UNIVERSITY OF CAPE COAST

FINANCIAL LITERACY AND RETIREMENT PLANNING OF HEALTH SECTOR WORKERS IN THE ABURA-ASEBU KWAMANKESE DISTRICT HOSPITAL



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BY
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Administration degree in Finance

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DECLARATION

Candidate's Declaration

Name

work and that no part of it has been presented for another degree in this
university or elsewhere.
Candidate's Signature Date
Name:
Supervisor's Declaration
We hereby declare that the preparation and presentation of the dissertation was
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ABSTRACT

This study investigates the relationship between financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District Hospital. The research employed a quantitative research design and utilized the Statistical Package for the Social Sciences (SPSS) 22 for data analysis. The study had five key objectives: (1) to examine the financial literacy levels of health sector workers, (2) analyze gender differences in financial literacy, (3) determine the retirement planning behavior, (4) analyze educational differences in retirement planning, and (5) ascertain the relationship between financial literacy and retirement planning. The findings revealed that the health sector workers exhibited a moderately high level of financial literacy, with male workers scoring higher than their female counterparts. However, the study also found a relatively low level of retirement planning behavior among the participants, with disparities based on educational attainment. Individuals with higher levels of education demonstrated more proactive retirement planning practices, such as contributing to formal savings plans and developing written retirement strategies. The regression analysis indicated a moderate, yet statistically significant, relationship between financial literacy and retirement planning. While financial literacy was a significant factor, the study also highlighted the presence of other influential variables not accounted for in the model. The study's conclusions suggest the need for targeted interventions and educational programs to address the gender and educational gaps in financial literacy and retirement planning within the healthcare sector.

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KEYWORDS

Financial Attitude

Financial Behavior

Financial Education

Financial Literacy

Health Sector Workers

Retirement Planning

DEDICATION

I dedicate this work to my dear wife, Mrs. Esther Adoko, and our cherished children, Desmond Acquah Bentil, Benjamin Acquah Bentil, Baaba Anamoah Bentil and Kelvin Acquah Bentil. Your endless love, patience, and understanding have sustained me throughout this endeavor. You have been my rock, my inspiration, and the reason I strive to be better each day. This achievement is as much yours as it is mine

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LIST OF ACRONYMS

ANZ Australia and New Zealand Banking Group Limited

EBRI Employee Benefit Research Institute

FINRA Financial Industry Regulatory Authority

GHS Ghana Health Service

GSS Ghana Statistical Service

HSOPS Health Sector Occupational Pension Scheme

MOF Ministry of Finance

OECD Organisation for Economic Co-operation and Development

SPSS Statistical Package for Social Science

CHAPTER ONE

INTRODUCTION

Financial literacy is a critical determinant of individuals' ability to make informed decisions regarding their financial future, particularly in the context of retirement planning (Mustafa, Islam, Asyraf, Hassan, Royhan, & Rahman, 2023). It encompasses essential knowledge and skills, such as budgeting, saving, investing, and understanding financial products and markets. Retirement planning, on the other hand, is the process of setting long-term financial goals and taking steps to ensure a secure post-retirement life. In addition to this, the increasing complexity of financial products and services, it is essential to be equipped with the knowledge to evaluate and choose the best options for financial well-being (Mustafa et al., 2022). Those with higher levels of financial literacy are more likely to understand complex financial instruments, accurately assess risks, and implement effective savings and investment strategies (Mustafa et al., 2022). This study seeks to investigate the relationship between financial literacy and retirement planning among health sector workers' financial literacy and retirement planning in the Abura-Asebu Kwamankese District Hospital.

Background of the Study

Retirement planning is a critical aspect of financial management, ensuring individuals achieve financial security and maintain a desirable standard of living after exiting the workforce (Safari, Njoka, & Munkwa, 2021). For health sector workers, who dedicate their lives to improving societal well-being, planning for retirement is particularly important due to the demanding nature of their work and the need for adequate financial resources to sustain

their quality-of-life post-retirement (Chen & Chen, 2023). Retirement planning involves setting financial goals, saving systematically, and making informed investment decisions to prepare for the transition (Chen & Chen, 2023). However, many health sector workers face challenges in this area, often due to limited financial literacy, lack of access to planning resources, or systemic barriers that hinder adequate preparation.

The situation in Ghana reflects these global concerns (Sarpong-Kumankoma, 2023). Reports from the Ghana Health Service (GHS) indicate gaps in retirement preparedness among health sector workers, which have led to financial stress and reduced quality of life for many retirees in this field. Factors such as inadequate pension benefits, lack of awareness about retirement planning options, and insufficient financial education contribute to this issue. According to the GHS, some retirees face difficulties in accessing their pensions, while others realize too late that their savings are insufficient to meet post-retirement needs. These issues highlight the pressing need to address financial literacy and retirement planning among health sector workers in Ghana (Sarpong-Kumankoma, 2023).

Addressing this challenge is essential for fostering financial security and enhancing the overall well-being of health workers (Hu, Zhang, & Xiong, 2024). Improving financial literacy can empower them to make informed decisions about savings, investments, and pension contributions. Furthermore, tailored interventions, such as workshops and one-on-one advisory services, can equip workers with the knowledge and tools to prepare adequately for retirement (Hu et al., 2024).

Economists all over the world have been seeking to understand the links between financial literacy, retirement planning, and wealth for the past few years (Hastings & Mitchell, 2022). Health workers usually make financial decisions relating to savings, investment, and retirement planning. For this reason, financial literacy becomes crucial in the decision-making of health workers toward their retirement from the service (Danso et al., 2023). According to Rai et al. (2023), financial literacy is the combination of awareness, knowledge, skills, attitude, and behavior necessary to make sound financial decisions, which aids in retirement planning.

Recent developments in financial markets make financial literacy increasingly important for retirement planning for workers (Lusardi & Mitchell, 2023). The increasing complexity of financial markets, increasing the cost of living, and the shift of retirement responsibility from government to individuals, which all demand personal financial management capability in individuals and households, are among the frequently cited reasons underpinning financial literacy enhancement initiatives in developed countries (McCarthy, 2023).

The very key decisions health workers make throughout their lives affect their financial security either positively or negatively and eventually the financial security of the nation. It is for this reason that the Government of Ghana has continued to prioritize financial literacy initiatives (Bank of Ghana, 2024). The aim is to raise awareness of the range of financial products and services available to consumers to help them better understand and manage their finances, thereby improving the financial behavior of the citizenry (Ministry of Finance, 2024).

The launch of Ghana's Annual Financial Literacy Week was initially recommended by the country's Financial Sector Strategic Plan (Godwyll, 2022). With a population that has grown to approximately 31 million people as of 2021 (Ghana Statistical Service, 2021), Ghana's financial literacy landscape has evolved. While the adult financial literacy rate was reported at 32 percent in 2023 (Koomson et al., 2022), more recent studies have shown some improvement. According to Marshall Wellington Blay et al. (2024), Ghana's financial literacy rate had increased to approximately 40 percent by 2023. This improvement can be attributed to various initiatives, including the continued implementation of the Annual Financial Literacy Week and other educational programs (Kwaah & Ghartey, 2022).

The concept of financial literacy as a construct and its measurement was indeed pioneered by the JumpStart Coalition for Personal Financial Literacy in the United States. However, in recent years, there has been a growing body of research focusing specifically on financial literacy in the Ghanaian context (Agyei et al., 2023; Asuming et al., 2022). A study by Agyapong and Attram (2023) found that despite improvements, significant disparities in financial literacy levels persist across different demographic groups in Ghana, with urban populations generally showing higher levels of financial literacy compared to rural areas. Furthermore, Kouladoum et al. (2023) highlighted the increasing importance of digital financial literacy in Ghana, given the rapid adoption of mobile money and other digital financial services. Their research suggests that enhancing digital financial literacy could be a key factor in improving overall financial inclusion and economic well-being in the country.

Despite an improvement in Ghana's financial inclusion rate, financial literacy remains a challenge (World Bank, 2023). Financial literacy rates vary widely across the globe, differing significantly between major advanced and emerging economies. On average, adults in major advanced economies show higher financial literacy rates compared to those in emerging economies (OECD, 2020).

The importance of financial literacy cannot be overlooked due to its impact on the quality of life of people (Lusardi & Mitchell, 2021). Recent studies have further emphasized the crucial role of financial literacy in personal and national economic well-being (Yakoboski et al., 2020). Again, some studies (Ergün, 2021; Lusardi & Mitchell, 2023;) have suggested that those with a high level of financial literacy are faced with fewer problems with issues relating to personal finance, investment, borrowing, and savings. Understanding financial literacy, financial behaviors, and decisions among health workers is of crucial importance to policymakers in several aspects. Financial literacy is of great importance as it will determine whether individuals will make a profitable financial decision and hence increase wealth accumulation, reduce poverty, improve their standard of living, and as a result help in attaining the Millennium Development Goal of poverty reduction.

A lack of experience in financial management may be particularly harmful to health workers' financial decisions in the present and future (Moore et al., 2021). Health workers need to understand the basic concepts of savings, investment, and spending to make the right and most profitable financial decisions. According to Gallego-Losada et al. (2021), health workers face various challenges in their finances, such as making sound investment

decisions. Understanding the risk and return associated with investment decisions requires a higher level of financial information. Good financial behavior is associated positively with a higher level of financial knowledge, financial education, and experience (Kaiser et al., 2020; Lusardi et al., 2020).

Recent research by Lim et al. (2023) identified the need for studies specifically focusing on measuring financial literacy among healthcare professionals. Financial and/or financial knowledge indicators are used as inputs to model the need for financial education and to explain variations in financial outcomes such as savings, investment, and debt. Investors' financial skills rest on their knowledge, their literacy rate of investment, and the skills required to use the knowledge. Furthermore, an investor's rationality, that is, lack of major biases, also counts greatly (Almenberg & Dreber, 2023).

A study conducted by Chen & Chen (2023) investigated the level of financial knowledge among healthcare workers in various settings. Findings indicated that many healthcare professionals lacked knowledge of financial issues, including investment strategies in their daily lives. While general studies show that people with higher education levels should have a higher level of financial literacy, many studies specifically targeting health workers have revealed that the level of financial literacy is still low, potentially harming their retirement planning (Kim & Xiao, 2020).

Further, financial literacy has, in recent years, attracted the interest of various groups, including governments, bankers, employers, community interest groups, financial markets, and other organizations, especially in developed countries. The importance of improving financial literacy has increased due to factors including the development of new financial products,

the complexity of the financial markets, and changes to political, demographic, and economic variables. The growing body of literature relating to financial literacy suggests consumers' comprehension of basic financial principles and products is minimal (OECD, 2020; World Bank, 2021) and might not be sufficient to guarantee households are in a position to make sound financial decisions.

For instance, empirical evidence suggests more financially illiterate households are more prone to inefficient low participation in the stock market, portfolio under-diversification, inertia in their portfolio management, over-indebtedness, and the use of informal sources of borrowing (Garg & Singh, 2022; Linnainmaa et al., 2020). A low level of financial literacy does not necessarily imply households are bound to make poor financial decisions. At least in principle, they can seek advice and guidance from qualified sources.

For that, households can resort to advice from experts when making financial decisions; this advice can act as a substitute for their learning, thus rendering the effort of acquiring financial expertise unnecessary. However, two problems might undermine this argument. First, the advice might be biased when financial advisors are also acting as sellers of financial products (Rossi & Utkus, 2020), and biased advice might not improve customers' portfolio allocations, possibly even being detrimental. Second, consumers might not demand advice. For instance, Jung et al. (2022) observe that even unbiased and free advice is not typically demanded and conclude that the supply of fair advice is not sufficient to improve investors' portfolio allocations. Their findings suggest that problems might lie in the demand for advice from investors, and not only in their supply.

The concept of financial literacy has been of increasing interest over the past few years, particularly in the context of healthcare professionals (Marston et al., 2021). The main reason for this is that today we live in a highly complex environment, confronting many problems such as political instability, and economic and financial distress. Globalization and the complexity of the financial markets have heightened the need for financial literacy. Globalization also makes it more difficult for consumers to make suitable decisions regarding taking on student loans or credit card debt. Consumers need to adapt rapidly, and this has led to greater product development and investment. This explains why governments, institutes, corporations, investors, and individuals have increasingly emphasized financial literacy. Moreover, this study examines the relationship between financial literacy and retirement planning as well as the various factors influencing both financial literacy and retirement planning decisions of health workers (Lone & Bhat, 2022).

Statement of the Problem

Retirement planning is a critical aspect of financial security, yet many individuals face significant challenges in adequately preparing for their retirement years (Lusardi & Mitchell, 2023). According to a report by Morgan Stanley, retirees grapple with longevity, market fluctuations, inflation, taxes, and legacy desires, all of which affect the adequacy of retirement savings. Additionally, a study by Morada Senior Living highlights that financial uncertainty, healthcare costs and social isolation are common challenges faced by retirees (Sarpong-Kumankoma, 2023). In the health sector, retirement planning presents unique challenges. Health sector workers often face demanding work schedules and high-stress environments, which can impact

their ability to focus on long-term financial planning. The Health Sector Occupational Pension Scheme (HSOPS) in Ghana aims to provide income replacement and support for health sector workers upon retirement. However, despite these efforts, many health sector workers still struggle with inadequate retirement savings and financial literacy (Sarpong-Kumankoma, 2023).

Financial literacy enhances retirement planning by equipping individuals with the knowledge and skills necessary to make informed financial decisions (Jiang & Shimizu, 2024). Theoretically life-cycle theory and the behavioral finance theory, highlight the importance of financial literacy in retirement planning. The life-cycle theory suggests that individuals plan their consumption and savings behavior over their lifetime to achieve a stable standard of living. Financial literacy enables individuals to understand complex financial products, assess risks, and make strategic decisions about saving and investing for retirement. This knowledge helps individuals to allocate resources efficiently, avoid financial pitfalls, and ensure a secure financial future. Also, behavioral finance theory further emphasizes the impact of financial literacy on retirement planning by addressing cognitive biases and emotional factors that influence financial decision-making. Financially literate individuals are better equipped to recognize and mitigate biases such as overconfidence, procrastination, and loss aversion, which can hinder effective retirement planning (Jiang & Shimizu, 2024).

In addition to this, educational level is a significant determinant of retirement planning, as it influences an individual's financial literacy, income potential, and access to resources (Mishra, 2025). The human capital theory posits that individuals invest in education to enhance their skills and knowledge,

which in turn increases their earning potential and economic stability. Higher educational attainment is associated with better job opportunities, higher salaries, and greater access to employer-sponsored retirement plans. Educated individuals are more likely to understand the importance of saving for retirement, navigate complex financial products, and make informed decisions about their retirement planning (Mishra, 2025).

Despite this there is a lack of studies that specifically address the unique challenges faced by health sector workers in retirement planning. While general research on retirement planning exists, the specific needs and circumstances of health sector workers, such as their demanding work schedules and high-stress environments, are often overlooked. Additionally, there is limited research on the impact of financial literacy programs tailored to health sector workers, which could provide valuable insights into effective strategies for improving their retirement outcomes. Further, earlier studies have failed to take into consideration the role of educational level as a determinant of retirement planning among health sector workers (Dhlembeu, Kekana, & Mvita, 2022). While these studies have explored the relationship between education and retirement planning in the general population, there is a need for more focused research on how educational attainment influences retirement planning behaviors and outcomes in the health sector.

Recent studies have consistently shown low levels of financial literacy among various populations in Ghana. For instance, Oppong-Boakye and Kansaba (2022) and Ndou and Ngwenya (2022) reported a national mean of only 44% in terms of financial knowledge among Ghanaians. More recent research by Marshall Wellington Blay et al. (2024), indicates that while there

has been some improvement, with financial literacy rates increasing to approximately 40% by 2023, there is still significant room for progress.

Ansong and Gyensare (2024) have explored financial literacy among students, traders, and business owners in Ghana, there is a noticeable lack of research focusing specifically on health sector workers. This gap is particularly problematic given the critical role that health workers play in society and the unique financial challenges they may face (Jennifred Maurice Adjei et al., 2023). Moreover, little is known about how financially literate individuals perform financially after retirement and during retirement, especially in the context of Ghana's health sector. This knowledge gap is crucial to address, as it could provide valuable insights for improving retirement planning strategies and financial education programs tailored to health workers' needs (Kaur et al., 2021).

Given these concerns, there is a pressing need to examine the financial literacy levels and retirement planning practices of health sector workers in Ghana, with a specific focus on the Abura-Asebu Kwamankese District Hospital. This study aims to address this gap in the literature and provide valuable insights that can inform policy and practice to improve the financial well-being and retirement preparedness of health workers in Ghana.

Purpose of the Study

The main purpose of this study is to examine the relationship between financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District Hospital.

Research Objectives

Specifically, the study seeks to achieve the following objectives:

- Investigate the gender differences in the levels of financial literacy among health sector workers in the Abura-Asebu Kwamankese District hospital.
- Analyze educational differences in the levels of retirement planning among health sector workers in the Abura-Asebu Kwamankese District hospital.
- 3. Ascertain the relationship between financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District hospital.

Research Questions

Based on the research objectives above, the following questions emerged:

- 1. What differences exist in the levels of financial literacy among male and female health sector workers in the Abura-Asebu Kwamankese District hospital?
- 2. What differences exist in the levels of retirement planning among educational qualifications of health sector workers in the Abura-Asebu Kwamankese District hospital?
- 3. What is the relationship between financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District hospital?

Significance of the Study

Financial literacy is of global concern. Complicated financial products, low level of awareness, and lack of knowledge about financial matters make the need for financial literacy significant (Gowri, 2023). Way and Holden (2023)

reveal that financial literacy can ameliorate concerns about inadequate retirement savings, rising debt levels, and personal bankruptcy. Since pension schemes are changed from time to time, it is expedient for people to be educated on financial products and financial well-being to aid decisions towards retirement planning.

The study contributes to empirical literature and also opens doors for further research. This study benefits society, especially working individuals in senior high schools in Ghana to realize the importance of retirement in life and the factors that might affect their behavior of retirement planning. Time might play an important role in the success of retirement planning; therefore, researchers might find out when is the suitable time to start the planning from this study. The government and policymakers could refer to this study to know the current situation to support the citizens in developing a better environment in their afterlife of retirement.

Organization of the Study

The study is organized into five (5) chapters. Chapter One is the introduction, and it covers the background to the study, the statement of the problem, the purpose of the study, research objectives, research questions, the significance of the study, and the organization of the study. Chapter Two entails the literature review. This involves the theoretical foundation and the empirical review of the study, conceptual framework as well as gaps identified in the literature regarding the research objectives. Chapter Three describes the methodology employed for the research. Chapter Four deals with the results and discussion of the study whilst Chapter Five provides the summary, conclusions, and recommendations.

Chapter Summary

Chapter one presented the background to the study which examined financial literacy and retirement planning in the global context. It also highlighted the statement of the problem, the purpose of the study, the research question and significance of the study, as well as the organization of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews relevant literature on financial literacy and retirement planning. The chapter discusses the key theories that underpin the research. Theories discussed in this section include the theory of reasoned action, the life-cycle theory of consumption and savings, and the role theory. An empirical review is undertaken in this chapter with an emphasis on financial literacy level, gender disparities in financial literacy as well as the link between financial literacy and retirement planning. The conceptual framework for the study is further discussed in this chapter. Other factors that influence the relationship between financial literacy and retirement planning are also discussed.

Theoretical Framework of the Study

There are three theories around which the current study was built and thus underpin the study. These are the theory of reasoned action, the life-cycle theory of consumption and savings, and the role theory. These theories are discussed in the study in the next subsection.

Theory of Reasoned Action

Fishbein and Ajzen (1980) in understanding financial literacy joined forces to explore ways to predict behaviors and outcomes. According to them, individuals are usually quite rational and make systematic use of the information available to them. Thus, people consider the implications of their actions before they decide to engage or not engage in a given behavior. They developed this theory to predict and understand behavior and attitudes. Their

framework, which has become known as the theory of reasoned action, looks at behavioral intentions rather than attitudes as the main predictors of behaviors. One of the greatest limitations of this theory was with people who have little or feel they have little power over their behaviors and attitudes. They described the aspects of behavior and attitudes as being on a continuum, from one of little control to one of great control.

To balance these observations, they added a third element to the original theory. This element is the concept of perceived behavioral control. The addition of this element has resulted in the newer theory known as the theory of planned behavior. The purpose of the theory is to predict and understand motivational influences on behavior that is not under the individual's volitional control; to identify how and where to target strategies for changing behavior; to explain virtually any human behavior such as why a person buys a new car, votes against a certain candidate, is absent from work or engages in premarital sexual intercourse.

The theory further provides a framework to study attitudes toward behaviors. According to the theory, the most important determinant of a person's behavior is behavior intent. The individual's intention to perform a behavior is a combination of attitude toward performing the behavior and subjective norm. The individual's attitude toward the behavior includes; behavioral belief, evaluations of a behavioral outcome, subjective norms, normative beliefs, and the motivation to comply.

According to the theory, if a person perceives that the outcome of performing a behavior is positive, she/he will have a positive attitude forward performing that behavior. The opposite can also be stated if the behavior is

thought to be negative. If relevant others see performing the behavior as positive and the individual is motivated to meet the exceptions of relevant others, then a positive subjective norm is expected. If relevant others see the behavior as negative, and the individual wants to meet the expectations of these "others", then the experience is likely to be a negative subjective norm for the individual (Glanz, Lewis, Rimer, & Eds, 1997).

Life-Cycle Theory of Consumption and Savings

The life-cycle theory of consumption and savings is usually used to analyze household consumption and savings behavior including saving for retirement (Modigliani & Brumberg, 1954; Ando & Modigliani, 1963). The simplest exposition of the life-cycle model posits maximization of lifetime utility, consumption smoothing, and decision-making under certainty. Consumption smoothing indicates that an individual attempt to maintain a relatively stable level of consumption. It is vital to emphasize that smoothing consumption does not mean keeping consumption or expenditure constant (Browning & Crossley, 2021).

The theory further contends that individuals smooth their consumption over their lifetime. This means that, based on the estimated resources an individual expects over his or her lifetime, the individual saves and spends to maintain a steady lifestyle. For instance, during periods when consumption expenditure exceeds income, the individual borrows to finance consumption. The individual also saves during periods when income exceeds consumption expenditure. This requires spending or borrowing in the younger years, saving in the middle years, and using the savings in the later years.

Since the life-cycle theory assumes that individuals consider not just their current financial position or near-future position but project the future as well, it provides a reason for retirement savings. The financial resources needed for retirement depend on the level of consumption anticipated during retirement and the cost of maintaining this level of consumption throughout the years of retirement. The central predictions of the life-cycle theory rest on the assumptions that individuals are far-sighted and rational and that they are correctly informed about the various factors which determine wealth accumulation. It infers that the saving decisions of different individuals reflect their rationality and knowledge status, given their preferences and other exogenous factors (Clark, d'Ambrosio, McDermed & Sawant, 2024).

The essence of knowledge makes financial literacy critical in making savings decisions since it involves the ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security (Hastings, Madrian, & Skimmyhorn, 2024). It is not only enough to know the level of financial knowledge that individuals possess but it is important to understand how this knowledge affects financial decision-making over a lifetime (Asaad, 2022).

Role Theory

A theoretical paradigm used in assessing the decisions people make toward retirement and the adjustment process of retirement is the role theory (Wang & Schlutz, 2022). Linton (1936) introduced the initial elements of role theory, defining status as a position in social structure and role as the expected behaviors of status occupants. Over time, the use of the term role broadened in two ways. First, the role is now used to describe both status and the behaviors

associated with it. Second, the role can refer to either the behaviors expected of a status occupant or the behaviors exhibited by a status occupant.

Role theory became more complex and more directly relevant to the study of life transitions (George, 1993). The theory puts forward the notion that older adults experience changes when role transition occurs. In particular, the transition from worker to a retiree is commonly identified as a major role loss which can lead to an erosion of social identity and self-esteem, (Ross & Drentea 2021). Retirement is an adjustment of one's principal role usually as a paid worker, a role that is central to a person's identity (Kim & Moen, 2021) because it directly affects the income and social interaction of the retirees.

Ashforth (2024) argues that being involved in a role is central to one's identity, which in turn affects one's behavior and decision. Role transition may include the process of losing or weakening work roles such as the work role or the career role while strengthening the family member role and the community member role (Barnes-Farrell, 2003). Roles give people a sense of worth and achievement (Choi, 2021) and help to shape their behaviors and self-concept (Hooyman & Kiyat, 2023). Behavior is based on social position and other factors such as demographic characteristics of the individual.

The Concept of Financial Literacy

Financial literacy is the ability to understand how money works: how someone makes, manages, and invests it and also expends it as well as other related issues of finance. In-depth knowledge of financial literacy is required to understand how money works. Such knowledge includes knowledge on the concept of financial literacy such as; compound interest, financial goals,

budgeting, investment, superannuation, contract, employment models, savings, purchase and priority, risk and returns relationships, diversification, financial goal setting, opportunity cost, budgeting strategies, and others. Some of the concepts are discussed below

The principle of compound interest: When people save money, they earn interest. If this interest is not spent, it compounds and savers earn interest on interest. Compound interest is "free money" and will increase a person's total savings accumulation over time. The same is true for investors who reinvest stock and mutual fund dividend and/or capital gains distributions in additional shares that later grow in value. Credit is the present use of other people's money (for instance a bank or credit card company) and is useful for emergencies and to purchase "big ticket" items. However, interest increases the cost of purchases made with credit, and credit use can lead to overspending and missed savings opportunities.

Opportunity cost is the next best alternative that a person gives up when they decide to do something. In other words, what you don't do when you do something else. For example, if someone makes a GH¢ 25 charitable donations, that money is not available to save or spend. Every day, people make dozens of opportunity cost trade-offs when they decide how to use their money and time. Financial goals should have a specific cedi cost and time frame such a "Save ¢8,000 to buy a new car in 4 years." Short-term goals can be achieved in less than one-year, medium-term goals in one-to-five years, and long-term goals in more than five years.

Investors diversify their investments by "not putting all their eggs in one basket." In other words, investment risk is reduced by selecting different types

of investments and different securities within each type (such as stocks from companies in different industry sectors, for instance, health care and technology, or stocks from different countries around the world).

Generally, the more uncertain the return on an investment, the higher its risk (of losing money) and the potential rate of return. This relationship is typically depicted with a pyramid that shows low-risk cash assets at the base of the pyramid and higher-risk stocks, real estate, derivative securities, and commodities toward the top. This depicts a positive correlation between risk and return: the higher the risk, the higher the return, and the lower the risk, the lower the return.

There has been an increase in financial literacy from the academic community, international organizations, and governments recently (Olga, 2023). Young adults may not be prepared to effectively manage the psychological costs associated with their financial problems. Such psychological costs include increased levels of stress and decreased levels of well-being (Norvilitis & Santa, 2023; Roberts & Jones, 2021). However, it is generally accepted among researchers that, financial education is the key to decreasing financial problems, especially among young adults.

In psychology and education, learning can be commonly defined as a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in one's knowledge, skills, values, and world views (Illeris, 2024; Ormrod, 1995). The level of knowledge of any subject, including financial knowledge and other knowledge, can, therefore, be connected to variables, such as age, gender, level

and program of study, parents' level of education, accessibility to media, sources of education on money matters and place of residence.

The financial literacy construct is very broad. The definition of financial literacy does not identify the level or depth of an individual's literacy. It can be construed as being the least delineated construct. For example, it may not be appropriate to conclude that an individual is financially illiterate if he or she lacks knowledge on credit cards, interest rates, or minimum balance payment, for that person may simply not believe in being in a debt situation. Some sections of society do not concur with a debt lifestyle and may not be aware of credit card issues or loan interest rates.

As stated by Mason and Wilson (2024), there is an inadequate conceptualizing of financial literacy. This is due to the synonymous use of the term to mean financial awareness. Studies have shown that financial literacy does not mean that a person would be able to make the right financial decision, as that person may not be familiar with the financial awareness of the financial construct or particular instrument (Marriott & Mellett, 1996). Similar to the tests of Marriott and Mellett (1996), there are several such tests and learning programs administered by financial institutions, governments, and citizens. One such test revealed significant differences in the statistical analysis when structured modeling was applied to the data as compared to treating the evaluations as independent and disregarding the inherent correlation structures can result in an inaccurate conclusion (Fry, Mihajilo, Russell & Brooks, 2024).

Researchers noted that consumerism, which promotes instant gratification, contributes to the misuse of credit and financial debt in American society (Chen & Volpe 2021; Elliot 2024; Roberts & Jones 2021). There is

evidence that shows a correlation between individuals' attitudes toward credit card usage and their financial behaviors. Danes and Hira (1990) examined individuals' knowledge, beliefs, and behaviors regarding the use of credit cards and found that people who indicated they use credit cards for installment purchases were more likely to use credit cards and incur finance charges compared to people who did not endorse the use of credit cards for installment purchases.

Xiao, Noring, and Anderson (1995) in examining affective, cognitive, and behavioral attitudes of college students, found that students generally have favorable attitudes toward the use of credit card use. Again, students who owned credit cards were more likely to hold favorable behavioral attitudes toward credit card usage than students who did not own one. Xiao, Noring, and Anderson, (1995) also found that more frequent use of credit cards was associated with more favorable overall behavior and affective attitudes towards the use of credit.

Organization for Economic Cooperation and Development (2023) found that consumers often think that they know more than they do. A common finding has been demonstrated not just in financial matters but across a wide range of knowledge and abilities (Alba & Hutchinson, 2024; Lichtenstein, Fischhoff & Phillips, 1982; Yates, 1990). Agnew and Szykman (2023) found correlations between actual and perceived financial knowledge. The correlation between actual and perceived knowledge is often moderate. At best the correlation ranges from 0.10 to 0.78 across demographic groups having a median correlation of 0.49 across 20 categories. Similar variation has been documented in non-financial knowledge domains (Alba & Hutchinson, 2024).

Hence, caution should be taken when using perceived knowledge as a simple proxy for actual knowledge.

Still, some express the need for knowledge in specific ways, such as understanding "the basic principles of sound financial health and responsibility" (National Foundation for Credit Counselling 2022). The United States' initial documentation for the National Strategy for Financial Literacy highlights a need for "the information, knowledge, and skills to evaluate options and identify those that best suit a person's needs and circumstances" (U.S. Department of Treasury, 2024).

Americans' lack of financial knowledge has been confirmed in the larger population by Hilgert and Hogarth (2023), by analyzing data from the University of Michigan's Survey of Consumers. Some 1,000 respondents between the ages of 18 and 97 were given a 28-question true/false financial literacy quiz, with questions examining knowledge about credit, saving patterns, mortgages, and general financial management. That study revealed that respondents could answer only two-thirds of the questions correctly. They were best informed regarding mortgages (81% correct responses), followed by saving patterns (67% correct), credit cards (65% correct), and general financial management (60% correct). Respondents were less knowledgeable about mutual funds and the stock market. Only one-half knew that mutual funds do not pay a guaranteed rate of return, and 56% knew that "over the long-term, stocks have the highest rate of return on money invested

Similar findings were reported in smaller samples, among specific groups of the population. Low levels of financial literacy are confirmed by related research by the JumpStart Coalition for Personal Financial Literacy,

which focuses on high school students in the U.S. (Mandell, 2022.) Students perform poorly on credit management and personal finance questions and have little less knowledge about stocks, bonds, and other investment vehicles. A survey of Washington State residents by Moore (2003) showed that people often do not understand the terms and conditions of consumer loans and mortgages. Mitchell (1988) examined workers' knowledge of pension provisions and showed that a substantial percentage of employees were unable to identify key features of their company retirement schemes, including early and normal retirement ages and how much their benefits would rise if they delayed their retirement.

Factors Influencing the Level of Financial Literacy

Gender

Financial illiteracy is more widespread among women than men, particularly familiarity with basic economic and financial concepts (Lusardi & Mitchell, 2022). Zissimopoulos, Fonseca, Mullen, and Zamarro (2022) found that less than 20 percent of middle-aged college-educated women were able to answer a basic question on compound interest as compared to about 35 percent of college-educated males of the same age group. Chen and Volpe (2023) found a similar gender difference among women at younger ages that were unexplained by differences in majors, class rank, work experience, and age.

Prior research consistently shows that gender is more important when considering advanced financial literacy, with a large percentage of females displaying relatively low levels of literacy relative to their male counterparts (Gallery, Newton & Palm, 2023); Lusardi& Mitchell 2007). There are few pieces of research carried out to test the difference between gender and financial

literacy rate. These include Rooij, Lusardi, & Alessie (2007) who found out that males scored better in financial knowledge compared to females.

Numerous studies argue that men are more likely to perform better on various literacy questions (Mandell, 2022; Worthington, 2023, Monticone, 2023). Almenberg and Säve-Söderbergh (2023) explain the large gender differences among Swedish individuals to the fact that women in Sweden rarely make economic decisions in the household. Goldsmith and Goldsmith (1997) suggest that women score worse than men because in general women are less interested in investment and personal financing topics and also rarely use financial services.

There is mixed support as well for gender differences in financial behaviors/practices. For instance, Hayhoe, Leach, Turner, Bruin, and Lawrence (2024) found that, compared to male students, female students had a higher tendency to have a written budget, plan their spending, keep bills and receipts, and save regularly. Henry, Weber, and Yarbrough (2021) also found that there is a higher likelihood for female students to have a budget than male students, although the sample size for male students was much smaller than for female students.

Wagland and Taylor (2023) however did not find gender to be a significant variable impacting the level of financial literacy among a sample of business degree students in an Australian university. However, the results indicated that the financial literacy of males was more than females. The mean score for males was found to be 61.41%. It could be concluded that there was a significant difference between male and female responses in terms of financial literacy.

However, Ibrahim, Harun, and Isa (2023) found that there is no difference between the level of financial knowledge between male and female students. The males responded "Don't know" more than selecting the incorrect answer on nine of the 20 questions while the females responded "Don't know" rather than selecting an incorrect answer on thirteen of the 20 questions meaning gender is not very relevant in considering financial literacy. The nine questions for the males were common to the thirteen questions for the females. On all of these 9 questions, there was a higher percentage of "don't know" responses by the females than males (Manton, English, Avard, & Walker, 2024).

Employment

Employment status may influence the financial attitudes and behaviors of individuals (Xiao et al. 2024). Chen and Volpe (2021) surveyed 924 college students in examining their financial literacy, its relationship to personal characteristics, and the impact on students' opinions and decisions about finances. They found that participants who had more years of work experience were much more knowledgeable than those with less experience. Students' work experiences may enhance their financial knowledge; however, the findings regarding students' employment status and their financial behaviors in other studies were mixed. Lyons (2024) found that students with risky behaviors in the use of credit cards were more likely to be working students and those working more hours per week were more likely to be risky in using credit cards than the entire sample of students.

Xiao, Noring, and Anderson (1995) found that college students working less than 20 hours per week showed the most favorable cognitive attitudes toward credit card use. Mae (2024) also reported that students working more

than 20 hours per week during their schooling years reported the highest credit card balance as compared to students who did not work, those working less than 20 hours per week during their school year, and those working during vacation. Based on the nature of employment, the respondents can be divided into two categories that are government and non-government employees.

Age

It is suggested that age and financial literacy have a correlation which results in an older person having a higher financial literacy and a younger having a low level of financial literacy. Based on previous research, there is a positive relationship between age and college students' financial literacy. From 18 to 24-year young adults usually had a higher degree of demographic diversity and instability, with many livings away from home for the first time. Moreover, many of these groups gain new independence and a greater sense of financial responsibility. The acquisition of financial knowledge seems to increase with age and experience (Chen & Volpe, 2021). Chen and Volpe (2021) and Micomonaco (2003) found a lack of financial literacy among people aged 18-24 and therefore concluded that age is a determinant of the level of financial literacy.

The reason for the low level of financial knowledge could be attributed to the young ages of 18 to 22 years old of the participants or below 30 as the majority of them were in a very early stage of their financial life cycle (Chen & Volpe, 2021). At this stage of the cycle, they are exposed to a limited number of financial issues related to general knowledge, savings and borrowing, and insurance. During this period, most of their incomes are spent on consumption rather than investment. The maximum financial literacy level of 65.38% is

shown by respondents falling in the age group of more than 60 years followed by 59.66% for the age group of 51-60 years.

Level of Education

Level of education is also consistently found to be associated with both basic and advanced financial literacy in the Dutch study (Rooij, Lusardi, & Alessie, 2007). In the ANZ Survey (2022), controlling for age, education attainment was also found to be associated with the financial literacy score. Similarly, education was positively and significantly associated with all three measures of financial literacy in the Australian study of superannuation fund members. It indicated that those with higher levels of education are the most financially literate (Gallery et al. 2023).

However, as van Rooij, Lusardi and Alessie (2007) cautioned, although education is highly correlated with financial literacy, there is a large percentage of individuals with university degrees who display low levels of more advanced financial knowledge. Thus, more highly educated individuals do not necessarily have the requisite knowledge and skills to make sound financial decisions. A survey by Lusardi, Mitchell & Curto, (2023) found that parents' education level was a strong predictor of financial literacy of young adults in the US. Financial literacy level is correlated with the level of education. The higher the education level, the higher the financial literacy level. Thus, it can be concluded that financial literacy level depends on the education level.

Financial Education, Financial Behaviour and Financial Attitude

As indicated by OECD (2023), monetary instruction is the procedure in which customers propel their pondered money-related items and thoughts given data and target guidance to settle on choices on the premise of good data with a

specific end goal to enhance their riches. An instruction that assists people to build up the abilities fundamental to making educated choices furthermore proposes measures that enhance their financial prosperity (Arnone, 1999). Money-related training then gives learning, data, and information that prepare people to settle on sound decisions that enhance their monetary prosperity. Monetary training is reliably turning into a fundamental issue being experienced by most economies because of the element and intricacy nature of the financial markets.

According to white (1999), financial behavior is defined as the process of how individuals understand and act on financial knowledge to make sound investment decisions. It then explains how human beings can apply financial ideas, concepts, and knowledge in their actions or inactions. Financial behavior, therefore, is the effect of financial literacy on the behavior of consumers or people. Further, recent empirical evidence suggests a strong correlation between financial literacy and behavior (Cole, Sampson & Zia, 2023) and that an important determinant of stock market participation is financial literacy (van Rooij, Bank & Lusardi, 2007). For example, the literature suggests that individuals with more financial knowledge are more likely to engage in a wide range of recommended financial practices (Hilgert, Hogarth & Beverley, 2003).

The disposition toward monetary matters and practices is an imperative indicator of financial conduct. States of mind, qualities, and convictions toward financial practices affect money-related basic leadership and are reflected in a person's financial practices and propensities. A person's monetary state of mind, esteem, or convictions can impact their financial dependability and objective setting, and be a marker of money-related administration practices, for

example, investment funds, spending, advance wrongdoing, and MasterCard obligation (Chien & Devaney, 2021; Parotta & Johnson, 2021).

Having an inspirational demeanor toward money-related administration can positively affect an individual's goals to use a few sorts of funds/speculation vehicles, restraint charge card utilizes, and deal with their accounts in more helpful ways (Borden et al., 2022). Financial literacy is said to be emphatically and decidedly identified with the attitudes of workers toward financial product consumption (Lewis, 1989).

Review of Empirical Studies

This section discusses studies that dealt with similar research problems in the past. The main points that emerged from the empirical review and their implication helped in the development of this research. The empirical review involved studies on the level of financial literacy, the gender difference in financial literacy, financial literacy, and retirement planning.

Level of Financial Literacy

The need for financial literacy is greater than ever due to the development of new financial products, the complexity of financial markets, and changes in political, demographic, and economic factors worldwide (Lusardi & Mitchell, 2023). The level of financial literacy globally has become a topical issue and is receiving much attention in academic and practitioner literature. The OECD 2020 International Survey of Adult Financial Literacy, covering 26 countries and economies, revealed that on average, only 26% of adults achieved the minimum target score for financial knowledge (OECD, 2020).

Recent studies continue to show that financial literacy levels remain low globally. For instance, a comprehensive study by Klapper & Lusardi (2020) across 140 countries found that only 33% of adults worldwide are financially literate. In the United States, the FINRA Investor Education Foundation's 2022 National Financial Capability Study showed that only 34% of respondents could answer at least four out of five basic financial literacy questions correctly (FINRA, 2023).

Similarly, research conducted in Europe reveals concerning trends. The European Banking Federation's 2020 Financial Literacy Playbook for Europe reported that in many European countries, less than 50% of the population understands basic financial concepts (European Banking Federation, 2020). In Asia, a study by the Asian Development Bank Institute covering Cambodia, Malaysia, Thailand, and Vietnam found that financial literacy scores ranged from 11.8% to 13.5% out of a possible 22 points (Morgan & Trinh, 2023).

In Africa, recent studies have also highlighted low levels of financial literacy. A survey conducted in Ghana by Akpene Akakpo et al. (2022) found that only 32% of respondents demonstrated a high level of financial literacy. Similarly, in South Africa, the results of the South African Social Attitudes Survey showed that only 28% of South Africans are financially literate (Roberts et al., 2022). These recent findings underscore the persistent global challenge of low financial literacy levels, emphasizing the need for continued efforts in financial education and awareness programs across different demographics and regions.

Gender Difference in Financial Literacy

Gender equality in terms of economic and financial opportunities remains a significant concern at both national and international levels. Recent empirical studies continue to identify gender gaps in financial literacy, with implications for financial knowledge and decision-making. Research consistently shows that financial illiteracy is more prevalent among women, with many unfamiliar with even basic economic concepts needed for saving and investment decisions. This persistent gender gap in financial literacy contributes to differential levels of retirement preparedness between women and men (Hasler & Lusardi, 2021).

Recent studies have further explored the nuances of gender differences in financial literacy. For instance, Bucher-Koenen et al. (2021) conducted a meta-analysis of studies from various countries, confirming that women are less likely to answer financial literacy questions correctly and more likely to indicate that they don't know the answer. This gender gap persists even after controlling for socioeconomic background, suggesting deeper underlying factors.

In terms of specific financial knowledge areas, Farrell et al. (2021) found that while the gender gap exists across various domains, it is particularly pronounced in areas related to investing and risk. Women tend to score lower on questions about stock market functioning, risk diversification, and asset pricing. However, the same study noted that women often perform better on questions related to day-to-day money management and budgeting.

The risk aversion of women in financial decision-making continues to be a topic of interest. A study by Charness & Gneezy (2007) provides experimental evidence that women invest less and appear to be more financially risk-averse

than men. This behavior can have significant implications for long-term wealth accumulation and retirement planning. Addressing the reasons behind these gender differences, research has moved beyond traditional explanations. For example, Tinghög et al. (2021) explored the role of confidence in financial literacy gender gaps. They found that women's lower confidence in their financial knowledge partly explains their lower performance on financial literacy tests, suggesting that interventions aimed at boosting confidence could help narrow the gap.

Moreover, societal and cultural factors continue to play a role. A study by Bottazzi and Lusardi (2020) across European countries found that the financial literacy gender gap is smaller in countries with more gender-equal cultures and institutions. This suggests that broader societal changes towards gender equality could have positive spillover effects on financial literacy.

In the context of retirement planning, recent research by Clark et al. (2020) found that the gender gap in financial literacy significantly contributes to differences in retirement savings behaviors. Women were found to be less likely to participate in retirement savings plans and to contribute lower amounts when they did participate. These recent findings underscore the persistent nature of gender differences in financial literacy and highlight the need for targeted interventions. They also suggest that addressing the financial literacy gender gap requires a multifaceted approach, considering factors such as confidence, societal norms, and specific knowledge domains.

Retirement Planning

Retirement planning continues to be a critical aspect of financial well-being, requiring individuals to make complex decisions about spending and saving long before retirement age. Recent research indicates that the challenges of adequate retirement planning persist. For instance, a study by Lusardi et al. (2020) found that even in the United States, a significant portion of the population remains unprepared for retirement, with only 36% of working-age individuals having tried to figure out how much they need to save for retirement.

The confidence levels regarding retirement preparedness have shown some fluctuations in recent years. According to the 2021 Retirement Confidence Survey by the Employee Benefit Research Institute (EBRI), 72% of workers are somewhat or very confident about having enough money to live comfortably throughout their retirement years. However, this confidence may be misplaced, as the same survey found that only 44% of workers have tried to calculate how much money they will need to save for retirement (EBRI, 2021).

The situation in developing economies like Ghana continues to be concerning. A recent study by Adzawla et al. (2023) on retirement planning among formal sector workers in Ghana found that only 43% of respondents had a retirement plan. The study highlighted factors such as financial literacy, income level, and age as significant determinants of retirement planning behavior.

The importance of early retirement planning has been further emphasized by recent research. For example, Hershfield et al. (2023) found that individuals who engage with their future selves are more likely to save for retirement. Their study suggests that interventions that help people connect with

their future selves could improve retirement planning behaviors. Moreover, the COVID-19 pandemic has had significant impacts on retirement planning globally. A study by Mitchell (2020) found that the economic shock caused by the pandemic has led many individuals to reassess their retirement plans, with some delaying retirement and others being forced into early retirement due to job losses.

In the context of Ghana, recent research by Osei-Assibey (2023) revealed that despite improvements in financial inclusion, many Ghanaians still lack adequate retirement plans. Their study found that only 28% of respondents had a formal retirement savings plan, with most relying heavily on the national Social Security system, which often proves insufficient for maintaining pre-retirement living standards.

The role of financial literacy in retirement planning has gained renewed attention. A study by Safari et al. (2021) in Ghana found a strong positive correlation between financial literacy levels and retirement planning behaviors among formal sector workers. This underscores the need for comprehensive financial education programs to improve retirement outcomes. These recent findings highlight the ongoing challenges in retirement planning across both developed and developing economies. They emphasize the need for targeted interventions to improve financial literacy, encourage early planning, and address the unique challenges faced by different demographic groups in preparing for retirement.

Financial Literacy and Retirement Planning

Studies have found that retirement planning is lacking among different groups. Not just among Ghanaians but among people around the world. Most people seem to be unprepared for the future. Lusardi and Mitchell (2021), stipulated that many households are unfamiliar with even the most basic economic concepts needed to make saving and investment decisions. They found that this is not a matter of age. Young and older people in the United States and other countries appear inescapably underinformed about basic financial computations necessary to make savings, retirement planning, mortgages, and other decisions. They also point out that governments and not-for-profit organizations are starting to play an important role in developing initiatives regarding financial education.

In a study, Lusardi and Mitchell (2023) report on a purpose-built survey module on planning and financial literacy for the health and retirement study. It measures how people make financial plans, collects the information needed to make these plans, and implements the plans. They show that there is a lack of knowledge among older Americans. Women, minority ties, and the least educated tend to be the most lacking but the financially savvy are more likely to plan and succeed in their planning. They found that this last group relies on formal methods such as retirement seminars, retirement calculators, and financial experts, not family or co-workers.

Using the national financial capability study, Lusardi and Mitchell (2023) examine financial literacy in the United States by ethnicity and demography. They demonstrate that financial literacy is particularly low among the young, women, and the less-educated. Two groups, Hispanics and African-

Americans score least well on financial concepts. The authors found a relationship between higher scores and the probability of retirement planning.

In an earlier study, they also found similar results but for older groups of women. Lusardi and Mitchell (2023) examine the level of financial literacy in women and how they plan for retirement. They found evidence that shows that older women demonstrate much lower levels of financial literacy than the older population as a whole. Also, women who are less financially educated are less likely to plan for retirement and be successful planners.

Similarly, Bucher-Koenen (2023) examines financial literacy in Germany. He found that knowledge of basic financial concepts is deficient among women, less educated, and those living in East Germany. Compared to West Germans, East Germans have little financial literacy, especially those with lower income and low education. Differences based on gender were not observed in the East. They also found a positive impact of financial knowledge on retirement planning. Van Rooij et al. (2007) results for the Netherlands concur. Also, Almenberg and Säve-Söderbergh (2023) found similar results in a study conducted in Sweden.

In an earlier study, Hathaway and Khatiwada (2022) provide a comprehensive critical analysis of past studies that examine the impact of financial education programs on consumer financial behavior. Of what they examined, they recommend that these types of programs be highly targeted towards a specific audience and area of financial activity (e.g., credit card counseling, retirement planning). About the timing of this training, they suggest it should be offered before the related financial event. Finally, and as an integral

part of any developed program, they suggest a program evaluation and for it to be included as part of the design of the program.

Garman, Kim, Kratzer, Brunson, and Joo (1999) found that employees who attended financial education workshops sponsored by the employer reported positive changes in their financial behavior and stated that their financial decision-making had improved. Accordingly, Martin (2007) reviews past literature on the effectiveness of financial education. He found that in general financial education is necessary and that the programs available at the time were effective. The findings suggest that some households make mistakes with personal finance decisions, specifically, low-income and less-educated households.

Schuchardt, Hanna, Hira, Lyons, Palmer, and Xiao (2023) discuss what financial literacy and education research priorities should be. Along with twenty-nine scholars from public and private universities, not-for-profit organizations, and the federal government participated in identifying critical research questions that could inform outcomes-based financial education, relevant public policy, and effective practice leading to personal and family financial literacy. Huston (2022) outlines the meaning and measurement of financial literacy and its limitations to assist researchers in determining or creating standardized financial literacy and measurement instruments.

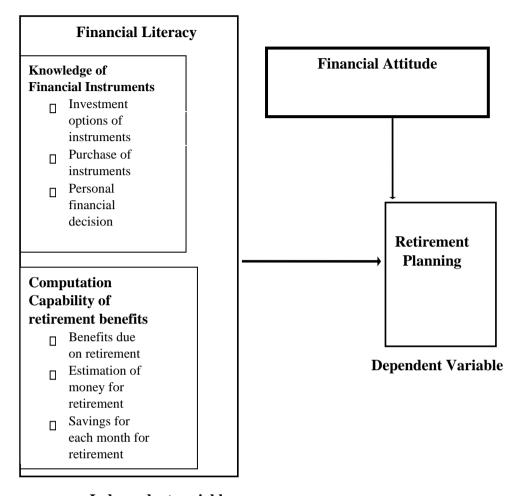
Kim, Kwon, and Anderson (2023), that individuals' retirement confidence tends to be higher than others as they calculate their retirement fund needs and have more savings. The level of confidence will increase as the higher household income provided that they are in better health. Working individuals

who received workplace financial education and advice earlier help them to have more confidence in retirement planning (Lai et al., 2023).

According to Wong and Earl (2023), retirees neglect retirement planning because they have a certain level of difficulty in adjusting to retirement. In the findings, the result suggests that only individuals: (1) demographic; (2) health, and organizational: (1) conditions of workforce exit influences predict better retirement planning. Psychosocial: (1) work centrality influences have no significant impact on retirement planning behavior in an integrated model. Lusardi and Mitchell (2007) showed that planners accumulate large wealth than non-planners through saving, investment, and the probability of selling the house to finance retirement.

Conceptual Framework

This conceptual framework has been taken from the theoretical principles of the research in which the variables such as financial literacy has been considered as the independent variable and the variable retirement planning has been thought of as the dependent variable. From the conceptual framework, retirement planning can be seen to be influenced by financial literacy.



Independent variable

Figure 1: Conceptual Framework

Chapter Summary

Lack of financial literacy remains an enormous barrier to effective financial decision-making. Individuals who lack financial knowledge may not find pleasure in engaging in financial management and may not be able to make sound financial decisions that will improve their quality of life of living. This thereby reduces the rate of investment, and risk management and therefore is beaten by unexpected financial outcomes that are not favorable.

The low level of financial literacy tends to be a burden on the government since it might hinder the achievement of the poverty reduction goal. There is a need to change the attitude of people toward debt, bankruptcy, and other issues relating to finance. Hence the importance of financial literacy cannot be overlooked. A certain amount can be achieved through educational programs and policies. This can be done through the legitimization of financial literacy as a core study in secondary and tertiary institutions. For now, and in the future, the task is to increase the level of financial literacy and to encourage good financial attitudes to increase the level of standard of living of people and hence the achievement of the millennium development goal of poverty reduction. The review ends with the conceptual framework linking financial literacy and retirement planning

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents the methods and techniques that were used to carry out the research. It includes a description of the study area, study design, population, sample size, sampling techniques, sources of data, data collection procedures, and methods of data analysis

Research Approach

Given the nature of the variables that would be analyzed, this study would require a quantitative research approach. Quantitative research as defined by Boateng (2023) is "research that seeks to determine the existence of a relationship between aspects of a phenomenon by quantifying the variation. The study adopted the quantitative research approach which is generally associated with the positivist paradigm. It usually involves collecting and converting data into numerical form so that statistical analysis could be made and conclusions are drawn. The quantitative approach suits the study as it addresses research questions developed into hypotheses to be tested for possible relationships between variables (Amaratunga, Baldry, Sarshar, & Newton, 2023).

Research Philosophy

The research philosophy underpinning this study on "Financial Literacy and Retirement Planning of Health Sector Workers in the Abura-Asebu Kwamankese District Hospital" is positivism (Creswell & Creswell, 2022). This philosophical stance aligns with the quantitative approach employed, utilizing questionnaires as the sole data collection method (Saunders et al., 2023). Positivism assumes that reality is objective and can be measured through

scientific, empirical methods (Kuyini & Kivunja, 2021). In this study, financial literacy levels and retirement planning behaviors are treated as observable phenomena that can be quantified and analyzed statistically (Aliyu et al., 2023).

The positivist approach allows for the formulation and testing of hypotheses, the identification of patterns and relationships within the data, and the potential establishment of causal links between variables (Park et al., 2020). By employing a structured questionnaire, the researcher maintains an objective, detached stance, minimizing potential bias and allowing for the collection of standardized, comparable data across the sample (Rahi, 2021). This approach facilitates the generation of generalizable findings about the financial literacy and retirement planning practices of health sector workers in the specified context. The positivist philosophy supports the study's aims to produce reliable, verifiable knowledge that can inform evidence-based policies and interventions to enhance financial literacy and retirement planning among healthcare professionals (Blackwell, 2022).

Research Design

The descriptive survey design will be employed for the study. This design involves the collection of data to answer research questions on the subject of the study. In a descriptive survey design, the researcher draws a sample from the population of interest, and generalizations are made taking into consideration their responses. Osuala (1993) indicated that descriptive surveys are practical to the present needs. He opined that descriptive surveys are regarded by social scientists as the best design especially where large populations are involved and it is widely used in educational research since data gathered through this design represent field conditions. Therefore, a descriptive

survey describes and interprets what it is. It is concerned with conditions that exist, practices that prevail, beliefs and attitudes that are held, ongoing processes, and trends that are developing (Osuala, 1993).

Study Area and Population

The study area for this research is the Abura-Asebu-Kwamankese District Hospital, located in the Central Region of Ghana. This district hospital serves as the primary healthcare facility for the Abura-Asebu-Kwamankese District, which is one of the 20 districts in the Central Region. The district covers an area of approximately 380 square kilometers and has a population of about 124,465 as of the 2021 census (Ghana Statistical Service, 2021). The hospital, situated in the district capital of Abura Dunkwa, provides a range of medical services to the local population and surrounding communities. As a government-run facility, it employs a diverse workforce of healthcare professionals, including doctors, nurses, midwives, pharmacists, laboratory technicians, and administrative staff. These health sector workers form the target population for this study on financial literacy and retirement planning. The choice of this study area allows for a focused examination of financial literacy and retirement planning practices among health workers in a rural Ghanaian setting, providing insights that may be relevant to similar contexts across the country.

For the study, the term study population can be taken to mean all the members of the target of study as defined by its aims and objectives (Sanders, Lewis & Thornhill, 1997). The administrative personnel and health workers of the Abura-Asebu Kwamankese District Hospital make up the study's target

population. Currently, there are about 50 administrative personnel and 150 health workers which constitutes the population size of the current study.

Sampling Procedure

The sampling technique for this study was simple random. This sampling technique was selected because the study deals with homogeneous groups to achieve the study's specific objectives (Zembat & Turaşl, 2021). In that case, categorization or heterogeneity within the sample does not matter. Simple random was ideal for the reason that it provides an unbiased and better estimate of the parameters, especially for a homogenous population (Ajay et al., 2023).

Sample Size Determination

The sample size for the study was calculated using Cochran's (1975), formula;

$$n = \frac{Z^2 x P(1-P)}{E^2}$$

Z = Z-score (e.g., 1.96 for a 95 percent confidence level)

P = Percentage of population picking a choice, expressed as decimal(can be determined from existing studies or pre-sample survey)

E =desired margin of error (e.g., .05 = +/-5 percentage points)

$$n = \frac{1.96^2 \times 0.50(1 - 0.50)}{0.05^2}$$

$$n = 384.16$$

Adjusted sample size;

Where N is the size of the population (N = 200)

$$n_0 = \frac{n}{1 + \frac{n-1}{N}}$$
$$= \frac{384.16}{1 + \frac{384.16-1}{200}}$$

= 131.75

= 132

Sources of Data

Primary sources of data were used for the study. The primary data was collected using questionnaires which will consist of open-ended and close-ended questions. In collecting the primary data, respondents were briefed on the purpose of the study. Respondents will further be assured of the confidentiality of their responses and will be expected to be sincere, factual, and honest in responding to the questions.

Data Collection Instrument

The collection of data is an extremely important part of all research endeavors, for the conclusions of the study are based on what the data reveal (Fraenkel & Wallen, 2024). According to Fraenkel & Wallen (1996), the method(s) of the collection to be used and the scoring of the data need to be considered with care. This means that for credible research results, the kind(s) of instruments to be used must be given the needed attention. Questionnaires are also familiar to most people, are cost-effective, and are easier to analyze.

Section A will deal with the background information of respondents. Section B deals with respondents' levels of financial literacy. Section C deals with the level of retirement planning behavior of respondents while Section D also looks at respondents' level of financial attitude. A questionnaire has several strengths: it is less expensive as you do not interview respondents; it saves time and resources. It also offers greater anonymity as there is no face-to-face interaction between the respondents and the interviewer. Notwithstanding the strengths, a questionnaire has several weaknesses. Its application is limited to a

study population that can read and write but is not illiterate, very young, very old, or handicapped. Questionnaires are notorious for their low response rates; that is, people fail to return them. Again, the opportunity to clarify issues is lacking. If for any reason, respondents do not understand some questions, there is no opportunity for them to have the meaning clarified.

Pre-test

The data collection instrument, the questionnaire will be pre-tested at the University of Cape Coast hospital in the Central Region to check their reliability and validity. There was also the need to find out if the items contained in the instruments were explicit enough and would, therefore, aid the respondents to complete the questionnaires. This process of the study will aid the researcher to detect inherent problems and inconsistencies in the instruments intended to be used and correct any abnormalities before carrying out the actual study.

Data Processing and Analysis

Data analysis is the process of simplifying data to make it comprehensible (Fraenkel & Wallen, 1996). Data analysis usually involves reducing accumulated data to a manageable size, developing summaries, looking for patterns, and applying statistical techniques (Cooper & Schindler, 2021). Data were processed using the Statistical Package for Social Science 22 (SPSS 22). Frequency tables will be used to summarise the data and made possible the presentation of percentages of the various variables identified. Independent sample t-tests for statistical differences and regression analytical tools will be employed to analyze the inferential statistics.

Ethical Procedure

In other to proceed smoothly through the conduct of the research, the researcher will carefully be followed the following ethical processes, particularly for the collection of data for the study. Firstly, the researcher will obtain an introductory letter from the Department of Finance, School of Business, University of Cape Coast. The letter explains that the researcher is a student pursuing a Master of Business Administration (Finance) and that he is required to undertake research in the field of Finance. The researcher will present this letter to the head of the hospital who will authorize them to go ahead and distribute questionnaires to the workers for data collection. Questionnaires will be distributed to health workers in hard copy. Two days will be allowed for respondents to fill in the questionnaires after which they will be collected for analysis.

Chapter Summary

The chapter focused on the research design. It attempted to describe the research methodology employed. In this regard, the study area, the data, its sources, the sampling technique, the data collection instrument, and the data processing and analysis used in this study were described. The study employed the primary source of data.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

The study investigates the financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District Hospital. The study was based on a quantitative research design and employed the Statistical Package for Social Science 22 (SPSS 22). This chapter presents the results of the study and further discusses it. The results of the study were presented based on specific research objectives.

Response Rate

The response rate is a crucial metric that indicates the level of engagement and participation among the target respondents. The formula for the response rate is the number of completed responses divided by the total number of potential respondents and multiplied by 100 to express the results as a percentage. The study obtained an 84.8% response rate which represents 112 out of a total of 132 respondents as a sample for the study which signifies a high level of engagement among the target respondents. This suggests that the questionnaire effectively captured the participants' attention and interest.

Descriptive Statistics

The descriptive statistics provide an overall distribution of the data across the key constructs of the study. These constructs include financial literacy, retirement planning behavior, and the perceived relationship between financial literacy and retirement planning among health sector workers in the Abura-Asebu Kwamankese District Hospital.

The defining items of each of these constructs were analyzed using means and standard deviations. For the financial literacy level, a mean score of greater than 3.0 would indicate overall moderate to high agreement with the respective financial literacy statements, while a score less than 3.0 would indicate overall low agreement. Similarly, for the retirement planning behavior and the perceived relationship between financial literacy and retirement planning, a mean score of greater than 3.0 would suggest overall moderate to high agreement with the respective statements, while a score less than 3.0 would indicate overall low agreement. The results of these descriptive statistics are presented in the corresponding sections of the questionnaire, providing insights into the financial literacy levels, retirement planning behaviors, and the perceived connections between these constructs among the health sector workers in the Abura-Asebu Kwamankese District Hospital.

Table 1: Financial Literacy Level

Statements	Mean	Standard Dev
How would you rate your understanding of basic	4.000	0.9035
financial concepts such as interest rates, inflation, a	nd	
risk diversification?		
What is the level of your knowledge of investment	3.818	1.1898
products such as stocks, bonds, and mutual funds?		
How confident are you in making financial decision	ıs 3.899	1.0926
related to borrowing, saving, and investing?		
How would you rate your overall financial literacy	3.687	1.0560
level?		
How well do you understand the concept of	4.030	1.1015
compound interest and its impact on long-term		
savings and investments?		
What is your level of understanding of the different	3.899	1.1736
types of retirement savings plan (e.g., pension		
schemes, 401(k), IRA) and their respective benefits		
and limitations?		
Rate your ability to create a diversified	3.616	1.2348
investment portfolio to achieve your retirement goa	ls.	
Rate your level of understanding of risk-return	3.374	1.1481
trade-offs when making investment decisions.		

Overall Financial Literacy Level	3.8013	1.1054
decisions?		
income statements) to make informed financial		
analyze financial statements (e.g., balance sheets,		
How would you rate your ability to interpret and	3.889	1.0487

Source: Field Survey (2024)

Table 1 provides insights into the financial literacy level of the health sector workers in the Abura-Asebu Kwamankese District Hospital. The results show that the overall financial literacy level of the health sector workers in the Abura-Asebu Kwamankese District Hospital has a mean score of 3.8013 with a standard deviation of 1.1054, indicating a moderately high level of financial literacy among the sample (Lusardi & Mitchell, 2023; Potrich et al., 2021).

Specifically, the health sector workers in the Abura-Asebu Kwamankese District Hospital exhibited a strong understanding of basic financial concepts such as interest rates, inflation, and risk diversification, with a mean score of 4.000 and a standard deviation of 0.9035. Additionally, the health sector workers in the Abura-Asebu Kwamankese District Hospital demonstrated a relatively high level of knowledge of investment products, such as stocks, bonds, and mutual funds, with a mean score of 3.818 and a standard deviation of 1.1898 (Antón et al., 2022).

The health sector workers in the Abura-Asebu Kwamankese District Hospital also reported a high level of confidence in making financial decisions related to borrowing, saving, and investing, with a mean score of 3.899 and a standard deviation of 1.0926 (Huston, 2022). Likewise, the health sector workers in the Abura-Asebu Kwamankese District Hospital exhibited a good understanding of the concept of compound interest and its impact on long-term savings and investments, with a mean score of 4.030 and a standard deviation of 1.1015 (Lusardi & Mitchell, 2023).

Moreover, the health sector workers in the Abura-Asebu Kwamankese District Hospital's level of understanding of different types of retirement savings plans and their respective benefits and limitations, as well as their ability to create a diversified investment portfolio to achieve their retirement goals, were relatively high, with mean scores of 3.899 and 3.616, respectively, and standard deviations of 1.1736 and 1.2348 (Van Rooij et al., 2023).

Overall, the results suggest that the health sector workers in the Abura-Asebu Kwamankese District Hospital have a moderately high level of financial literacy, which could positively influence their retirement planning behavior and decisions (Lusardi & Mitchell, 2023; Potrich et al., 2021).

Factor Analysis

According to Watkins (2022), factor analysis is a statistical technique that simplifies a large set of observed and correlated variables into a smaller, more manageable dataset by identifying a fewer number of unobserved variables, known as factors. This process makes the data easier to understand and handle. The primary objective of factor analysis is to uncover hidden trends, demonstrate how these trends intersect, and identify attributes that are common across multiple trends. This method proves particularly beneficial when dealing with intricate datasets, such as those found in psychological research, socioeconomic studies, and other complex concepts. Additionally, as propose by Kaiser (1960) and supported by Cliff (1988), Eigenvalues serve as an effective criterion for identifying a factor. A factor should be considered if its Eigenvalue exceeds one, while it should be disregarded if its Eigenvalue is less than one. According to the rule of variance extraction, a factor should have a

variance greater than 0.7. If the variance is less than 0.7, it should not be considered as a factor

In order to create a single construct for study variables the researcher aggregate the multiple items that measure each variable. This process begins by assessing the reliability of the items to ensure they consistently measure the same underlying concept. In SPSS, this can be achieved by calculating Cronbach's Alpha through the Reliability Analysis option under the Analyze menu. A Cronbach's Alpha value of 0.7 or higher as explained above indicates acceptable internal consistency. If the reliability is satisfactory, the next step involves creating a composite score for the construct. This score can be computed by averaging or summing the responses of the items associated with the variable.

Factor Loading

This section depicts the result for factor loading for the study constructs.

Table 2: Factor Matrix with Factor Loadings for Financial Literacy

	\mathcal{C}
Financial Literacy Items	Factor
FL1	.723
FL2	.793
FL3	.824
FL4	.801
FL5	.842

From table 5 above, it can be inferred that, all the variables or items under financial literacy show strongly for these constructs.

 Table 3: Factor Matrix with Factor Loadings for Retirement Planning

Objects Under Re	etirement Planning	Factor	
RP1		.754	
RP2		.723	
RP3		.741	
RP4		.740	
RP5		.748	
RP6		.741	

From table 11 above, it can be observed that, all the variables or items under objective measure show strongly for these constructs.

Result and Discussion

Objective 1-Analyze the gender differences in the levels of financial literacy among health sector workers.

The first objective of this study was to Analyze the gender differences in the levels of financial literacy among health sector workers in the Abura-Asebu Kwamankese District hospital. T achieve this objective, an independent T- test was conducted. The result for this is depicted on table 2 below.

Table 4: t-test on levels of financial literacy among male and female

Items	Male		Female	Female		p-value	sig
	Mean	SD	Mean	SD			
FLI	2.87	.479	2.67	.401	3.898	.023	S
FL2	3.27	.989	3.19	.867	329	.714	NS
FL3	2.85	.554	2.02	.191	2.814	.005	S
FL4	2.64	.617	1.84	.378	6.043	.003	S
FL5	3.37	.433	2.19	.339	5.983	.014	S
Overall	2.87	.267	2.69	.440	3.008	.042	S

The t-test results in table 2 compare financial literacy levels (measured through various items) between male and female participants. The findings show significant differences in several items, suggesting disparities in financial literacy between genders. For instance, males scored higher on items FLI (t = 3.898, p = 0.023), FL3 (t = 2.814, p = 0.005), FL4 (t = 6.043, p = 0.003), and FL5 (t = 5.983, p = 0.014), with all results being statistically significant (S). These findings highlight that males generally have higher levels of financial literacy in these areas. However, item FL2 showed no significant difference (t = -0.329, p = 0.714, NS), indicating that financial literacy in this specific dimension does not vary meaningfully by gender.

The overall analysis also reveals that males (mean = 2.87, SD = 0.267) exhibit higher average financial literacy compared to females (mean = 2.69, SD = 0.440), with a statistically significant t-value (t = 3.008, p = 0.042).

Objective 2- Analyze educational differences in the levels of retirement planning among health sector workers in the Abura-Asebu Kwamankese District hospital.

The second objectives of this study aimed to analyze educational differences in the levels of retirement planning among health sector workers in the Abura-Asebu Kwamankese District hospital. This was done using analysis of variance test. The result for this is depicted on table 3 below.

Table 5: ANOVA test on the levels of retirement planning among educational qualifications

Items		Sum of	df	Mean	F	Sig
		Squares		Squares		
None	Between	.929	1	.929	2.920	.085
	Groups	58.546	39	.395		
	Within	59.475	40			
	Groups					
	Total					
Elementary	Between	.984	1	0.984	4.454	.075
	Groups	45.675	39	.314		
	Within	46.659	40			
	Groups					
	Total					
Secondary	Between	.186	1	.186	.903	.034
	Groups	45.539	39	.217		
	Within	45.725	40			
	Groups					
	Total					
Diploma	Between	.314	1	.314	1.637	.203
	Groups	51.196	39	.401		
	Within	51.510	40			
	Groups					
	Total					
Others (Degree,	Between	.797	1	.797	.410	.568
Master and PhD	Groups	51.089	39	.253		
	Within	51.886	40			
	Groups					
	Total					
Overall	Between	.869	1	.869	4.763	.009
	Groups	59.434	39	.295		
	Within	60.303	40			
	Groups					
	Total					

The ANOVA results in Table 3 above evaluate the differences in retirement planning levels across various educational qualifications. The overall analysis shows a statistically significant difference in retirement planning among educational groups (F = 4.763, p = 0.009), indicating that educational qualifications play a critical role in influencing retirement planning behaviors. However, when analyzed individually, most educational levels did not show significant differences in retirement planning. For example, participants with "None" (F = 2.920, p = 0.085) and "Diploma" qualifications (F = 1.637, p = 0.203) had no statistically significant variation in their retirement planning levels. Similarly, participants in the "Others" category (Degree, Master, and PhD) also exhibited no significant differences (F = 0.410, p = 0.568), suggesting that higher education does not necessarily result in a greater focus on retirement planning within this group.

Interestingly, the "Secondary" education group revealed a significant difference in retirement planning (F=0.903, p=0.034), indicating that individuals in this category might have distinct financial planning behaviors compared to others. This could be attributed to early exposure to financial management concepts or practical financial needs arising at this education level. These results suggest that while educational qualifications influence retirement planning overall, the relationship is not uniform across all educational categories. This highlights the need for targeted interventions tailored to specific education levels to encourage effective retirement planning across diverse groups.

Objective 3- Ascertain the relationship between financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District hospital.

The third objective of the study seeks to analyse the relationship between financial literacy and retirement planning of health sector workers. To achieve this, ordinary least square (OLS) regression model was used. The results for this are depicted on tables 4, 5 and 6 respectively. The results from the tables below indicates that financial literacy has a significant and positive influence on retirement planning among health sector workers. Specifically, the findings show that as financial literacy increases, the quality or effectiveness of retirement planning also improves. The model explains 30.8% of the variation in retirement planning ($R^2 = 0.308$), meaning that financial literacy is a substantial factor, though other variables may also play a role.

The significance levels (p < 0.001) confirm that this relationship is statistically meaningful and not due to random chance. The standardized beta coefficient (0.555) highlights a moderately strong impact of financial literacy on retirement planning. These results suggest that improving financial literacy among health sector workers can lead to better preparation and decision-making regarding their retirement.

 Table 6: Model Summaryb

Model	R R Square	Adjusted R Square	Std. Error of	Change	Change Statistics				Durbin -
	•	•	the Estimat e	R Square Chang e	F Chang e	df 1	df 2	Sig. F Chang e	Watso n
1	308 5 5 5 a	.304	3.419	.308	95.48	1	21	.000	1.33

a. Predictors: (Constant), FL

Table 7: ANOVAa

Model		Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	ssion 1116.232		1116.232 95.488		.000b
	Residual	2513.298	215	11.690		
Total		3629.530	216			

a. Dependent Variable: RP

b. Dependent Variable: RP

b. Predictors: (Constant), FL

Table 8: Regression Coefficients^a

M	lodel	Unsta	ndard	Standard	t	Si	95.0%		Collinearity	
		ized		ized		g.	Confi	Confidence		es.
		Coefficient		Coefficie			Interval for			
		S		nts			В			
		В	Std.	Beta			Low	Upp	Tolera	VIF
		Erro						er	nce	
			r				Bou	Bou		
							nd	nd		
1	(Const	4.06	.776		5.2	.00	2.53	5.59		
	ant)	6			40	0	6	5		
	FL	.463	.047	.555	9.7	.00	.370	.556	1.000	1.0
					72	0				00

a. Dependent Variable: RP

Discussion of Result

Objective 1-Analyze the gender differences in the levels of financial literacy among health sector workers.

Findings from this objective indicate notable gender disparities in financial literacy levels across several dimensions. Males consistently demonstrated higher mean scores in most financial literacy items, including FLI, FL3, FL4, and FL5, all of which showed statistically significant differences (p < 0.05). For instance, the mean scores for males on FL3 and FL4 were significantly higher than females, with t-values of 2.814 (p = 0.005) and 6.043 (p = 0.003), respectively. These findings suggest that males possess greater

knowledge or proficiency in specific areas of financial literacy compared to their female counterparts. However, for FL2, no significant difference was observed (t = -0.329, p = 0.714), indicating that this aspect of financial literacy is relatively balanced between genders.

The overall mean scores further reinforce this pattern, with males (mean = 2.87, SD = 0.267) outperforming females (mean = 2.69, SD = 0.440) significantly (t = 3.008, p = 0.042). These results highlight a persistent gender gap in financial literacy, which could stem from differences in access to financial education, cultural or societal factors, or varying levels of exposure to financial decision-making processes. The findings call for focused efforts to enhance financial literacy among females, such as incorporating targeted financial education programs and promoting equitable access to resources that build financial competencies. Addressing these gaps is essential for fostering financial empowerment and ensuring gender equity in financial decision-making. The observed gender disparities in financial literacy have significant implications for financial inclusion and empowerment. With males consistently scoring higher in most areas, females may face challenges in effectively managing personal finances, making informed financial decisions, and accessing economic opportunities.

The findings of gender disparities in financial literacy align with numerous studies that have documented similar patterns. For example, Lusardi and Mitchell (2023) found that women generally score lower than men on financial literacy assessments worldwide. Their research highlighted that women often lack confidence in their financial knowledge, which contributes to poorer financial decision-making. Similarly, Chen and Volpe (2024) observed

that male college students outperformed their female counterparts in financial literacy tests, attributing the differences to variations in exposure to financial education and societal expectations regarding financial roles. These studies underscore a global trend of gender-based gaps in financial literacy, consistent with the results in table. Another consistent finding is reported by Bucher-Koenen et al. (2021), who examined financial literacy in various European countries and found significant gender differences. Their study revealed that women tend to have less familiarity with financial concepts such as interest rates and inflation, which could hinder their ability to make sound financial decisions. Additionally, Fonseca et al. (2023) pointed out that these disparities are often exacerbated by lower participation of women in financial markets, leading to less practical experience.

Objective 2- Analyze educational differences in the levels of retirement planning among health sector workers in the Abura-Asebu Kwamankese District hospital.

Findings from the second objectives findings highlight the need for education-specific approaches to promoting retirement planning. The significant overall influence of educational qualifications on retirement planning suggests that education serves as a critical factor in shaping individuals' financial behaviors. Policymakers and educational institutions can leverage this by integrating financial literacy and retirement planning topics into curricula at different educational levels, particularly focusing on secondary education where significant differences were observed. Targeting individuals at this stage may enhance their awareness of the importance of early financial planning and empower them to make informed decisions about their future.

Moreover, the lack of significant differences in retirement planning among those with higher educational qualifications implies that advanced education alone may not guarantee better financial planning. Employers and financial institutions should therefore design targeted retirement planning programs for professionals, irrespective of their educational background, to ensure they receive practical knowledge about securing their financial future. Additionally, community organizations could provide workshops for individuals with minimal or no formal education to bridge gaps in financial awareness and access to resources.

Several studies align with the findings that educational qualifications significantly influence retirement planning, although the impact varies across education levels. For instance, Lusardi and Mitchell (2024) found that individuals with higher education tend to exhibit greater financial literacy, which contributes to better retirement preparedness. However, their research also highlighted that advanced education alone does not always translate into effective financial planning, echoing the observation that even individuals with higher degrees may lack practical retirement strategies. This underscores the need for targeted financial literacy interventions tailored to specific education levels and practical financial scenarios. Similarly, a study by Clark, d'Ambrosio, McDermed, and Sawant (2024) revealed that retirement planning knowledge is significantly higher among individuals with formal education exposure to financial concepts, particularly those introduced during secondary education. This is consistent with the finding that individuals with secondary education showed notable differences in retirement planning behaviors. Their study emphasized the critical role of early financial education in fostering longterm planning habits, suggesting that interventions aimed at younger populations can have lasting impacts on retirement preparedness.

Objective 3- Analyse the relationship between financial literacy and retirement planning of health sector workers in the Abura-Asebu Kwamankese District hospital.

The results from the third objective emphase on the critical role that financial literacy plays in shaping effective retirement planning among health sector workers. With a significant R^2 value of 0.308, the model explains about 30.8% of the variability in retirement planning, indicating that financial literacy contributes meaningfully to this process. The statistical significance of the regression model (F = 95.48, p < 0.001) and the positive regression coefficient (B = 0.463) suggest that higher levels of financial literacy are strongly associated with improved retirement planning outcomes. This aligns with existing literature that highlights financial literacy as a cornerstone of sound financial decision-making, especially in long-term financial preparations such as retirement planning. The standardized beta coefficient (0.555) further demonstrates a moderately strong impact of financial literacy, emphasizing its importance as a key predictor.

Moreover, the confidence interval for the regression coefficient (0.370 to 0.556) confirms the reliability of this relationship, while the Durbin-Watson statistic of 1.33 indicates minimal autocorrelation, enhancing the validity of the results. These findings suggest that health sector workers with higher financial literacy are better equipped to make informed and proactive decisions regarding retirement savings, investments, and overall financial security. Given the significant influence of financial literacy, this result highlights the need for

targeted financial education programs in the health sector to enhance workers' retirement preparedness. Based on the result above, Employers and policymakers in the health sector should consider implementing comprehensive financial literacy programs to equip workers with the skills needed to effectively manage retirement savings and investments. This could lead to improved financial security, reduced dependence on social welfare programs, and greater overall well-being for retired health workers. Additionally, the findings suggest that fostering financial literacy at an organizational and policy level can bridge gaps in retirement readiness and ensure sustainable financial planning practices in the workforce.

The findings of this study align with previous research that which highlight the positive impact of financial literacy on retirement planning. Lusardi and Mitchell (2023) highlighted that individuals with higher levels of financial literacy are better equipped to understand complex financial products and make informed decisions about retirement savings. Their study found that financial knowledge plays a critical role in fostering retirement preparedness, as it enables individuals to effectively navigate decisions regarding savings rates, investment portfolios, and retirement income strategies. Similarly, Hershey et al. (2023) demonstrated that financial literacy enhances an individual's ability to estimate retirement needs and implement strategies to achieve financial security, thereby reinforcing the findings that greater financial literacy leads to improved retirement planning outcomes.

Additionally, studies conducted in specific professional sectors, such as the health and education fields, provide further support for these findings. Clark, Lusardi, and Mitchell (2022) investigated financial literacy among healthcare workers and found that those with higher financial knowledge were significantly more likely to participate in retirement savings plans and make strategic investment choices. Their research emphasizes the unique challenges health sector workers face, such as demanding schedules and varying income levels, which make financial literacy even more critical for effective retirement planning.

Contrary to the findings of this study, some research suggests that financial literacy alone may not significantly influence retirement planning. For example, Mishra (2025) argue that while financial literacy is important, its direct impact on retirement planning behaviors is often overstated. They found that even individuals with adequate financial knowledge may fail to apply it effectively in their retirement decisions due to behavioral factors such as procrastination, lack of confidence, or aversion to financial risks. Their findings suggest that financial literacy must be complemented with behavioral interventions, such as nudges and automated saving mechanisms, to produce meaningful improvements in retirement planning outcomes.

Furthermore, a study by Hu et al. (2024) challenges the assumption that financial literacy has a robust and consistent effect on financial behavior. Their meta-analysis of financial literacy interventions revealed that while knowledge improves slightly following educational programs, it often does not translate into sustained behavioral changes such as increased retirement savings or better investment choices. They argue that external factors, including income levels, social influences, and access to financial products, may play a more decisive role in shaping retirement planning behavior than financial literacy itself. These studies highlight that while financial literacy is valuable, it may not

independently drive improved retirement planning, contradicting the current study's emphasis on its strong and direct influence.

Theoretical and Managerial Implication of the Findings

The findings contribute to existing theories on financial literacy by reinforcing the notion that gender disparities persist across various dimensions of financial knowledge and skills. These results from objective one aligns with social learning theory, which suggests that gendered differences in financial behavior are influenced by societal norms, education, and role modelling. Furthermore, the findings support the human capital theory, emphasizing that differences in access to education and skill development contribute to varying levels of financial competence between males and females (Chen & Chen, 2023). From a managerial perspective, the findings from the first objective emphasize the importance of developing gender-sensitive approaches in financial education and workplace training programs. Managers in financial institutions should consider tailoring their outreach strategies to address the specific needs and challenges faced by women in building financial knowledge and confidence. For instance, financial service providers can design womenfocused programs that simplify financial products and enhance practical decision-making skills. Additionally, organizations should implement mentorship and peer-learning initiatives to create supportive environments where women can gain hands-on financial experience (Chen & Chen, 2023).

Further, the findings from the second objectives align with human capital theory, which posits that individuals invest in education to enhance their skills and decision-making capabilities, including financial planning (Jiang & Shimizu, 2024). However, the results also reveal that higher educational

attainment does not guarantee improved retirement planning, suggesting that education alone is insufficient without targeted financial literacy interventions. This finding highlights the limitations of traditional education in addressing practical financial behaviors and supports the integration of financial education into broader educational curricula. These findings also emphasize the importance of designing tailored financial education programs that address the specific needs of individuals across varying educational levels. Employers, financial institutions, and policymakers should prioritize initiatives aimed at secondary and lower-educated groups, as these segments exhibit significant variations in retirement planning behaviors (Jiang & Shimizu, 2024). For example, companies could offer workplace-based financial literacy workshops that focus on retirement strategies and encourage early planning among employees. Financial service providers could also develop customized tools and advisory services to cater to individuals with diverse educational backgrounds, ensuring inclusivity and accessibility.

The findings from the third objectives results support the notion that financial literacy acts as a critical enabler of informed decision-making and long-term financial preparedness, as proposed in behavioral finance theories. The significant positive relationship between financial literacy and retirement planning also provides empirical backing for models emphasizing the importance of financial education in shaping proactive and strategic retirement behaviors. This reinforces the argument that financial literacy is not just a skill but a vital factor influencing an individual's ability to plan for the future effectively. Additionally, these results suggest that financial literacy should be integrated as a key variable in theoretical frameworks analysing retirement

readiness, particularly in professions like the health sector where job demands may limit attention to personal financial planning.

Further, from a managerial perspective, the findings highlight the need for healthcare organizations and policymakers to prioritize financial literacy programs as a strategic tool to enhance retirement readiness. Managers can design and implement targeted workshops, personalized financial planning sessions, and access to professional financial advisory services for employees. These initiatives would not only improve employees' financial literacy but also promote job satisfaction and reduce post-retirement financial stress, contributing to overall well-being. Moreover, policymakers can use these insights to shape public policies that encourage mandatory financial literacy training in professional sectors.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarizes the study's objectives, the relationships the research investigated, the theories that underlie the study, the methods that were utilized to achieve the study objectives, and the data processing and analysis techniques used. Furthermore, this chapter outlined the key findings in line with the study objectives, draws conclusions based on the results, and provides recommendations based on the conclusions. The chapter finally made suggestions for further research on the topic in the area of theories that can be used and the methodologies.

Summary

Summary of findings

Based on the data collected through the questionnaire, the following key findings were revealed in order of the study's objectives. Findings, from the first objective indicate a notable gender disparity in financial literacy, with males significantly outperforming females in most areas assessed. Males had higher scores in critical areas like financial knowledge and decision-making However, no significant difference was observed in FL2, suggesting some areas of financial literacy where gender disparities are less pronounced.

The results from the second objectives indicates that overall, educational qualifications play a significant role in influencing retirement planning, with individuals having higher educational attainment generally displaying better financial planning behaviors. However, the analysis revealed that this influence is not consistent across all education levels. The findings also highlighted that

individual with secondary education exhibited significant differences in retirement planning behaviors compared to other educational groups, implying that this stage of education may be critical in shaping financial habits. This underscores the importance of early financial education, particularly at the secondary level, to foster long-term retirement planning. The study suggests that targeted interventions at various educational stages, particularly for individuals with lower or no formal education, are necessary to enhance retirement readiness.

Findings from the third objective of the study highlight a significant and positive relationship between financial literacy and retirement planning among health sector workers. The findings reveal that financial literacy explains approximately 30.8% of the variance in retirement planning, indicating its critical role in shaping effective financial preparation for retirement. With a standardized beta coefficient of 0.555, the study demonstrates a moderately strong influence of financial literacy, emphasizing that workers with higher financial knowledge are better equipped to make informed and proactive decisions regarding their retirement. The statistical significance of the results (p < 0.001) underscores the robustness of this relationship and supports the argument that improving financial literacy can lead to better retirement outcomes. These findings align with theoretical perspectives and empirical evidence that position financial literacy as a key determinant of financial decision-making and long-term financial well-being. However, the study also acknowledges that while financial literacy significantly impacts retirement planning, other factors, such as behavioral tendencies and external influences, may also play a role.

Conclusion

The study provided a comprehensive examination of the financial literacy and retirement planning behavior among health sector workers in the Abura-Asebu Kwamankese District Hospital. The study shown that the financial literacy level of the health sector workers was found to be moderately high, with the workers demonstrating a strong understanding of basic financial concepts, investment products, and the ability to make financial decisions. Moreover, their knowledge of retirement-specific topics, such as different types of retirement savings plan and creating diversified investment portfolios, was also relatively high. This suggests that while the health sector workers have a good grasp of general financial literacy, there is room for improvement in their retirement planning-related knowledge and skills.

Significant gender differences were observed in financial literacy levels, with male health sector workers generally displaying higher understanding across various domains compared to their female counterparts. This gender-based disparity underscores the need for targeted interventions and educational programs to address the financial literacy gap and ensure equitable access to retirement planning resources. In terms of retirement planning behavior, the health sector workers exhibited relatively low levels of engagement. Factors such as the development of written retirement plans, contribution to formal retirement savings, and consultation with financial advisors were relatively limited among the sample. This suggests that the health sector workers in the district may not be adequately prepared for their financial future in retirement.

The study further examined the relationship between educational level and retirement planning behavior, revealing that individuals with higher levels of education, such as those with bachelor's degrees or above, were more likely to exhibit proactive and comprehensive retirement planning practices. This included starting retirement planning earlier, figuring out retirement savings needs, and contributing to formal retirement savings plans. These findings highlight the importance of education in promoting effective retirement planning among healthcare professionals. Lastly, the regression analysis indicated a moderate, yet statistically significant, relationship between financial literacy and retirement planning among the health sector workers. While financial literacy was found to be a relevant factor, other variables not accounted for in the model may play a more influential role in explaining the variance in retirement planning behavior. This underscores the need for a more holistic understanding of the factors that shape retirement planning practices within the healthcare sector.

Overall, the study provides insights into the financial literacy and retirement planning landscape of health sector workers in the Abura-Asebu Kwamankese District Hospital. The findings indicated the importance of targeted interventions, educational programs, and a comprehensive approach to addressing the financial well-being and retirement preparedness of healthcare professionals. By enhancing financial literacy and promoting proactive retirement planning, the health sector workers in the district can be better equipped to secure their financial future and achieve long-term financial security.

Recommendation

Based on the findings from the first objectives, governments and educational authorities should integrate financial literacy programs into school curricula at all levels, ensuring that both male and female students receive equal exposure to foundational financial concepts. Additionally, financial institutions can collaborate with community organizations to provide workshops and seminars tailored specifically for women, focusing on practical financial skills such as budgeting, investing, and managing credit. These efforts should prioritize accessibility by offering flexible scheduling, free or subsidized costs, and culturally appropriate content to reach diverse female populations. Employers and industry stakeholders also have a critical role to play in bridging this gap. Corporations should include financial literacy training as part of professional development programs, particularly for female employees, to empower them with the knowledge needed for personal and professional financial management.

In line with the findings from the second objectives, it is recommended that policymakers and educational institutions prioritize the integration of comprehensive financial literacy programs into the curriculum at various educational levels, with a particular emphasis on secondary education. Given that individuals with secondary education showed significant differences in retirement planning, this stage presents a valuable opportunity to equip students with the knowledge and skills needed for effective financial decision-making. Educational systems should introduce basic financial concepts early on, including saving for retirement, investing, and budgeting, to ensure that students develop sound financial habits that will serve them well into adulthood. By

providing these skills early, students can become more proactive in planning for their financial future, leading to improved retirement readiness across the population.

For employers and financial institutions, the findings suggest the need for targeted retirement planning programs tailored to employees at various education levels. Companies should offer accessible, customized workshops and resources that focus on practical financial strategies for retirement, especially for employees with lower or secondary education, who may face more challenges in understanding retirement planning concepts. Financial service providers should also develop tools and advisory services that are specifically designed to address the unique needs of individuals at different educational stages.

Based on the findings from the third objectives, healthcare administrators are encouraged to implement targeted financial education programs within their organizations. These programs should be designed to address the unique challenges healthcare workers face, such as long working hours and variable income structures, which may hinder their ability to focus on retirement planning. Workshops, seminars and interactive sessions on topics like budgeting, retirement savings, investment strategies, and pension plan options should be incorporated into professional development initiatives. Providing these resources can empower employees with the knowledge and tools needed to make informed financial decisions and improve their long-term financial security.

Healthcare administrators should also consider offering access to personalized financial advisory services. Partnering with financial planning

professionals to provide one-on-one consultations can help employees create tailored retirement plans that align with their financial goals and current resources. These advisory services could include periodic reviews of employees' retirement strategies to ensure they are on track to meet their objectives. Additionally, organizations can integrate automated financial planning tools, such as retirement calculators or savings goal trackers, into their employee benefits platforms. These tools can simplify the process of retirement planning and encourage workers to actively engage in their financial future.

Finally, healthcare organizations should advocate for policies that enhance financial literacy at a systemic level. Collaborating with policymakers, unions, and financial institutions to promote mandatory financial education programs across the sector can create a culture of financial awareness and preparedness. Administrators can also work to improve communication about existing retirement benefits, such as employer-sponsored pension plans, by providing clear, accessible information about contributions, payouts, and investment options.

Suggestions for Further Studies

To further advance the understanding of the factors influencing financial literacy and retirement planning among the health sector workers in the Abura-Asebu Kwamankese District Hospital, several suggestions for future research are proposed. Firstly, conducting larger-scale studies with representative samples across multiple healthcare institutions and regions can improve the generalizability of findings and provide a more comprehensive view of the financial literacy and retirement planning landscape in the healthcare sector. This can help identify potential geographical or institutional variations that may

influence the financial knowledge and behaviors of healthcare professionals. Secondly, exploring additional factors that may influence financial literacy and retirement planning, such as organizational support, access to financial education resources, job satisfaction, perceived job security, and personal financial goals, could provide deeper insights into the complex relationships between these variables. In addition, employing a multi-dimensional approach that considers individual, organizational, and societal factors can offer a more holistic understanding of the barriers and facilitators to financial well-being and retirement preparedness among healthcare workers.

Thirdly, utilizing mixed-methods research designs that combine quantitative and qualitative techniques, such as surveys, in-depth interviews, focus groups, and case studies, can provide a richer, more nuanced understanding of the financial literacy and retirement planning behaviors of healthcare professionals. Qualitative methods, in particular, can shed light on the lived experiences, perceptions, and decision-making processes that shape the financial decision-making of healthcare workers, which may not be easily captured through purely quantitative approaches. Additionally, conducting comparative studies across different healthcare specializations, work settings (e.g., public vs. private healthcare institutions), and career stages (e.g., early-career, mid-career, and late-career) could reveal important insights into the unique financial literacy and retirement planning needs of various subgroups within the healthcare workforce. This can inform the development of targeted interventions and support systems tailored to the specific challenges and priorities of different healthcare professionals.

Finally, integrating theoretical perspectives from related disciplines, such as behavioral economics, financial psychology, and adult learning theory, could further enrich the conceptual foundations and provide additional analytical lenses for understanding the factors that shape financial literacy and retirement planning behaviors among healthcare workers. This interdisciplinary approach can lead to more robust and nuanced interpretations of the research findings, ultimately informing more effective interventions and policies to support the financial well-being and retirement preparedness of healthcare professionals.

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