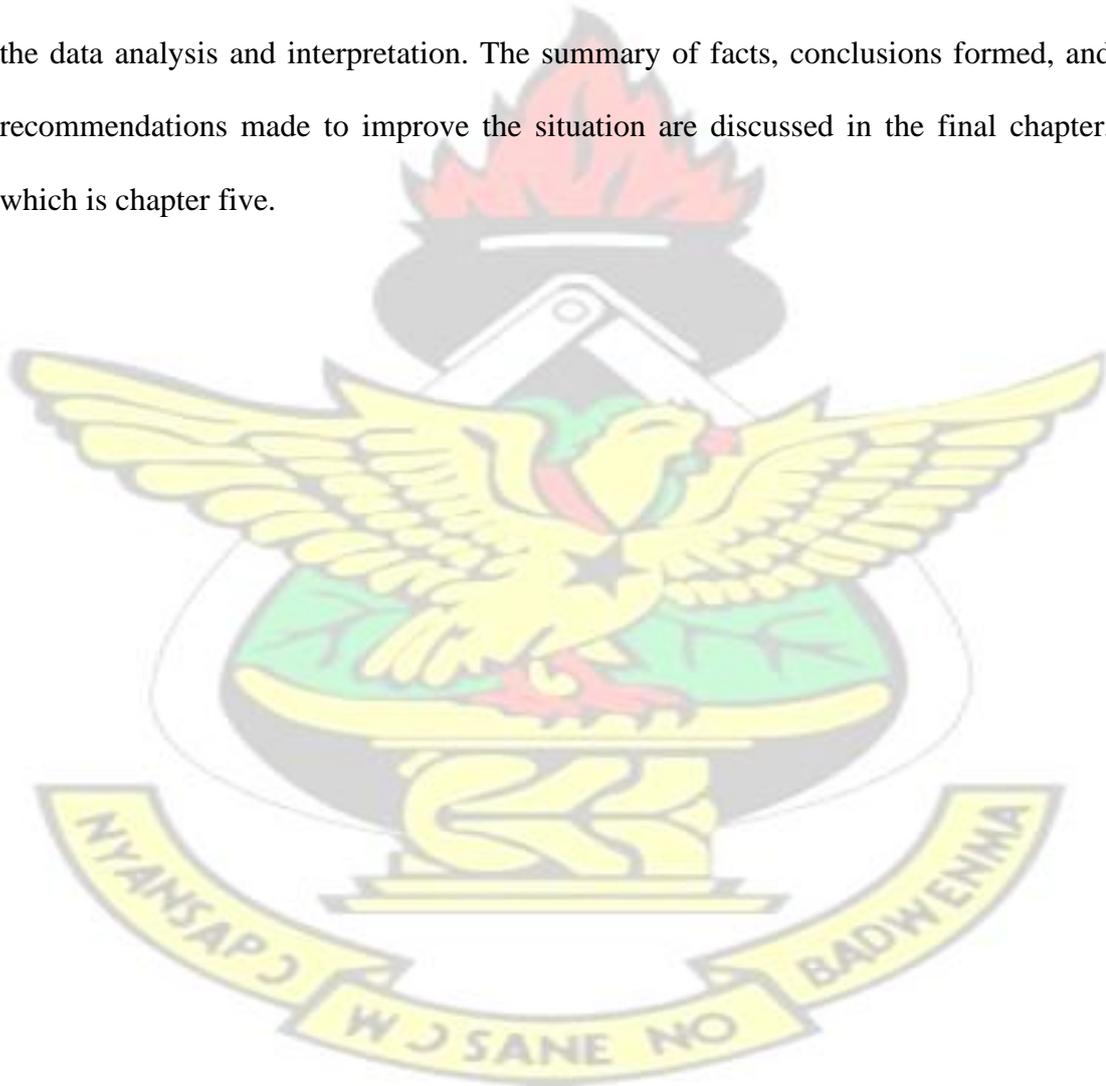
This study focused specifically on focused on the effect of financial literacy on personal financial management and how this relationship could be mediated via investment among employees in the private sector. The private sector is very broad; hence this study will only focus on SMEs in the GA East municipal Assembly.

1.7 Summary Research Methodology

This study will employ the cross-sectional survey design. The choice of this survey method lies in its ability to make inferences. Following a review of existing literature, a structured questionnaire will be used to collect primary data for the study. The items will be extracted from existing literature on the various constructs in the model. The population of the study will include employees of SMEs in GA East Municipal Assembly in the Greater Accra Region. PLS-SEM (Partial Least Squares Structural Equation Modelling) and SPSS will be combined to analyse the data collected. Descriptive analyses such as frequencies, means and standard deviation will be used to describe the demographic characteristics of the respondents and the variables in the model. Both EFA and CFA will be conducted to ascertain the reliability and validity of the variables. Structural model evaluation will be employed to test both the direct and indirect relationships.

1.9 Organisation of the Study

The research is divided into five sections. The first chapter covers the background of the study, the statement of the problem, the study's objectives, research questions, the study's importance, the study's scope and limitations, and the study's organization. The literature review is the second chapter. This chapter examines relevant literature on the subject at hand. The research approach is discussed in the third chapter. The methods for collecting and analyzing data are described in detail. The fourth chapter deals with the data analysis and interpretation. The summary of facts, conclusions formed, and recommendations made to improve the situation are discussed in the final chapter, which is chapter five.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter primarily provides an overview of the body of knowledge on the subject of the study. The conceptual, theoretical, empirical, conceptual framework and hypothesis formation are all included in the literature review. A study of the concepts underlying financial management, investment decision, and financial literacy was also included in the conceptual review. The Agency theory and the Signaling theory served as the theoretical review's focal points. The empirical review concentrated on studies that addressed the goals of the study, including the connections between investment decision and financial management, financial management and financial literacy, and the connections between investment decision and financial management, as well as the mediating role of investment decision in this relationship. Finally, a conceptual framework and hypothesis development were developed.

2.2 Conceptual review

2.2.1 Financial Literacy

Remund (2010, p. 284) defines financial literacy as having the knowledge and confidence to manage one's own finances through wise long-term planning and prudent short-term financial decision-making while taking into consideration life events and the economy. According to Hossain(2020), financial literacy is a crucial trait of owner-managers and improves their knowledge, abilities, and financial traits, enabling them to effectively manage other crucial resources, particularly financial resources.He added that financial literacy improves owner-managers ability to make strategic decisions and

helps them find better financing sources so they can get low-cost money with better terms and conditions, which may also help them create control over spending. Financial literacy initiatives have emerged as a crucial policy tool to promote financial inclusion of marginalized communities (Asian Development Bank, 2016, 2017; Klapper and Singer, 2014; Lyons, Grable and Zeng, 2017; Lyons, Grable and Joo, 2018; United Nations, 2015; Villasenor, West and Lewis, 2016; The World Bank, 2014, 2018; Yuan and Jin, 2017). These initiatives aim to bridge the gap in financial literacy and access to financial services experienced by the most economically disadvantaged populations. By educating individuals on financial matters and providing them with resources to navigate the financial system, financial literacy initiatives can enable greater participation in the economy and improve overall financial well-being. The prominence of financial literacy initiatives in policy discussions underscores their potential to drive positive economic and social outcomes, particularly for those who have been traditionally excluded from the financial mainstream. Financial literacy appears to be a significant factor in influencing how consumers make financial decisions (Cucinelli et al., 2019). Consumers who are more financially literate are typically more likely to choose financial goods that are better suited to their needs than those who are less literate. However, Morgan et al. (2019) also noted that financial literacy has grown in importance and now has a significant place on many nations' policy agendas as a necessary component of effective financial inclusion, along with consumer protection. Financial fragility and the ability to withstand unanticipated shocks are both related to financial literacy (Hasler, Lusardi and Oggero, 2018). In this study, financial literacy will be defined according to Remund's (2010) definition, which states that it is a measure of how well someone understands basic financial concepts and has the knowledge and confidence to manage their own finances by making sound, long-term

financial plans and wise decisions in the short term while keeping current events and the state of the economy in mind.

2.2.2 Financial Management

By fostering financial growth toward sustainability values, which depend on promoting, among other things, increased environmental responsibility, climate resilience, low carbon, human rights, gender equality, sustainable economic growth, and social inclusion, financial management systems are significantly changing the business environment. The development of the global financial markets has undergone a long-term revolution that has produced the financial management system. It was established using macroeconomic alternatives and articulated governmental, legal, and technological regulations. Financial management is a technique that, if properly incorporated into business operations, supports sustainable business practices and sustainable financial growth for organizations (Al Ahababi and Nobanee, 2019). To guarantee there is a sufficient flow of funds inside the company, financial management is the concept of organizing, controlling, and planning various financial processes, such as the use and processing of cash (Ameer and Othman, 2012). However, Anantawikrama Tungga et al. (2021), financial management will enable an individual or business to understand their revenue and outgoing expenses, allowing them to better and more precisely regulate their financial situation. Cooperatives are important in the realm of fiscal management since they may solve concerns related to the well-being of its members, such as providing extra leftovers known as Remaining Operations to its members, and because financial management is represented in the existence of total business management. They added that cooperative financial management demonstrates the presence of effective management of corporate operations. There are numerous models for evaluating sound financial management practices (Loke, 2017).

For instance, according to the Financial Services Authority (FSA) of the United Kingdom, the four different aspects of financial management behaviour evaluated are the capacity to manage money, make wise decisions, plan financially for the future, and have the ability to ask for help from the right people (Kempson et al., 2005). Making ends meet and managing one's finances need preparation, wise product selection, and knowledge of the market. The four key components of effective financial management procedures, according to The Financial Regulator of Ireland (2009) resemble the FSA's strategy quite a bit. Kempson et al. (2013) reported on a World Bank study, conducted in conjunction with the Russia Trust Fund of Financial Literacy and Education, which identified eleven shared components of financial behavior across different countries. This suggests that certain financial habits and practices are prevalent across nations, regardless of socio-economic and cultural differences. Budgeting, living within one's means, keeping track of expenses, using knowledge to avoid overspending, paying for unforeseen costs, saving, having an attitude toward the future, resisting impulses, and accomplishment oriented are the 10 behavioural components. However, acquiring, allocating, and spending money with a specific purpose is classified as "financial management behaviour." (Topa, Hernández-Solís and Zappalà, 2018). This study follows the perspective on financial management, which further clarified that empirical data supports the idea that, if families are successful in managing their finances, both their long-term financial happiness and economic well-being will increase (Consumer Financial Protection Bureau, 2015). Financial management behaviour, however, is intricate and challenging to put into practice. A helpful defence against unsafe financial activities is the careful and prudent management of money and expenditure, which includes being thrifty with your money. Moreover, there may be age-related differences in how individuals handle their finances. According to research data, young people

appear to engage in less basic financial activities, such as budgeting or regularly planning their long-term investments, even though repeated practice and financial activities have an impact on people's capacity to manage their finances (Jorgensen and Savla, 2010).

2.2.3 Investment Decision

Tamplin (2022) defined investment as an asset acquired at cost with the expectation that it will later provide value above its initial cost and time to value. This occurs as a result of the asset's value increasing. He added that changes in market conditions, such as those affecting stocks, changes in the entire supply (such as the price of an artist's work rising as collectors buy more of the whole supply), and changes in direct improvements can all lead to investments (such as with buying real estate and renovating to increase the value). Investments are defined as the acquisition of assets with the expectation of a future increase in value over the amount initially invested. An investment may be made in almost anything, including intangibles like a person's education. According to Sabri et al. (2020), investing entails allocating time, effort, or other resources to achieve lucrative returns in the form of income, interest, or asset appreciation. Maulana (2020), on the other hand, viewed investment choices as long-term capital decisions based on projections of future business profit returns. Sustainable investing is an investment strategy that takes environmental, social, and governance (ESG) considerations into account when choosing investments for a portfolio and managing it (Global Sustainable Investment, 2018). According to Tamplin, (2022), investments are financial products that investors buy in anticipation of a future profit. He listed various investment types, including equity investments in stocks, debt instruments in bonds, mutual funds, and index funds. The use of investment projects, a planning tool that enables decisions about the execution of capital resources,

has typically been developed to create new businesses. However, they are also applied in the improvement of various areas of operational businesses (such as logistics, occupational security and health, and production, among others) in order to satisfy both internal and external customers (Valencia et al., 2020). The current study will make use of Sabri, et al., (2020) 's definition of investment, which indicates that it entails organizing time, effort, or other resources in order to generate economic returns in the form of income, interest, or asset appreciation. They said that investment is the gathering of recently created things like inventory, buildings, equipment, etc. However, investment is defined by financial experts as the purchase of an item with the hope of making money or seeing a capital increase. An investor is someone who distributes funds with the intention of making money, and an investor's behaviour is influenced by their mind-set. Savings and investing are intertwined; therefore, every investor wants to put his or her hard-earned money in a safe, attractive, and liquid area. Financial literacy was found to play a significant role in defining attitudes toward investing and saving, according to Delafrooz and Paim (2011).

2.3 Theoretical Review

2.3.1 Agency Theory

According to agency theory, there are differences between the interests of business owners, such as shareholders and managers, and those of the controlling corporation. The separation of ownership and control in modern firms raises the possibility of conflict between owners and managers. The basic objective of the corporation is to maximize shareholder value. It is expected of management to take actions and make decisions that will benefit shareholders. Many shareholders may acquire shares in a huge firm when it becomes public, making it impossible for them to even disclose their

motivations. As a result, they have little power or sway over management. Agency theory is concerned with the value of the company because of a disagreement between the primary, or owners of the company, and the agent (Management Firm). According to the theory of agency, everybody is motivated by their own interests. The requirement to strike a balance between the interests of stockholders (the principal) and the restrictions imposed by the rewards and incentives to be received gives birth to the conflict of interest between shareholders and management (Maulana, 2016).

2.3.2 Signaling Theory

According to Brigham and Houston (2011), the company uses the signal to let investors know how management regards the company's prospects based on financial performance, compliance or noncompliance (Tarmidi, 2019). Signaling theory illustrates the informational disparity between the management business and the parties interested in such information. Information provided by firms, in particular about company performance, is particularly important since it affects how investors react to and make decisions about the market. Investors may utilize recent corporate data as a source for prospective outcomes.

2.4 Empirical Review

2.4.1 Financial Literacy and Financial Management

Yap et al. (2018) looks into how financial attitudes and knowledge affect married people's behaviour while managing their money and their level of financial contentment. 200 married respondents were included in the study, chosen by non-probability sampling. To evaluate the hypotheses, a two-step multiple regression analysis is utilized. The outcome demonstrated that the factor most strongly influencing

financial management behaviour was financial attitude. In order to obtain financial contentment, the study suggested paying more attention to one's financial attitude and behaviour.

Sukma and Pradana (2022) conduct a study to examine the validity of the pandemic's claims and Telkom University students' claims on financial literacy. 100 undergraduate business administration students served as the sample. The study employed the quantitative approach, verificative description, and purposeful non-probability sampling techniques. According to research findings, the inclusion variable had an impact on and acted as a mediator of the relationship between financial literacy and financial behaviour.

Goenadi et al. (2022) investigated how social capital mediation influences financial inclusion in relation to financial literacy. The study used 150 participants and questionnaires sent to Indonesian stock investors to collect primary data. Therefore, as one's level of financial literacy rises, so does that person's level of financial inclusion. The study suggests that, in order to avoid misunderstandings, it is better to meet in person or conduct an interview than to distribute surveys online.

Andarsari and Ningtyas (2019) looked into how Malang women entrepreneurs' financial conduct was affected by their level of financial literacy. 95 female micro, small, and medium business owners were involved in the study. Data was gathered via a questionnaire. Partial Least Squares using Smart PLS 3 were used to analyze the variables. The other indicators were all determined to be reliable, and financial literacy was discovered to have a favourable impact on financial behaviour.

2.4.2 Financial Literacy and Investment Decision

Hamza and Arif's (2019) investigate the influence of big-five model-based personality traits as a mediating factor between financial literacy and investing decisions. 235 responses were used in the study utilizing the convenience sample method. The study employed a questionnaire and the data analysis program Smart-PLS. The findings imply that extraversion, conscientiousness, and agreeableness did not significantly influence investment choices in relation to financial literacy.

Raut (2020) looked into the role of past behaviour and financial literacy in individual investors' investment decisions and examined the validity of the theory of planned behaviour. The study employed a self-administered questionnaire. The research demonstrated that societal pressure, which can be lessened through financial literacy, has a significant impact on investors' decisions.

Arianti (2018) examined and measured the effects of financial behaviour, income, and financial literacy on investment decision-making. In this study, the quantitative descriptive research method was employed. Using the questionnaire method, information was gathered from 100 students. The software program SPSS version 22 was utilized in this study to do the descriptive statistical analysis, data quality test, classical assumption test, multiple linear regression test, F-test, t-test, and coefficient of determination. The results of the study indicate that financial literacy has little influence on the choice of investments.

Baihaqqy et al. (2020) investigated the role of financial literacy in investment decisions in Indonesian society. This study employs a quantitative approach, employing a survey method with 400 research samples made up of Baby Boomers, Generation Xers, and Gen-Y / NetGen. The findings indicated that financial literacy influences investment decisions. As a result, the study concluded that the findings share patterns with research

from developed and emerging market countries but differ from other studies in Indonesia.

Pillai and Rajasekar (2020) analyzed the influence of financial literacy on investment performance through the mediation of the investors' Big Five personality traits. The study collected data in Tamil Nadu's metropolitan cities (Chennai, Coimbatore, Madurai, Salem, and Tiruchirappalli) using stratified random sampling. Financial literacy and investment attitude have a significant and positive relationship.

2.4.3 Investment Decision and Financial Management

Fauziah and Asandimitra (2018) investigated the impact of investment, financing, dividend, and profitability decisions on the firm value of basic industrial and chemical businesses listed on the Indonesia Stock Exchange (IDX) between 2012 and 2016. A causal research methodology is used in this study. 49 businesses make up the purposive selection sample. Multiple linear regression analysis was employed in the analysis, along with the traditional assumption test and the hypothesis test using SPSS version 22. The outcome of the regression analysis demonstrated that the choice of investments, funding source, and dividend policy have no bearing on the firm's worth. The value of the company is substantially impacted by profitability.

In their research spanning from 2014 to 2018, Nugraha et al. (2020) explored the effect of “funding, investment, and dividend policies” on firm value in the manufacturing sector. Utilizing a quantitative descriptive methodology, the study employed a sample of 15 manufacturing firms listed on the Indonesia Stock Exchange and utilized Eviews-10 to analyze the data. Results indicated that all three factors, namely policy, investment decisions, and dividend policy, significantly impacted firm value. The study underscores the importance of improving company performance with respect to funding decisions and dividend policies to enhance firm value.

Putri and Budyastuti (2021) determined and analyzed the impact of Investment Decisions, Dividend Policy, and Profitability on Firm Value in Indonesia's Stock Exchange-Listed Production Companies from 2016 to 2018. Manufacturing Companies on the Indonesia Stock Exchange from 2016 to 2018, with a total of 134 companies in the sample. The sampling technique makes use of purposeful sampling. This study employs a variety of linear regression analytic approaches. The results showed that while dividend policy and profitability have a favourable impact on firm value, investment decisions had no impact on firm value.

Agung et al. (2021) looked into how decisions regarding investments, finances, and dividend policies impacted corporate value. Using the purposive sampling method, 22 businesses in the food and beverage industry that were listed on the Indonesia Stock Exchange from 2016 to 2018 were chosen as samples. To examine the data, many linear regressions were applied. The study's conclusions demonstrated that the decisions regarding investments, finance, and dividends all have an impact on a company's worth. According to the study, businesses should think about their investment, financing, and dividend policies because these factors not only entice investors to put money into the company but also because firm value serves as a gauge of investors' confidence in the company's ability to generate a return on their investment.

Risal and Kristiawati (2017) researched and analyzed the effects of financing, dividend payment practices, firm size, and investment on the value of Indonesian companies. 143 manufacturing enterprises that were listed on the Indonesian Stock Exchange between 2010 and 2014 make up the research population. Using purposeful selection, 116 businesses were selected as research samples. A quantitative approach and a multiple regression model were employed to examine the relationship between the dependent and independent variables. The results showed that the investment choice

variable has no effect on company value whereas the dividend payment policy and financing decision variables both had considerable positive effects on company value. Because it is believed that there are other additional factors that can influence a company's worth, the study's variables were kept to a minimum.

2.4.4 The Mediation role of Investment Decision

Shahwan (2018) looked into how capital structure impacts the overall performance of Jordanian listed commercial banks and the mediating effects of investment and financing decisions. The unit of analysis was the Amman Stock Exchange-listed Commercial Banks that continuously disclosed their financial statements for 16 years (2002-2017), and the data source was their annual financial report. In order to determine the direct and/or indirect effects of mediating variables versus endogenous and exogenous variables, the patterns of relationships between the variables under research were investigated using AMOS version 25 and SPSS version 21. The results show that the effect of capital structure on corporate performance in Jordanian listed commercial banks is partially mediated by both investment and financing decisions.

Efni (2017) evaluated how financing and investment decisions affected the firm value of the risk and dividend policy of the company. The study's populations were companies in the property and real estate sectors in Indonesia that met specific requirements, and the financial statements from the Indonesia Stock Exchange served as the study's secondary data source. WarpPLS is used in the study for structural equation modeling as well as descriptive and inferential analysis. The findings revealed that, while dividend policy and funding decisions are unable to increase the firm's value, risk and investment decisions can. As a recommendation for future research, the study suggested that macroeconomic factors such as “economic growth, exchange rates, inflation, and

interest rates” be taken into account as critical determinants of corporate risk. This would enable the analysis of the direct impact of changes in “economic growth, exchange rates, inflation, and interest rates” on corporate value. By including these macroeconomic variables in their analysis, researchers can obtain a more comprehensive understanding of the factors that contribute to corporate risk and value. Sugeng and Yusna (2020) made an effort to look into and study the direct and indirect impacts of financial decisions, dividend policy, and business value, as well as the role of investment decisions as a mediator. Between 2014 and 2017, the study focused on businesses listed on the Indonesia Stock Exchange (BEI). The population was chosen based on population parameters, and data were collected using a purposeful sampling technique. The data were analyzed using multiple regression, and the Sobel Test was employed to check for potential mediators. The study's conclusions demonstrated the importance of the indirect impact of funding decisions and dividend policy, which is mediated by investment decisions, on business value. The report also advised The Company's management to take into account the ideal level of debt in the capital structure.

2.5 Hypothesis Formulation

2.5.1 Financial Literacy and Financial Management

Knowledge and comprehension of financial matters are required for financial literacy. As a result, it plays a big part in managing financial assets. Numerous empirical researches have revealed a link between financial performance and financial literacy. For instance, Olima(2013) conducted research on the effect of financial literacy on personal financial management and found a strong correlation between the two. In a similar vein, a 2011 study by Nyamute and Maina discovered a favourable link between

personal financial management practices and financial literacy. Additionally, a study was carried out (Yap et al., 2018), and the findings showed a positive correlation between financial literacy and financial management behaviour. In light of the foregoing, the following theory was proposed:

H₁. *Financial Literacy has a positive and significant effect on Financial Management*

2.5.2 Financial Literacy and Investment Decision

According to Madi and Yusof (2018), investors misread data and what the figures signify when there is a lack of financial literacy. They also said that a lot of individual investors had misapplied their subjective beliefs to solve financial problems and suffered from poor money management by using their funds in the wrong places. According to Wolfe-Hayes (2010), "financial literacy has become a pressing and obvious necessity for all sectors of society, individuals, businesses, and government." Empirically, Amisi (2012) discovered that pension fund administrators in Kenya who are financially literate make better investment choices. In addition, Musundi (2014) looked at a number of risk categories that are taken into account while making investment decisions, including "market risks, liquidity risks, strategy risks, and regulatory risks, which have a very big impact on the judgments." In light of this, the following hypothesis is created:

H₂. *Financial literacy has a positive and significant effect on Investment decision*

2.5.3 Investment Decision and Financial Management

When evaluating the efficacy of a firm's investment decisions, the relationship between those decisions and the ensuing financial management is crucial. The investment choice is fundamental to financial management because it involves the company's financial,

human, and organic resources and is the only method for managers to ensure that the business survives for a very long time (Karanja, 2012). Therefore, a company's ability to implement investments is essential to both its current success and sustainability, and both depend on the managers' accurate forecasts and wise choices. Measuring the quality of a company's financial management is one technique to evaluate the impact of investment decisions made by managers. The investigation raised the following hypothesis as a result:

H₃. Investment Decision has a positive and significant effect on Financial Management.

2.5.4 The mediating effect of Investment Decision

The company's decision to invest its money now is based on the expectation that the potential rewards will outweigh the associated risks in the long run. Investment decisions, according to (Madi and Yusof, 2018), are choices made in relation to investments that offer benefits above the minimal interest rate earned. Investment project finance refers to the application of several forms of money in the project's financing. Large-risk initiatives are anticipated to yield high returns that are based on the cash flow of the project that exceeds the investment. The evaluation of these high-risk investment proposals involves a high hurdle rate. A number of the company's investment choices can serve as an example of how the business is expanding. The company's expansion demonstrates its ability to manage its investments profitably, enabling it to select from a variety of profitable investment options. The company's expansion offers investors the hope of rising profits in the future. The circumstance will generally improve the relationships between financial management and literacy among people and corporate entities. In this sense, the study produced the following hypothesis:

H4. *Investment Decision mediates the relationship between Financial Literacy and Financial Management.*

2.6 Conceptual Framework

According to Ravitch and Riggan (2016), the conceptual framework plays a crucial role as an integrative ecosystem that enables researchers to systematically unite all aspects of a study. This process entails clarifying the interrelationships, disparities, redundancies, tensions, and contextual influences associated with a research setting and the study of phenomena within that setting. The conceptual framework provides a foundation for researchers to synthesize complex information, elucidate the underlying logic of their research, and facilitate their interpretation and communication of the findings. The conceptual framework and underlying assumptions that connect financial literacy and financial management are outlined in this chapter, with investment decisions serving as the mediating factor.

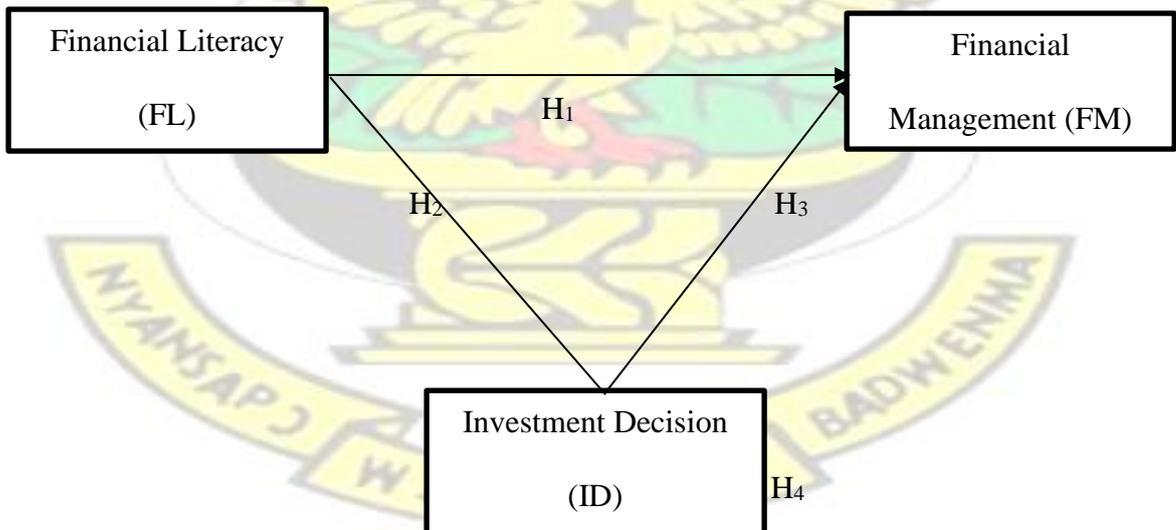
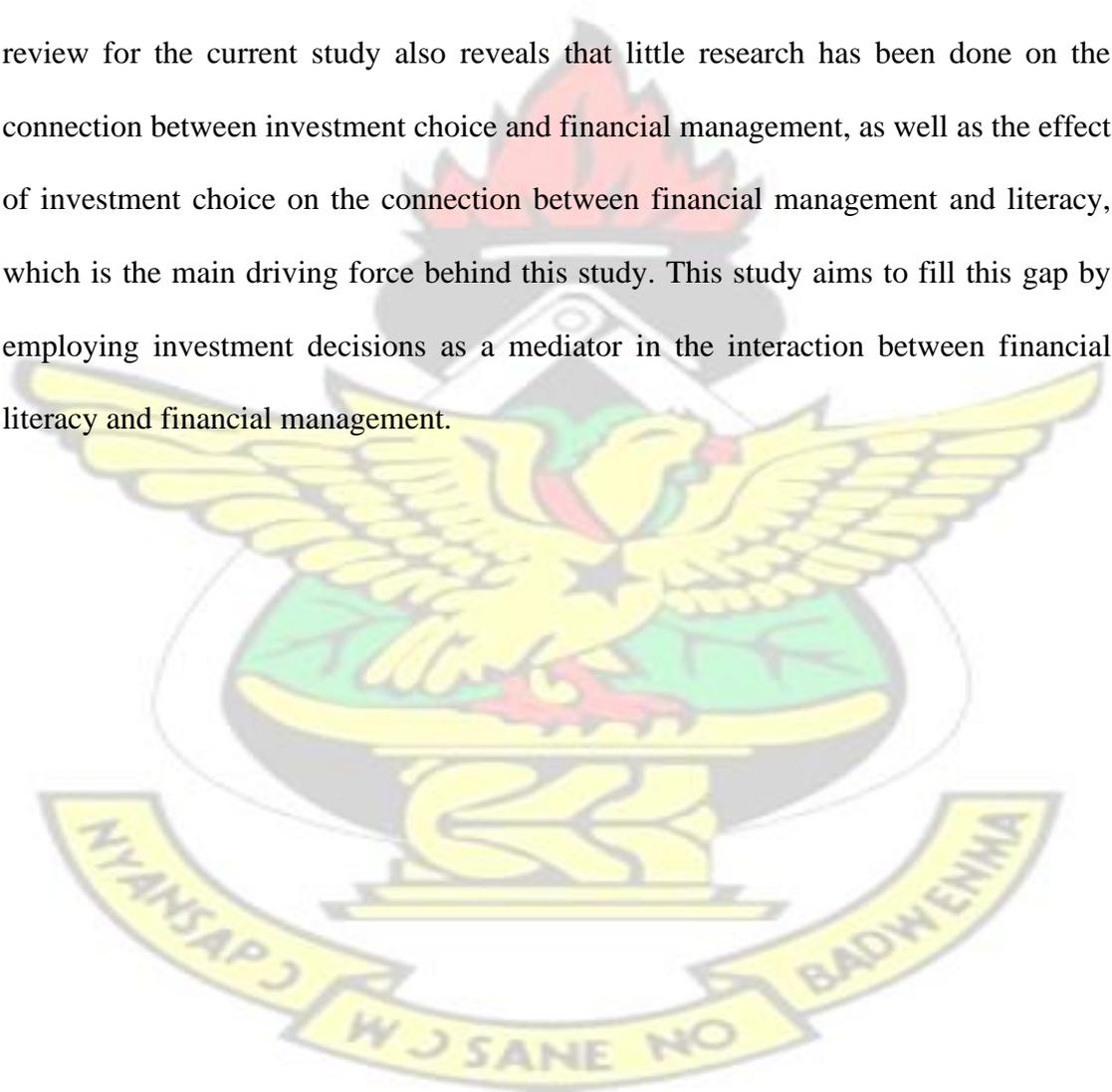


Figure 2. 1 Conceptual Framework

2.7 Chapter Summary

Consumers in many developed countries lack enough knowledge of financial products and procedures, according to financial literacy surveys (Olima, 2013). This is concerning because financial ignorance may limit people's capacity to invest in and save for retirement, jeopardizing their quality of life in their later years. It is further alarming that these shortcomings are concentrated in specific population segments, such as those with low income and low education, minorities, and women, where their lack of financial literacy may make them more susceptible to financial difficulties in retirement (Madi and Yusof, 2018). The evidence of illiteracy raises concerns about whether customers will understand and take advantage of the opportunities provided by financial markets or more readily fall victim to frauds or dishonest brokers given the increased complexity of financial products (Edirisinghe et al., 2017). There are no studies that provide a conclusive assessment of the expenses of financial education programs, making it impossible to calculate the programs' expected returns. (Olima, 2013). In addition, as earlier research revealed, not many employees take advantage of training opportunities, and even fewer really implement the suggested behavioural changes. Yet, these drawbacks do not mean that financial education initiatives should be ignored. The decisions people make with their money aren't limited to retirement savings, which is why education and awareness are so important. Furthermore, such information might be used for a considerable amount of time rather than only being examined a few months or years after a program is provided. For instance, those who participated in financial education courses in high school had a higher propensity to save money later in life (Bernheim, Garrett, and Maki 2001). Those with lower incomes and education levels, for example, have been shown to save in quite different ways from those with higher incomes and education levels in studies of saving

and financial literacy. Focusing on these populations and developing programs that are better suited to their needs and barriers to saving for the future may be essential (Olima, 2013). There is proof that some of the targeted programs now in place have helped the poor increase their savings (Schreiner and Sherraden, 2007). We unavoidably get to the topic of errors when we consider that people have limited literacy and do not prepare for their retirement at 19 years old. One of these programs can demand that participants learn some fundamental financial concepts (Alesina and Lusardi, 2006). The literature review for the current study also reveals that little research has been done on the connection between investment choice and financial management, as well as the effect of investment choice on the connection between financial management and literacy, which is the main driving force behind this study. This study aims to fill this gap by employing investment decisions as a mediator in the interaction between financial literacy and financial management.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides details of the research methodologies used to solve the research topic and accomplish the study's objectives. Consequently, this section of the study deals with the research design and approach, study population, sample size, sampling technique, source of data, research instrumentation and data collection procedure, validity and reliability, and ethical consideration.

3.2 Research Design

The present study adopts a positivist research philosophy, which is deemed appropriate for the investigation of the effect of financial literacy on personal financial management and the possible mediation by investment. This choice is justified by the fact that the study focuses on measurable variables that lend themselves well to quantitative data collection and analysis. As such, the study employs a quantitative research approach, which is renowned for producing precise and generalizable data that can be tested against preconceived hypotheses and existing concepts (Goertzen, 2017). Quantitative research is viewed as a deductive approach to investigation, in which the researcher starts with a theory and tests it through empirical observation (Ragab and Arisha, 2018). In the present study, both descriptive and explanatory research types are used to provide a comprehensive understanding of the effect of financial literacy, personal financial management, and investment among private sector employees. The descriptive research type is utilized to provide a detailed description of the variables, whereas the explanatory research type enables the investigation of the relationship between financial literacy, personal financial management, and investment. By combining both

research types, the study aims to provide a holistic understanding of the research question and to uncover the potential mechanisms that mediate the relationship between financial literacy, personal financial management, and investment.

Finally, the study employed a cross-sectional survey design where deductive reasoning is applied to the quantitative data (Cohen, Manion, and Morrison, 2017). The survey design allows the collection of data from different units over a specific period. Since the study is conducted over a limited time period, the cross-sectional survey is deemed more appropriate.

- Philosophical underpinning: positivist or subjectivist - The study approach: quantitative or qualitative or a mix - The research type: descriptive, explanatory, or exploratory or a mixture - The research strategy: experimental, survey, or case study, a mixture - should also touch briefly on data and methods.

3.3 Population of the Study

In the context of this study, the target population comprises employees of SMEs in the Greater Accra Region. It is estimated that approximately 1,823, 070 are employed by SMEs in the Greater Accra Region (Ghana Statistical Service IBES Report, 2017). Hence the target population of this study comprised 1,823, 070 employees of SMEs in the Greater Accra Region.

3.4 Sample and Sampling Techniques

In obtaining the sample size in a given population, three main methods for estimating a sample size can be identified. Firstly, the sample size can be calculated by using formulas (Israel, 1992). Secondly the use of a published statistical table to estimate the sample size, for instance, the published statistical table of Krejcie and Morgan (1970) and Cohen et al., (2013, 2009). Lastly, a researcher can decide to utilize census methods

by collecting data from the entire population. For this study, sample size was established from Yamane's simplified formula (1967) as shown below:

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

Where:

n = Expected Sample Size N = Study Population

E = Margin of error and the confidence interval is 95%

$$n = \frac{1823070}{1 + 1823070 (0.05)^2} = 399.91 \cong 400$$

Based on the formula, four hundred employees of SMEs in the Greater Accra Region will be drawn for the study. This represents the total number of participants that were included in the study sample. The study will employ multi-stage sampling. Multistage sampling involved dividing the population into groupings (or clusters). It's a more complicated type of cluster sampling that's frequently referred to as multi-stage cluster sampling which combined both stratified and simple random sampling. With regard to this study, a multi-stage sampling that involved two stages will be used. The first stage comprised the categorization of SMEs into manufacturing and service. The second will employ convenience sampling, where employees of SMEs who are ready and available at the time of data collection will be included in the sample.

3.5 Data and Data Collection

The researcher commenced the data collection by contacting the NBSSI district directorates to inform them of the nature and objectives of the research. Respondents were then contacted individually to inform them of the study as well as to solicit their participation in the survey. The data collection was self-administered. It simply means the questionnaires were personally given to the actual respondents in the operating districts of the NBSSI in the Greater Accra region. To participate in the survey,

participants were approached in their workplaces. To encourage participation, each questionnaire was accompanied by a cover note from the researcher clarifying the aim of the study as well as soliciting respondent involvement in the study; it as well provided assurance of confidentiality of the selected participants and briefly introduced the research work. Details of how the sample is arrived in presented in Table 3.1 below.

Table 3.1 Sample Size and Data collection

MMDA	Expected Sample	Achieved Sample
Ablekuma Central Municipal District	55	49
Adenta Municipal District	35	32
Ashaiman Municipal District	40	36
Ayawaso West Municipal District	45	40
Dangme East District	35	34
Ga East Municipal District	45	42
Korle-Klottey Municipal District	40	34
La Dade Kotopon Municipal District	45	41
La Nkwantanang Madina Municipal District	50	47
Ningo Prampram District	40	37
Total	430	400

Field Survey (2023)

3.5.1 Variables Description and Measurement (data and variables)

The study employed three major variables namely; Financial Literacy, Personal Financial Management, and Investment Decision. Financial Literacy in this study was operationalized as the ability to understand and make use of a variety of financial skills. It was the independent variable and was measured by four items (Purwidianti and Tubastuvi, 2019; Yap et al., 2018). Personal Financial management in this study reflects managing ones money as well as saving and investments. PFM was which is the dependent variable was measured by 10 items (Yap et al., 2018; Nyamute and Maina, 2011; Olima 2013). Investment decision in this study refers to the process of selecting

a stock from a wide range of options available on the various stock markets. ID which is the mediating role was measured by 9 items (Baihaqqy et al., 2020; Raut, 2020). Summary of the measures of the various constructs is presented in Table 3.2 below.

Table 3.2 Operationalization of Variables

Variable Type	Number of Items used	Sources
Independent (Financial Literacy)	4	Purwidianti and Tubastuvi, 2019; Yap et al., 2018
Dependent (Personal Financial Management)	10	Yap et al., 2018; Nyamute and Maina, 2011; Olima 2013
Mediating (Investment Decision)	9	Baihaqqy et al., 2020; Raut, 2020
Totals	23	

3.5.2 Data Collection Instruments

The questionnaire was designed in three parts. The first part contains the demographic information of the respondents. The second part contains questions on financial literacy, the third part contains questions on investment decisions, and the last part on the financial management of employees. A five-point Likert scale was used to code the responses, with 1 denoting "strongly agree," 2 denoting "agree," 3 denoting "uncertain," 4 denoting "disagree," and 5 denoting "strongly disagree." In the survey, participants were asked to choose a number from 1 to 5 that best represented their thoughts on each statement. The items used to measure the constructs are included in the appendix. Though the items were already validated and tested in previous studies, this study also conducted different types of validity and reliability of the items to ensure the final results are reliable.

3.6 Validity and Reliability of Constructs/Variables

To ensure external validity, the participants were randomly selected to avoid selection bias. The selected participants were assured of the benefits of the study to the organisation to ensure a minimum dropout rate. Both the content and the construct validity of this study were also ensured. The validity and reliability of a research study are two research criteria for consistency (Straus, 2017). Alpha coefficient of 0.70 is used as a cut-off point for assessing the internal consistency of the research item and scales to guarantee study reliability (Singh, 2017; Hair, Biasutti and Frate, 2017)). To eliminate logical flaws and biases in the study, the researcher emphasizes the validity and reliability of the results. This was done by adopting all of the constructs and conducting a pilot study using ten employees from the company. The regression model is specified as

$$Y = \alpha + \beta_1 X_i + \beta_2 X_{ii} + \varepsilon$$

Where Y is Personal Financial Management; X_i = Financial Literacy; X_{ii} = Investment Decision

$\beta_{1,2}$ are the rates of effects and ε =error

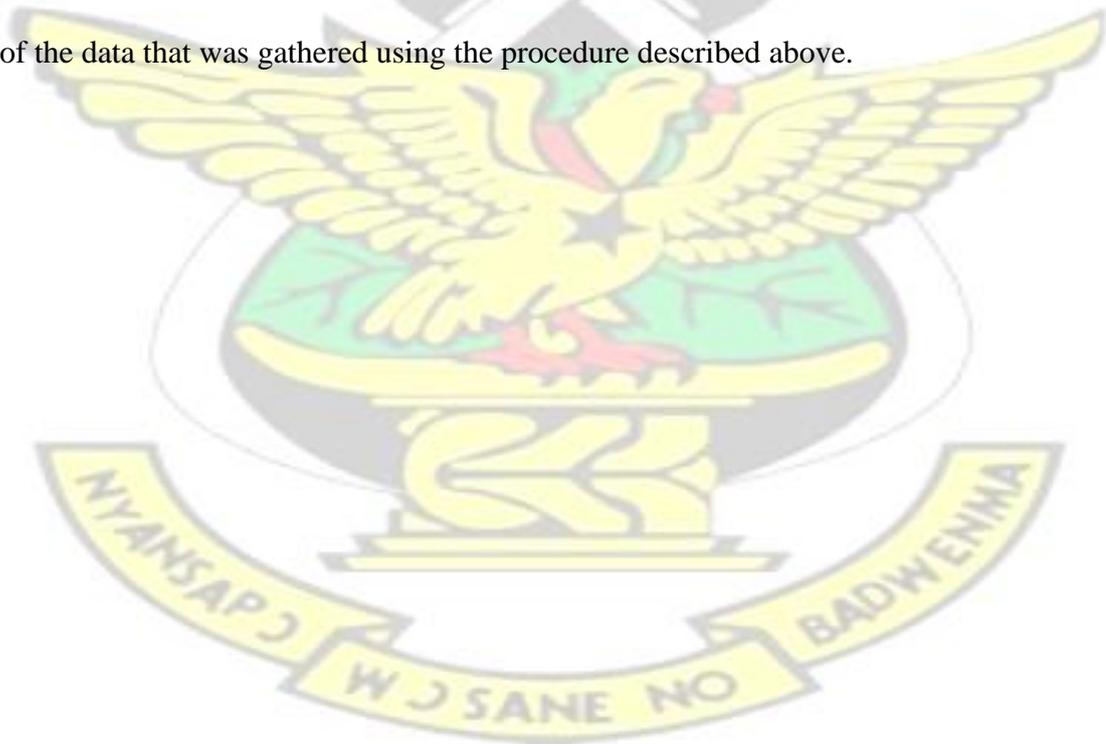
3.7 Ethical Consideration

No of the setting or circumstance, a person must uphold certain moral standards (Akaranga and Makau, 2016). The moral guidelines that researchers in different fields of research must adhere to are the focus of research ethics (Fouka and Mantzorou, 2011). The decision-makers of all chosen firms were given a consent form outlining the benefits and dangers associated with participation and asking for their permission to be included in the study. Selected businesses have the option to decline taking part in the study. In the consent form, the researcher said that all confidentiality and anonymity

protections would be upheld. It was also noted that businesses have the freedom to decide when, how much, and under what circumstances they provide information. In their interactions with subjects, the researcher refrained from engaging in any behavior that could be construed as deceit. The researcher also avoided any instances of data manipulation and plagiarism.

3.8 Chapter Summary

This chapter provided details of the research methodologies used to solve the research topic and accomplish the study's objectives. Consequently, this section of the study deals with the research design and approach, study population, sample size, sampling technique, source of data, research instrumentation and data collection procedure, validity and reliability, and ethical consideration. The next Chapter provides an analysis of the data that was gathered using the procedure described above.



CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter displays the findings drawn from the data. Descriptive statistics, exploratory factor analysis, and confirmatory factor analysis were all used in the analysis. To assess the study hypotheses, the researcher employed SmartPLS 4. The study's main findings are further examined and contrasted with findings from previous studies.

4.2 Demographic Characteristics

This section analyzes the participant's demographic data. Information captured included the participants' age, gender and level of education. The results are displayed in the table 4.1 below. The results showed that 27.8% of the participants were females while 72.3% were males. Also, 41.3% of the participants aged between 18-30 years, 50.5% aged between 31-40 years and 8.3% of the remaining also aged between 41-50 years. The results also showed that 23.3% of the participants had bachelor's degree, 2.0% had diploma and 75.0% of the remaining had master's or PhD.

Table 4. 1 Demographic Characteristics

Variable	Dimension	Frequency	Percent
Gender	Female	111	27.8
	Male	289	72.3
Age	18-30 years	165	41.3
	31-40 years	202	50.5
	41-50 years	33	8.3
Level of Education	Bachelor's Degree	92	23.0
	Diploma	8	2.0
	Graduate Studies (Master / Ph.D.)	300	75.0
	Total	400	100.0

4.3 Exploratory Factor Analysis

In order to identify latent variables connected to research, exploratory factor analysis (EFA), a multivariate statistical technique, can distinguish between and concentrate on the theoretical underpinnings and conjectural constructs that can explain the arrangement and ordering of the assessed variables (Watkins, 2018). In essence, the EFA looks for internal variables that are highly correlated with one another but have weak correlations with any external variables. However, there are a few rules that must be observed in order to utilise the EFA correctly. Watkins (2018) advises using 10-15 participants per variable to more effectively collect population-level data. For instance, a ratio or interval scale should be used to evaluate each variable. Of course, there are more standards that need be met.

4.3.1 Common Method Bias

In quantitative research and self-reporting studies, common method bias can be troublesome. To satisfy the requirements of validity, compliance to the test for common method bias is necessary. To lessen the incidence of common method bias, two factors must be met: procedural design and statistical control. Reasonable attention was used in the survey design process in accordance with some of the suggestions made by Podsakoff et al. (2003). Harman's one-factor test was used as a statistical analysis. The findings demonstrate that there isn't any risk of common method bias because the single factor extraction was 15% and was below the 50% threshold value.

4.3.2 KMO and Bartlett's Test

The findings presented in Table 4.3 reveal that the study's Kaiser-Meyer-Olkin (KMO) sampling adequacy score was 0.928. This score indicates that the variables within the dimension are significantly associated with each other, whether measured against a zero

matrix or an identity matrix. As such, the exploratory factor analysis was able to generate reliable estimations based on the study's sample size. Additionally, Table 4.3 indicates the statistical significance of these findings, as evidenced by a p-value of less than 0.05. These results suggest that the internal correlations between variables may be attributable to other factors not explicitly accounted for in the study. Furthermore, it is worth noting that most of the evaluation methods used to measure the underlying concept underwent significant modifications.

Table 4. 2 Common Method Bias

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.731	14.926	14.926	3.731	14.926	14.926
2	2.939	11.755	26.681	2.939	11.755	26.681
3	2.691	10.764	37.445	2.691	10.764	37.445
4	1.989	7.956	45.401	1.989	7.956	45.401
5	1.963	7.852	53.253	1.963	7.852	53.253
6	1.461	5.844	59.097	1.461	5.844	59.097
7	1.272	5.087	64.183	1.272	5.087	64.183
8	1.2	4.8	68.983	1.2	4.8	68.983
9	1.122	4.488	73.471	1.122	4.488	73.471
10	0.903	3.614	77.085			
11	0.876	3.505	80.59			
12	0.764	3.055	83.645			
13	0.663	2.653	86.299			
14	0.602	2.407	88.706			
15	0.517	2.069	90.775			

16	0.48 4	1.937	92.712			
17	0.38	1.518	94.23			
18	0.33 3	1.331	95.561			
19	0.30 7	1.229	96.79			
20	0.21 8	0.873	97.662			
21	0.20 8	0.833	98.495			
22	0.16 4	0.656	99.151			
23	0.11 7	0.466	99.617			
24	0.05 9	0.238	99.855			
25	0.03 6	0.145	100			
Extraction Method: Principal Component Analysis.						

Table 4. 3 KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.928
Bartlett's Test of Sphericity	Approx. Chi-Square	15095.28
	df	300
	Sig.	0.000

4.4 Evaluation of Measurement Scale

A two-step procedure employing Smart PLS and partial least squares structural modelling (PLS-SEM) was used to examine the suggested model (Ringle et al., 2015). The study initially assessed the validity and reliability of the data using reflecting measurement methods. When the goal is to develop theoretical ideas and the study is meant to provide predictions, the application of PLS is pertinent (Hair et al., 2012).

4.4.1 Reliability

Two key studies are employed to evaluate the internal consistency reliability of measures in this research, namely composite reliability (CR) and Cronbach's alpha

(CA). While CR assesses the extent to which one group of items can predict the underlying construct in another, CA provides a reliability score based on correlations across apparent indicator constructs. Both CA and CR scores should fall between 0.70 and 0.95 to be considered valid. Table 4.4 presents the internal consistency reliability of the model, with CR scores ranging from 0.958 to 0.974 and CA scores ranging from 0.942 to 0.971 for all variables. These results suggest that the measures used in the study are reliable and consistent in capturing the underlying constructs.

4.4.2 Validity

Convergent and discriminant validity make up construct validity. Items must positively correlate with other items of the same construct in order to fulfil the criteria for convergent validity (Churchill, 1979). In the table 4.4, convergent validity was proved because every AVE value was greater than 0.50. The researcher used Fornell-Larcker criterion to check for cross-loading in order to evaluate the discriminant validity. Every latent loading in the analysis was larger than the cross-loadings of other latent variables. Additionally, the AVE was found to be greater than the equivalent squared correlations among the latent variables (Table 4.5).

4.4.3 Multicollinearity Test

The significance of the indicators and their interactions are examined using multicollinearity. In cases when there is multicollinearity between two others, it is advised to use only one of the indicators. Due to multicollinearity, the constructs would become a dependent variable rather than an independent one. Perhaps this is the reason why users must turn on a particular alert. The results of the multicollinearity test seem acceptable in Table 4.4. (Nitzl, 2016). (Fuchs, 2011).

Table 4. 4 Reliability and Validity

Constructs	Items	Loadings	CA	CR	AVE	VIF
Financial Literacy	FL1	0.923	0.942	0.958	0.852	2.869
	FL2	0.942				2.768
	FL3	0.958				2.922
	FL4	0.866				2.837
Investment Decision	ID1	0.857	0.965	0.970	0.784	2.846
	ID2	0.868				2.249
	ID3	0.905				2.471
	ID4	0.901				2.786
	ID5	0.915				2.993
	ID6	0.883				3.029
	ID7	0.875				3.047
	ID8	0.884				2.502
	ID9	0.878				2.826
Personal Financial Management	PFM1	0.9	0.971	0.974	0.758	2.927
	PFM10	0.911				2.25
	PFM11	0.864				2.553
	PFM12	0.85				2.854
	PFM2	0.9				2.73
	PFM3	0.916				2.806
	PFM4	0.903				1.434
	PFM5	0.84				2.839
PFM6	0.899				2.257	
PFM7	0.832				2.168	

	PFM8	0.835				2.34 3
	PFM9	0.789				3.09 8

Table 4. 5 Discriminant Validity

Constructs	1	2	3
Financial Literacy	0.923		
Investment Decision	0.864	0.885	
Personal Financial Management	0.887	0.947	0.871

4.5 Descriptive Statistics

A statistical summary of the study's variables is presented below. The mean values of the variables serve as a summary of the raw data, while the standard deviation indicates how well the mean values represent the data (Field, 2009). As shown in Table 4.6, the descriptive analysis reveals that the financial literacy score had a mean of 3.66 and a standard deviation of 1.354, the investment decision score had a mean of 3.94 and a standard deviation of 1.116, and the personal financial management score had a mean of 3.92 and a standard deviation of 1.108. The results demonstrate that all constructs' departures from their respective means were not statistically significant, proving that the calculated or statistical mean and the observed mean are the same.

4.6 Normality Test

Kurtosis and skewness, two further metrics of data normality, are also included in Table 4.7. Wilson et al. (2010), suggests using these two metrics as effective methods for displaying the probability distribution of a data collection. According to the criterion, most of the variables must fall between -2 and +2. However, Table 4.6 findings demonstrate that every variable is within the acceptable limits for this study.

Table 4. 6 Descriptive and Normality Statistics

Constructs	Mean	Standard Deviation	Skewness	Kurtosis
Financial Literacy	3.66	1.354	-0.643	-0.688
Investment Decision	3.94	1.116	-0.808	-0.263
Personal Financial Management	3.92	1.108	-0.745	-0.333

4.7 Boot Strapping Resampling Technique

Investigators can more precisely assess the precision and predict the behaviour of one or more target constructs by using a structural equation model, also known as an internal model. By resampling the data 5,000 times and taking standard error into consideration, the coefficients of the mediating model are examined for consistency (Hair et al., 2014). Numerous indicators, including collinearity, p value, path coefficient, coefficient of determination, effect size (f^2), and impact size, are taken into account below the structural model (g^2). A significant relationship between two or more measurements is known as collinearity. The variance inflation factor was used to gauge the level of collinearity between the latent variables.

4.7.1 Predictive Relevance

The R^2 values of 0.75, 0.50, and 0.25 are categorised as significant, moderate, and weak, respectively, by Henseler (2018). However, Chin et al. (2020) state that it is crucial to understand the R^2 when considering the related field's environment into consideration. According to table 4.7 and Figure 4.1, the model offers a respectable level of prediction accuracy (R^2 Adjusted) values 0.747 and 0.914 for investment decision and personal financial management. The results showed that financial literacy and personal financial management together explained 91.4% of the fluctuation in the

personal financial management. As a result, the model is able to anticipate the future and has strong predictive power.

Table 4. 7 R-square and Adjusted R-square

Constructs	R-square	R-square adjusted
Investment Decision	0.747	0.747
Personal Financial Management	0.915	0.914

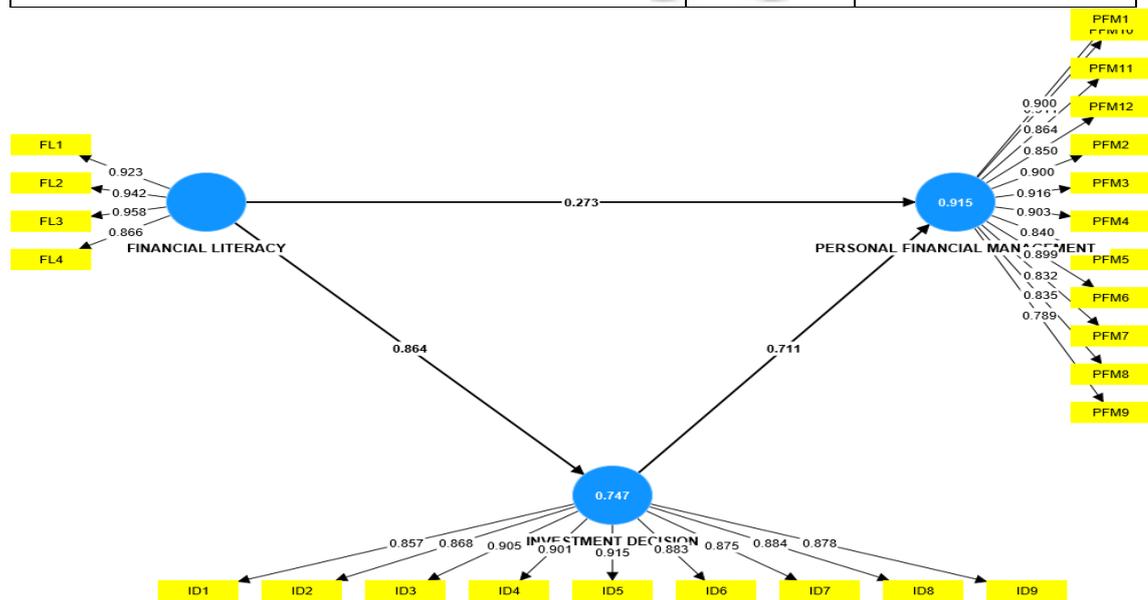


Figure 4. 1 Measurement Model Assessment

4.8 Hypotheses for Direct and Indirect Relationship

The four hypotheses proposed in the study was evaluated in this section. The study's primary objective was to investigate the mediating function of investment decision in the relationship between employees' personal financial management and financial literacy in the private sector.

According to the study's hypothesis, there is a direct correlation between employees in the private sector's degree of personal financial management and their financial literacy. The results of Table 4.8 show that personal financial management and financial literacy have a positive and significant link (B=0.273; SD=0.039; t=6.926; P-

value=0.000<0.05). According to the findings, while all other things stay constant, there would be a 27.3% improvement in personal financial management for every gain in financial literacy. The findings support the hypotheses put forward in the study.

The study also made the assumption that the financial literacy of private sector employees and their decision of investments are clearly related. The results of Table 4.8 show that financial literacy and investment choice have a positive and significant association (B=0.864; SD=0.013; t=66.490; P-value=0.000<0.05). According to the findings, while all other things stay constant, there would be 86.4% improvement in investment decision for every gain in financial literacy. The findings support the hypotheses put forward in the study.

The study also assumed that there is a direct link between employees in the private sector's investment decision and their personal financial management. Findings from Table 4.8 show a significantly positive correlation between investment decision and personal financial management (B=0.711; SD=0.036; t=19.494; P-value=0.000<0.05). According to the findings, while all other things stay constant, there would be 71.1% improvement in personal financial management for every gain in investment decision. The findings support the hypotheses put forward in the study.

Further, it has been shown in the research that the association between financial literacy and individual financial management of employees in the private sector is mediated by investment decision. Results in table 4.8 demonstrated that the link is mediated by investment decision (B=0.615; SD=0.032; t=19.157; P-value=0.000<0.05). The findings indicate that investment decision act as a mediator in the link between financial literacy and personal financial management. Furthermore, the results imply that a greater degree of investment decision-making will enhance the relationship (61.5%)

between understanding your finances and managing them. The results confirm the study's declared hypothesis.

Table 4. 8 Hypotheses for Direct and Indirect Relationship

Hypotheses	Path Coefficient	Error	T Statistics	P Value	Decision
Financial Literacy -> Personal Financial Management	0.273	0.039	6.926	0.000	Supported
Financial Literacy -> Investment Decision	0.864	0.013	66.490	0.000	Supported
Investment Decision -> Personal Financial Management	0.711	0.036	19.494	0.000	Supported
Financial Literacy -> Investment Decision -> Personal Financial Management	0.615	0.032	19.157	0.000	Supported

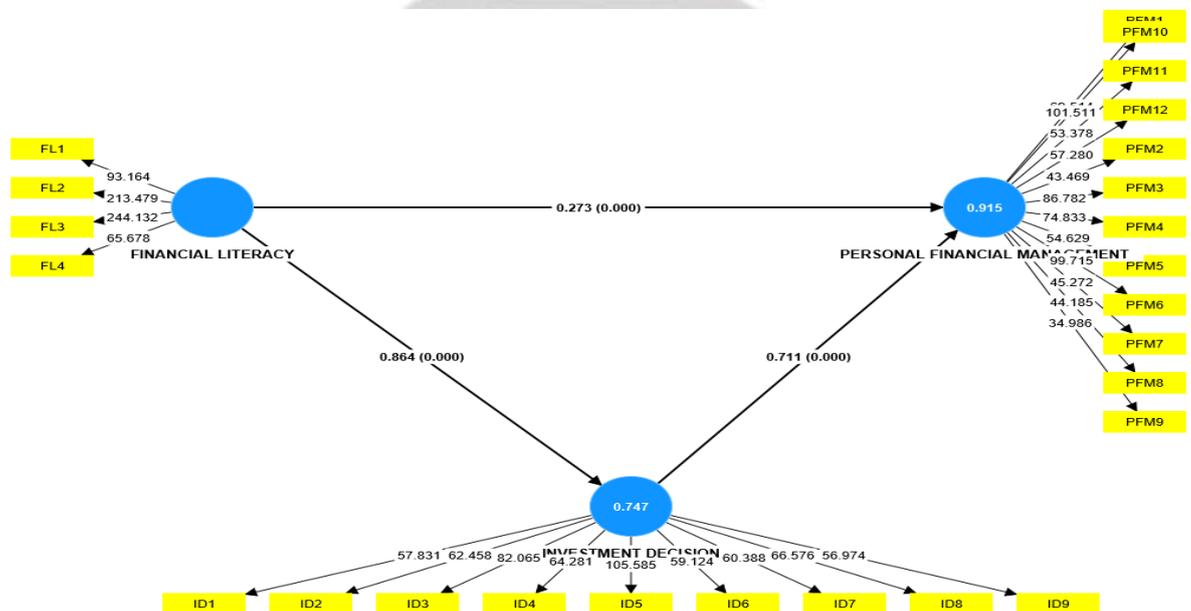


Figure 4. 2 Structure Model Evaluation

4.9 Discussion Key Findings

In this part, the main findings are described together with pertinent literature. The study's primary objective was to investigate the mediating effect of investment decision in the relationship between financial literacy and personal financial

management among private sector workers. The next section below discusses the main findings in relation to the specified objectives.

The objective one assessed if there is a direct correlation between employees in the private sector's degree of personal financial management and their financial literacy. The results showed that personal financial management and financial literacy have a positive and significant link ($B=0.273$; $SD=0.039$; $t=6.926$; $P\text{-value}=0.000<0.05$). According to the findings, while all other things stay constant, there would be a 27.3% improvement in personal financial management for every gain in financial literacy. The findings support the hypotheses put forward in the study. The results agree with those of Nyamute and Maina (2011), who looked at personal financial management behaviours of both employees with and without financial education. Utilizing a prepared questionnaire, 192 employees provided the survey data. The results demonstrated how personal financial management behaviours are influenced by financial literacy. It is advised that people strive to learn the fundamental concepts of money management so they may better handle their own funds. The results back up Olima (2013), which examined the level of financial literacy among Kenya Revenue Authority workers and the effects of that understanding on those workers' savings practises and readiness for social security. The study made use of primary information acquired through semi-structured questionnaires. Because financial education programmes direct programme creation and improvement, the study's findings showed that financial literacy has a significant influence on financial management. The findings are in line with Jayantilal's (2017) evaluation of financial literacy and its effect on Bank of Baroda (Kenya) Limited employees' personal financial management. The study, which concentrated on the 173 bank workers, utilised a descriptive quantitative research approach. Structured questionnaires were used to gather data, and they were given to

bank personnel using convenience sampling. According to the study, financial literacy has a favourable impact on personal financial management among Bank of Baroda (Kenya) Limited workers, which results in increased investing practise, more balanced deposits, and a reduced debt-to-income ratio.

Also, the objective two made the assumption that the financial literacy of private sector employees and their decision of investments are clearly related. The findings showed that financial literacy and investment choice have a positive and significant association ($B=0.864$; $SD=0.013$; $t=66.490$; $P\text{-value}=0.000<0.05$). According to the findings, while all other things stay constant, there would be 86.4% improvement in investment decision for every gain in financial literacy. The findings support the hypotheses put forward in the study. The findings correspond with those of Baihaqqy et al. (2020), who looked at how financial literacy affected investing decisions in Indonesian society. Using a survey method and 400 research samples made up of Baby Boomers, Gen Xers, and Gen Y/NetGen, the study took a quantitative approach. The results showed that investing decisions are influenced by financial knowledge. The findings back up Arianti (2018), who also looked at and calculated how financial behaviour, income, and financial literacy affect investment decision-making. The quantitative descriptive research approach was used in the investigation. Information was acquired from 100 students via questionnaire. The study's findings showed that investing decisions are influenced by financial knowledge. The findings also align with those of Raut (2020), who investigated the influence of prior practices and financial literacy on the investment choices of individual investors. A self-administered questionnaire was used in the investigation. According to the research, investors' choices are significantly influenced by societal pressure, which may be decreased by having a strong grasp of money matters.

The objective three also assumed that there is a direct link between employees in the private sector's investment decision and their personal financial management. Findings showed a significantly positive correlation between investment decision and personal financial management ($B=0.711$; $SD=0.036$; $t=19.494$; $P\text{-value}=0.000<0.05$). According to the findings, while all other things stay constant, there would be 71.1% improvement in personal financial management for every gain in investment decision. The findings support the hypotheses put forward in the study. Although similarly studies have not look at the impact of investment decision on personal financial management, other studies have examined the effect on investment decision on firm value and performance. Fauziah and Asandimitra (2018), for instance, examined how investment choices influenced the firm values of chemical and basic industrial enterprises listed on the Indonesia Stock Exchange (IDX) between 2012 and 2016. The research method used in this study is causal research. 49 businesses make up the sample chosen intentionally. The findings demonstrated that the investments made had no impact on the company's worth. Additionally, Nugraha et al. (2020) conducted study to examine the effects of finance, investment, and dividend policies on firm value in the manufacturing industry between 2014 and 2018. With a total sample of 15 manufacturing businesses represented on the Indonesia Stock Exchange, the study employed a quantitative descriptive methodology. The data was processed with Eviews-10. According to the results, policy, investment choices, and dividend policy all have a considerable influence on business value. The study suggests that company management should keep raising the bar for itself in terms of investment choices and payout practises. Putri and Budyastuti (2021) also identified and investigated the impacts of investment decisions, dividend policy, and profitability on firm value in Indonesia's stock exchange-listed production enterprises between 2016 and 2018. The

results showed that while company value is positively influenced by profitability and dividend policy, firm value was unaffected by investment decisions.

Furthermore, the objective four stated that investment decision is a mediator in the relationship between financial literacy and individual financial management of employees in the private sector. Results showed that the relationship is mediated by investment decision ($B=0.615$; $SD=0.032$; $t=19.157$; $P\text{-value}=0.000<0.05$). The finding demonstrates that investment decision mediates the association between financial literacy and personal financial management. Furthermore, the results imply that a greater degree of investment decision-making will enhance the relationship (61.5%) between understanding your finances and managing them. The results confirm the study's declared hypothesis. Prior studies did not examine the mediating function of investment decision in the relationship between financial literacy and personal financial management, but instead examined investment decision as an intervening variable on other factors, for instance, Hendrawaty et al. (2020) investigated the influence of the chief executive officer's financial literacy on the corporate financial performance of SMEs by examining the mediating function of sources of investment decisions that include financial statement, proponent information, and neutral information. 301 executives from SMEs in Indonesia were the primary source of the data. The indirect impacts demonstrated that the link between the business performances of the CEO was strongly mediated by sources of investment decision. The direct and indirect effects of financial decisions, dividend policy, and company value, as well as the function of investment decisions as a mediator, were also investigated and studied by Sugeng and Yusna (2020). Data were gathered using an intentional sample strategy, and the population was selected based on population factors. Multiple regression was used to

evaluate the data, and the Sobel Test was used to look for any relevant mediators. The findings demonstrated that the connection is mediated by investing choice.

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 Introduction

The findings, conclusions, and recommendations are summarized in this chapter, which also serves as the study's last chapter. The study limitations and the direction of future research are also covered in this chapter.

5.2 Summary

5.2.1 Relationship between Financial Literacy and Personal Financial Management

The first objective of the study was to examine the direct association between the level of personal financial management and financial literacy among private sector employees. The findings of the study reveal a statistically significant positive correlation between personal financial management and financial literacy. According to the findings, while all other things stay constant, there would be an improvement in personal financial management for every gain in financial literacy. The findings support the hypotheses put forward in the study.

Possessing a solid understanding of financial literacy can be beneficial in achieving various life objectives, such as seeking prudent credit counselling, establishing a business, and saving for education or retirement. Financial literacy encompasses knowledge on developing a financial plan, preparing for retirement, managing debt, and tracking personal finances. Financial literacy may be acquired through reading books, listening to podcasts, subscribing to financial news, or speaking with a financial

professional. By learning about financial literacy topics like budgeting or emergency planning, people become better equipped for the unforeseen. Even while receiving a sizable unforeseen expense or losing employment generally has a detrimental effect, one might also reduce the effects by preparing for crises and exercising financial education ahead. By learning how and where to manage and save money effectively, people may create plans that offer guidance, hold them responsible for their finances, and map a path to achieving seemingly unattainable goals. Someone may always devise a plan to increase their chances of making a desire come true, even if they are unable to do it right now due to financial constraints. Achieving financial literacy requires gaining knowledge and implementing various skills related to budgeting, managing and repaying debt, comprehending credit and investment products. Setting a budget, keeping tabs on your spending, paying your bills on time, saving wisely, keeping a regular eye on your credit report, and making future plans are all essential steps to improving your personal finances.

5.2.2 Relationship between Financial Literacy and Investment Decision

The second goal likewise made the assumption that there was a direct link between financial literacy and investment decisions made by private sector workers. Findings showed that financial literacy and investing decision had a positive and significant link. According to the findings, while all other things stay constant, there would an improvement in investment decision for every gain in financial literacy. The findings support the hypotheses put forward in the study.

Financial education encompasses both long-term financial planning and short-term financial strategy. Understanding how present investment decisions can impact future tax liabilities is a significant aspect of financial literacy. Additionally, comprehending

the most suitable investment products to prepare for retirement is another essential component. Imagine having to make a choice that will impact your life without all the necessary information. People may approach significant life decisions with more security if they are equipped with the required financial knowledge since, they will be less likely to be taken off guard or negatively affected by unexpected outcomes. Financial literacy or awareness is necessary in the market world, especially in developing countries, in order to choose the best project. To increase their capacity to make sane investing decisions, people must gain financial expertise and information. People who are financially literate understand the fundamental ideas behind money and assets; they are educated, informed, and aware about matters relating to assets, taxes, insurance, banking, investments, and money management. They use their abilities and expertise to comprehend and plan financial decisions. Investors that are financially savvy make wise decisions. Therefore, financial literacy is crucial for empowering individuals to make sane investing decisions in order to efficiently control their money. Financial losses result from illogical investment decisions made by people or investors who lack financial literacy.

5.2.3 Relationship between Investment Decision and Personal Financial Management

Additionally, the objective three assumed a direct connection between employees in the private sector's investment decision and their personal financial management. The results showed a strong and positive correlation between personal financial management and investment decision. According to the findings, while all other things stay constant, there would be an improvement in personal financial management for every gain in investment decision.

Investing money is a significant business decision where investors carefully select commodities or investment options based on their risk tolerance, investment objectives, and expected returns. These decisions can have long-term consequences on a company's growth and profitability, affecting cash flows. Even individuals with limited means can earn substantial returns by planning ahead. Company executives allocate financial resources to long-term assets and create capital budgets despite limited funds. Short-term investments are selected by managers in charge of daily operations to ensure flexibility and working capital. Factors such as periodic return, risk, maturity, tax benefits, volatility, and inflation rates affect investment decisions. By strategically allocating financial resources across various assets, a company can maximize its return on investment. Long-term investment decisions, also known as capital budgeting, are made when money is invested for an extended period. Investing can increase wealth, promote financial security, aid in retirement planning, and help achieve personal and financial goals. It can also be an effective way to generate multiple income streams and combat inflation.

5.2.4 The mediating role of Investment Decision on relationship between Financial Literacy and Personal Financial Management

Furthermore, the objective four stated that investment decision is a mediator in the relationship between financial literacy and individual financial management of employees in the private sector. Results showed that the connection is mediated by the decision of investments. The outcome demonstrates that investment decision acts as a mediator in the association between financial literacy and personal financial management. The findings also suggest that the association between financial literacy and personal financial management will be strengthened with increased investment decision-making.

The choice to invest money by a firm is based on the belief that long-term potential returns would exceed short-term dangers. Investments are decisions made in respect to assets that give advantages over the minimum interest rate received. Investment project finance is the use of a variety of kinds of funding for a project. Risky projects are expected to produce large returns depending on the project's cash flow, which surpasses the investment. These strong investment ideas are evaluated with a high hurdle rate. A number of the business' investment decisions may be used as an illustration of how it is growing. The business's growth shows that it can manage its assets effectively, allowing it to choose from a wide range of profitable investment possibilities. The company's growth gives investors hope for future increases in earnings. The situation will often strengthen the connections between financial literacy and management among people and business enterprises.

5.3 Conclusion

The major goal of the study was to better understand how investment decision influence workers' individual financial literacy and their personal financial management. To accomplish the goals outlined in the study, the researcher employed a quantitative technique using a descriptive and explanatory research design. The participants in the study were workers at SMEs in the Greater Accra Region. To gather primary data, the researcher employed a convenience sample strategy. The information was gathered from 400 employees of SMEs in the Greater Accra Region using a well-structured questionnaire. Descriptive statistics and a normality test were performed on the data. The researcher utilised SmartPLS 4 and SPSS version 26 to analyse the data. The study's conclusions showed that investment decisions and personal financial management are significantly and positively impacted by financial literacy. The

findings also demonstrated that investment decision significantly affect personal financial management. Additionally, it was shown that investment decision mediates the link between financial literacy and personal financial management. The results imply that people's financial management may be improved by increasing their understanding of financial literacy and investing decision.

5.4 Recommendation

The major goal of the study was to better understand how investment decision influences workers' individual financial literacy and their personal financial management. The study's conclusions showed that investment decisions and personal financial management are significantly and positively impacted by financial literacy. The findings also demonstrated that investment decision significantly affect personal financial management. Additionally, it was shown that investment decision mediates the link between financial literacy and personal financial management. The results imply that people's financial management may be improved by increasing their understanding of financial literacy and investing decision. The researcher suggests the following recommendation out of the findings.

- The research's conclusions suggest that financial literacy training programmes and their providers give thorough knowledge on borrowing and investments.
- The report also suggests that borrowers make plans for their spending patterns and payment of debts to avoid being crippled financially by the severity of interest rate swings.
- The report suggests that, in light of the rise in financial literacy, there be an increase in the quantity and diversity of financial literacy training programme providers, some of which will include complete information on debt and investments.

- The study suggests that consumers should receive training in appropriate money management techniques in order to foster a more competitive and effective market for consumption and savings.

5.5 Limitations and Future Research Direction

When completing the research, a number of difficulties were encountered, including some respondents who felt compelled to withhold personal information because they viewed it as being of a private nature and occasionally of competitive value. People understandably experience embarrassment when disclosing information that reveals shortcomings in their personal management, especially when secrecy is not guaranteed. Some respondents may have given responses that were prejudiced or dishonest because they believed that sharing information about how well they understand specific parts of financial management and how they use it for financial benefit was too crucial. The study was also conducted at a certain period. The study's flaw is that it doesn't record the respondents' degrees of financial literacy or their long-term financial management strategies. This is significant because rational consumers' knowledge and tastes evolve over time. The impact of individual financial management on workers in SMEs in the Greater Accra region was examined in this study. In order to determine if there is uniformity regarding the impact of financial education on personal financial management among participants in the various organisations, it is advised that similar study be reproduced in other organisations and the findings be compared. It is also advised that follow-up studies on responders, similar to this one, be conducted throughout time. The influence of financial management on SME workers in Ghana was the primary goal of this research on financial education. Therefore, it is advised

that research be conducted among personnel from various organisations across the nation to strengthen the validity and coherence of the results.

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APPENDIX
QUESTIONNAIRE

Dear Survey Participant,

Welcome to the Survey on the effect of Financial literacy, Investment and personal financial management Nexus: A case study of Private Sector employees in GA East Municipal Assembly.

Please be assured that your responses will be treated in the strictest confidence, with the data collected being anonymized and used for statistical and academic purposes only.

Thank you.

Part 1: Personal Information (Please tick the appropriate answer)

Demographic Characteristics: The following information/statements are needed for classification and comparison purposes of variables necessitated by this study only. Please indicate the classifications which best describe you by ticking (✓) appropriately in the box provided.

Please answer the following questions:

1. *Gender:* Male Female
 2. *Age*
18-30 years 31-40 years 41-50 years Above 50 years
 3. *Level of Education*
Junior High School Senior High School Diploma Bachelor's Degree
 Graduate Studies (Master / Ph.D.) Others For Others, please specify.....
-

Please answer the following questions by considering the degree to which these questions

No.	FINANCIAL LITERACY	1	2	3	4	5
FL1	I know what inflation and interest rates changes					
FL2	I make a price comparison when buying a product or service					
FL3	I pay attention to the price/performance ratio when buying a product or service					
FL4	I have knowledge about financial products					
	INVESTMENT DECISION					
ID1	Past history influences my present investment decisions					
ID2	Although the price of my investment has gone down, I am holding to it					
ID3	I rely on my knowledge other than trusting other people					
ID4	Thinking hard and for a long time about something gives me satisfaction					
ID5	I understand the fundamentals of the company and have confidence in making my investments					
ID6	I tend to sell my investments immediately the prices go back to the acquisition price					
ID7	Previous profits generated from similar investments by the company made it very attractive to me to invest in it					
ID8	The last investment was more of bad luck than it was my poor judgment					
ID9	I am holding to my investments because I know the prices will revert soon					

use a scale of 1-5. Where 1=strongly disagree, 2=disagree, 3=neutral, 4= agree and

5=strongly agree

PERSONAL FINANCIAL MANAGEMENT						
No.	Statement	1	2	3	4	5
PFM1	Comparison shopped when purchasing a product or service					
PFM 2	Paid all your bills on time					
PFM 3	Kept a written or electronic record of your monthly expenses					
PFM 4	Stayed within your budget or spending plan					
PFM 5	Paid off the credit card balance in full each month					
PFM 6	Maxed out the limit on one or more credit cards					
PFM 7	Made only minimum payments on a loan.					
PFM 8	Began or maintained an emergency savings fund.					
PFM 9	Saved money from every paycheck.					

PFM 10	Saved for a long-term goal such as a car, education, home, etc.					
PFM 11	Contributed money to a retirement account					
PFM 12	Bought bonds, stocks, or mutual funds					

Please indicate how often you have engaged in the following activities in the past six months: 1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = always

THANK YOU

