UNIVERSITY OF CAPE COAST

FINANCIAL LITERACY AND RETIREMENT PLANNING AMONG GOVERNMENT WORKERS IN GHANA

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BY

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate' Signature………………………….... Date…………………………

Name: Diana Kankam Andoh

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature…………………………. Date………………………

Name: Dr. Evans Frimpong-Manso

ABSTRACT

This study was aimed to examined the effect of financial literacy on retirement planning. Specifically, the study sought; to determine the level of financial literacy among government workers in Ghana; to examine the perceived level of retirement planning among government workers in Ghana; to examine the effect of financial literacy on retirement planning among government workers in Ghana. The study was centered on the expectancy theory. The study employed the explanatory research design since the study tested the relationship between the various variables. The data collection instruments were questionnaire. The study employed the quantitative research approach. The simple random sampling technique was used in selecting a respondent of 385. Descriptive statistics and structural equation model were employed to analyse the objectives of the study. The study found that there was a positive and significant relationship between financial behaviour and financial knowledge on retirement planning. The study recommended that individuals must prioritize financial education to improve your understanding of key concepts, investment options, and retirement planning strategies.

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DEDICATION

To my son- Nyameadom Osei-Bonsu Mumuni

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CHAPTER ONE

INTRODUCTION

Financial literacy, encompassing a range of knowledge and skills related to managing personal finances, is crucial for effective retirement planning. This competency is particularly significant for government workers in Ghana, who often rely on structured pension schemes and financial planning to secure their post-retirement life. In the Ghanaian context, where economic stability and social security frameworks are evolving, the financial literacy of government employees becomes a key determinant of their ability to make informed decisions about savings, investments, and retirement benefits. In Ghana, the landscape of retirement planning has undergone significant changes with the introduction of reforms in the pension system, aimed at improving the financial security of retirees. However, the effectiveness of these reforms largely depends on the financial literacy of the workforce. Government employees, being a significant segment of the formal workforce, play a crucial role in setting the precedent for financial behaviors and retirement preparedness in the country.

Background of the Study

The financial systems of the 21st century have been expanding at a rapid pace, getting more sophisticated, and seeing an increase in complexity all over the globe. It is because of this that the economic and social environment in which individuals make choices about their finances has also undergone significant transformations (Sarpong-Kumankoma, 2023). This has resulted in an increase in the duty that each individual employee has in terms of managing their own funds and ensuring their financial independence. It is common knowledge that individuals' retirement planning, saving and investing choices, as well as their overall financial well-being, may be negatively impacted by financial issues that arise as a consequence of poor personal financial management. According to Doorley and Nolan (2019), older workers in the United States are not at all confident about the effectiveness of their attempts to save for retirement. Further, according to Doorley and Nolan, one-third of persons in their 50s have not developed any form of retirement saving plan at all.

Retirement planning and preparedness, choices about savings and investments, and overall financial well-being are all significant elements that have been explored in a number of studies. These factors are crucial in influencing the quality of life of employees. (Tan & Singaravello, 2020) One of the most important aspects of financial health is the financial well-being of employees as well as their choices on retirement savings and investments. According to Antoni, Saayman, and Vosloo's research from 2020, employees who have high levels of financial well-being get the financial flexibility to make decisions that enable them to take pleasure in their lives. People all across the world are being urged to take responsibility for their own financial well-being as a result of the periodic changes that take place in pension and retirement schemes. During retirement, individuals are required to make choices about the amount of money they will save and the kind of investments they will make (Harahap et al., 2022). It is necessary to make modifications to one's identity, thinking, emotion, and actions in order to adapt to changes in one's life (Mustafa et al., 2023; Safari, Njoka, & Mukwa, 2021).

Taking this into consideration, the management of workers' personal finances is a significant concern in the modern world. According to Niu, Zhou, and Gan's research from 2020, it is also acknowledged as a domain of essential life skills. Illiteracy in financial matters is one of the factors that contribute to personal financial difficulties. According to the findings of a research that was carried out by Graber (2020), the majority of workers do not possess the level of financial literacy that is required to make significant financial choices that are in their own best interests. Poor financial habits and personal and family money management practices have consequential, damaging, and negative affects on one's retirement planning and preparedness, financial well-being, as well as life at home and work, according to Dhlembeu, Kekana, and Myita (2022). According to these authors, these practices have a negative influence on one's life.

The literature up to this point has offered a variety of definitions of what it means to be financially literate. Financial literacy was described by Janposri (2021) as the capacity of an individual to comprehend and make use of topics pertaining to finances. Personal financial knowledge was defined by Gallego-Losada et al. (2022) as the notions of personal financial management skills and information. On the other hand, Ogoi (2019) claimed that financial literacy encompasses awareness and understanding of financial instruments as well as their application in both personal and professional life. Taking all of these concepts into consideration, it is clear that financial literacy encompasses the capacity to maintain a balanced bank account, create budgets, save money for the future, and acquire knowledge about debt management tactics. If an individual is able to successfully handle their own finances in life and in this ever-changing society, then that individual is said to be financially literate.

The workers' capacity to manage day-to-day financial concerns will improve as a result of their increased financial literacy, which will also lessen the negative implications of bad financial choices, which may otherwise take years to overcome. According to Garcia (2021), an increase in financial literacy has a beneficial effect on the retirement planning, financial well-being, and personal finance management of workers whose financial literacy is increased. The education of workers may help improve their individual financial knowledge and abilities (Sirisakdakul and Khornjamnong, 2020; Setyawan-Hytabarat and Wijaya, 2020). Financial literacy is a component of employee education.

It is important to be aware of the fact that the choices that individuals make at significant points in their life ultimately have an impact on their own financial security and, ultimately, have an impact on the financial security of their nation. It is for this reason that the Government of Ghana recognized the importance of the Annual Financial Literacy Week as a long-term policy priority action for the financial industry. The Ministry of Finance and Economic Planning (MOFEP) said in 2018 that the objective was to increase knowledge about the many financial products and services that are accessible to customers in order to assist them in better understanding and managing their money, which would ultimately lead to an improvement in the financial behavior of the general population. "The launch of the Annual Financial Literacy Week was recommended by Ghana's Financial Sector Strategic Plan," according to Safari and Njoka (2021).

According to the Ghana Statistical Service (2022), the adult financial literacy rate in Ghana was 45 percent as of the year 2021. The country's population included more than 33 million individuals. According to the findings of a research that was carried out in Ghana by Sarpong-Kumankoma (2023), the majority of Ghanaians do not possess sufficient financial knowledge and do not possess the skills necessary to make informed judgments and choices on the management of their finances, nor do they comprehend the specifics of financial goods and services. Klapper, Lusardi, and Oudhensden (2015) discovered that just 33 percent of people throughout the globe are financially literate. This finding lends credence to the above statement. It may be deduced from this that barely one in three adults are financially literate people.

When these low levels of financial literacy are taken into consideration in the context of making financial decisions during retirement, it becomes abundantly evident that only a tiny percentage of the population is likely to possess the necessary degree of financial knowledge and expertise. Once again, individuals who are severely under-informed about fundamental financial concepts and, as a result, are not financially literate fail to prepare for retirement, which has repercussions for their financial well-being (Baker et al., 2021; Fang, Hao, & Reyers, 2022; Larisa, Njo & Wijaya, 2020; Sun et al., 2021). According to Baskoro and Aulia (2019) and Doorley and Nolan (2019), there has been a lack of research that investigates the link between financial literacy and retirement planning, as well as the role that demographic features play in the relationship. This is despite the fact that it is widely acknowledged that education about financial literacy is of great significance. Because of this, the purpose of this research is to investigate the connection between financial literacy and the planning of retirement for employees working in the public sector in Ghana.

Statement of Problem

The majority of scholars have been interested in the topic of financial literacy and preparing for retirement throughout their work. Asamoah, Alagidede, and Adu (2021) state that a significant number of seniors in underdeveloped nations such as Ghana do not have adequately provided retirement lifestyles for themselves. Due to the fact that the majority of Ghanaian workers and their employers are not adequately prepared for their retirement years, a significant number of pensioners in Ghana are forced to live a substandard life without having access to decent housing for themselves. Adam, Frimpong, and Boadu (2017) found that the majority of retirees may depend on the assistance of their families as a source of income.

The majority of emerging countries have pension benefits that are not sufficient to fulfill the fundamental requirements of the people who receive them. A group of pensioners in Ghana got a pension from the Social Security and National Insurance Trust (SSNIT, 2019) that was as low as GH¢230 (about US$50) per month. This information was referenced in Adam et al. (2017). After that, the retiree is placed in the poverty bracket, which is a classification that is determined by the World Bank and the United Nations. (Ibrahim & Shehu, 2020) The burden that people have to bear in order to ensure their financial well-being after retirement necessitates making challenging decisions and making trade-offs well before they reach retirement age.

Many individuals wish they had more financial knowledge to allow them to prepare for a retirement that is unique to them (Lusardi et al., 2018). Financial literacy is a key component of healthy financial decision-making, and many people wish they had some more financial knowledge. According to Lusardi, Mitchell, and Ogero (2018), a significant number of family units are not aware with the most fundamental economic ideas that are required from them in order to make choices on saving and investing. According to Owiredu-Ghorman, Addy, Gyabaah, and Amoako (2018), it is important to note that the younger and more elderly residents in Ghana looked to be under-informed about fundamental notions of financial literacy. This found to have significant repercussions for a variety of choices, including those pertaining to saving, retirement planning, mortgages, and other monetary matters. As a consequence of their lack of knowledge about finances, they do not have any appropriate savings plans in place for their retirement.

Due to the fact that it requires preparing for a lengthy period of time, the majority of young individuals believe that retirement planning is a burden for them. According to the Life Insurance Association of Malaysia (LIAM) (2014), young people in their 20s feel that they are too young to think about retirement, but young people in their 30s and 40s believe that they are prepared for retirement since they have money in their Employee Provident Fund (EPF). According to Habib, Bhuiyan, and Hasan (2019), the truth in the majority of emerging African nations, such as Ghana, is that the majority of individuals are unable to afford to retire at the age of 55. This is due to the fact that they begin making preparations for retirement at a relatively late stage in their working lives.

As a result of the negative effects that financial illiteracy may have on an individual's well-being, especially in the aftermath of the damage caused by the financial crisis, governments, financial institutions, and regulators are becoming more concerned about the issue (OECD, 2019). Based on the OECD's report from 2013, the 2019 G20 Summit has acknowledged the significance of financial literacy as a crucial factor in achieving improved financial inclusion. As a consequence of this, several governments have devised and implemented programs offering financial education, notably in educational institutions and adult groups who are ostensibly more vulnerable. Some studies have shown that these programs have favorable impacts, despite the fact that the data about them is currently limited and does not for definitive conclusions to be drawn.

Given that the majority of the existing research on financial literacy and retirement planning focuses mostly on studies conducted in industrialized countries, this study was prompted to be conducted. It is possible that the majority of these nations have distinct pension systems and other financial education techniques, which may not be applicable to a developing country like Ghana (Bucher-Koenen, Alessie, Lusardi, & Van-Rooji, 2021; Sirisakdakul & Khornjamnong, 2020; Boisclair, Lusardi, & Michaud 2017; Niu & Zhou, 2018).

Once again, the majority of studies have examined financial literacy by using the degree of numeracy, comprehension of inflation, interest compounding, and risk diversification (Bucciol, Quercia, & Sconti, 2021; Lusardi et al., 2018). On the other hand, the OECD (2018) assessments on financial behavior, financial attitudes, and financial knowledge will be used in this investigation to evaluate the level of financial literacy. To provide a deeper understanding of the matter that is going to be examined, this methodological technique is both more thorough and more efficient than other approaches.

According to Jati, Setyawanti, Christanti, and Ambarsari (2019) and Mireku (2015), the majority of research and studies on financial literacy and financial well-being have concentrated on young people and students who are also employed. According to the findings of yet another study conducted by Adam et al. (2017) on the topic of financial literacy and financial well-being, retirees are abandoning workers. Therefore, it is possible to make appropriate preparations in order to have a better retirement in the near future. Taking this into consideration, it is essential to do research on government employees in Ghana, evaluate the extent to which they are knowledgeable about finances, and investigate whether or not they are making enough preparations for their retirement.

Purpose of the Study

The main objective of the study is to analyse the effect of financial literacy on retirement planning among government workers in Ghana.

Research Objectives

The study is guided by the following research objectives;

1. To determine the level of financial literacy among government workers in Ghana.
2. To examine the perceived level of retirement planning among government workers in Ghana.

3. To examine the effect of financial literacy on retirement planning among government workers in Ghana.

Research Question

1. What is the level of financial literacy among government workers in Ghana?
2. What is the perceived level of retirement planning among government workers in Ghana?
3. What is the effect of financial literacy on retirement planning among government workers in Ghana?

Significance of the Study

The findings of this research will make a contribution to the current body of information about the discussion on the level of financial literacy among personnel working in the public sector in Ghana. The outcomes of this research are expected to give agencies and policy makers with insights that will allow them to put suitable strategies and measures into place to increase retirement planning via financial education. It is intended that these findings will provide useful information. The results of this study will also be helpful for organizations such as SNNIT and other pension institutions, since they will be valuable for financial planning. After everything is said and done, the study will be used as a reference source for researchers in the future.

Delimitation of the study

The components of financial literacy were the subject of this research. These components included the financial behavior, financial attitude, and financial knowledge of people working in the government sector. The reason for this is that doing a border study requires a significant amount of time and money.

Limitations of the study

This study on financial literacy and retirement planning among government workers in Ghana is subject to several limitations. First, the research relies on self-reported data, which can be affected by biases such as social desirability bias, where respondents may overstate their financial knowledge or planning activities to appear more competent. Additionally, the sample may not be fully representative of the diverse demographics within the Ghanaian government workforce, potentially skewing the findings. The study's cross-sectional design captures a snapshot in time, limiting the ability to observe changes and trends over a longer period.

Furthermore, cultural factors and regional differences within Ghana might influence financial behaviors and perceptions, which this study may not fully account for. Finally, the rapidly changing economic and policy environment in Ghana means that conclusions drawn from the data may quickly become outdated, necessitating continuous research to maintain relevance. These limitations highlight the need for caution in generalizing the results and underscore the importance of ongoing, comprehensive studies in this field.

Organisation of the Study

In all, there were five chapters that comprised the research. The backdrop of the study, the explanation of the issue, the aims of the investigation, the importance of the study, and the limitations of the study are all included in the subject matter of the first chapter. The second chapter was devoted to a review of the relevant literature. As a result of the fact that this chapter presents the principles of the research, it contributes to the formation of the nature and the direction of the study. The third chapter discussed the research procedures that were used in the study. It discusses the study design, the processes for sampling and the population, the data and the technique for collecting the data, the research tools, and the method for processing and analyzing the data. Results and comments of the research were presented in the fourth chapter of the report. A summary of the results, conclusions, and suggestions for the research were presented in the fifth chapter of the report.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The primary purpose of the research was to investigate the level of financial literacy and retirement planning shown by government employees in Ghana. As a result, this chapter includes reviews of literature that are associated with the research. It also focuses on theoretical reviews, explanations of ideas, empirical reviews, and concludes with a conceptual framework of the study.

Theoretical Review

The study was underpinned by the expectancy theory due to its direct linkage to the study's research objectives. This section therefore showed how the theory directly relates to the study's objectives.

Expectancy theory

Expectancy theory was pioneered by Lewin (1943), and it was connected to the relationship between an individual's perception and their behavior. The motivational effects that lie beneath human behavior can be explained as functions of anticipation, instrumentality, and valence, according to Vroom (1964) and Bolles (1972), who did additional research on this hypothesis and offered a theoretical foundation for the interpretation of these influences. Therefore, performance is reliant on effort since expectation is a function that explains the likelihood that a specific action or one's state of nature will generate a given result. This means that performance is dependent on effort. In addition, instrumentality is concerned with the relationship between performance and reward, which indicates that a result is based on performance. Valence, on the other hand, is concerned with the value of importance that an individual gives to a perceived consequence.

According to Mandel and Klein (2007), these components or functions are what encourage an individual to produce products that are of value. Therefore, when an individual is induced to choose a specific behavior above other behaviors based on the results that are expected, the individual will behave or perform in a particular manner. A simple point that Oliver (1974) emphasized was that the actual behavior of an individual is strongly dependent on the outcome that is sought or intended. The viewpoint of Oliver was disproved by Montana and Charnov (2008), who demonstrated that an individual's behavior is not simply dependent on the consequence that is anticipated. This is because the theory is about the mental processes that are associated with making better choices. Furthermore, the idea emphasizes that awards should be directly related to the performance of employees, and that employers should also make sure that relevant rewards are made available in an adequate manner.

An explanation of the motivating influences that underlie financial literacy and retirement planning was provided by the expectation theory, which served as the methodology for the study. For the purpose of this hypothesis, it is hypothesized that an employee who anticipates favorable outcomes from retirement planning may be compelled to participate in financial education. Because of this, the worker may have the expectation that the likelihood of being financially literate will create a particular consequence, which is to say that they will be able to enjoy financial security during their retirement years. To put it another way, an employee may be encouraged to enhance their financial literacy in order to increase their chances of successfully reaching their long-term monetary goals. In light of this, it is possible that employees will not be pushed to acquire financial literacy if they have the perception that doing so will not result in the desired end, which is financial security during retirement. As a result, one of the most crucial outcomes that an employee hopes to achieve as a result of being financially literate is the possession of appropriate retirement plans that are able to fulfill retirement requirements, for example.

Social Learning Theory

Therefore, according to Goldhaber (2000), education theory, also known as behaviorism, provides a methodical investigation of the observable consequences on behavior as well as the manner in which individuals develop habits. From the perspective of the social learning theory, the amount of financial literacy of an individual is determined by a number of elements, including the individual's level of financial knowledge and skills, as well as their attitude towards the management of money. When it comes to demonstrating how a person's socialization development influences his or her norms and preferences, two methods that can be utilized are modeling and observational learning, as stated by Bandura (1977). The research that was conducted by Skinner in 1953 was a big advance in the field of learning theory at the time. This research revealed that once a behavior is related to a result, whether it be a reward or a punishment, the likelihood of the activity continuing changes. In order to determine whether or not an individual continues to spend money rather than save it because they receive an immediate benefit as a result of doing so, this concept is utilized. When financial literacy is broken down into discrete abilities that can be exercised sequentially and reinforced over time, it is possible for people to understand, grasp, and make smart financial decisions such as paying off debt or investing. However, this is only achievable if the skills are divided down into different categories. According to the social learning theory, one way to become financially educated is to model your behavior and attitudes after those who are already financially literate in your society. This is one technique of being financially educated.

All human behavior is motivated by five fundamental needs, according to the definition of choice theory, internal control psychology provided by Glasser (1998). These five basic needs include the physiological need for survival, as well as four psychological needs that can be represented by the terms love/belonging/acceptance, power/recognition/accomplishment, freedom/independence/choice, and fun/learning/excitement, amongst others. In order to investigate and comprehend a large number of variables that can be utilized in order to encourage individuals to exercise their choice in a range of commercial behaviors within the framework of retirement investment decision-making, a choice theory approach is utilized. It is possible to split choice theory into four categories for the purpose of this paper. These categories are as follows: the emphasis on noticeable qualities of choice; the context in which the option is examined; the time horizon in which the decision is made; and the reversibility of the decision (Ambler et al., 2004). Particularly challenging is the process of selecting investments for retirement because there is such a wide range of sophisticated options that individuals have to choose from. One of these options is where to invest the income that they will receive during retirement.

Conceptual Review

This section explains and the concepts underpinning the study. The concept of financial literacy and retirement planning has been explained under this section

Concept of financial literacy

According to Cicero, this term originated from Latin literature, which meant "a learned person." This concept was borrowed from Latin literature. As a result of the fact that this idea or term has been the subject of widespread awareness ever since the beginning of time, numerous academics have provided lengthy definitions of it. According to Worthington (2013), the ability to make informed judgments and to make appropriate decisions in connection to the use of and management of money or finance is what is meant by the term "financial literacy." It was revealed by him that in order to be financially literate, one must be aware of the clarity of concerns or the region of essential instructions. Therefore, the system of financial education must to be focused at providing sufficient knowledge for individuals, including employees, so that they are able to plan financially for their future, particularly during retirement periods.

According to Agnew, Szykman, Utkus, and Young (2007), the ability to access, organize, assess, and make use of financial resources is the definition of financial literacy at that time. On the other hand, Garman and Gappinger (2008) described it as the knowledge that an individual possesses regarding the concepts, principles, facts, and technology tools that are necessary to be financially savvy. In addition, Huston (2010) stated that the concept of financial literacy should encompass the application of financial knowledge rather than concentrating exclusively on an individual's capacity to acquire and assess financial information. In his remarks, he emphasized that the application of financial knowledge or skills is necessary for achieving financial literacy. Remund (2010) also defined it as a measurement of one's comprehension of the fundamental ideas in the field of finance.

Huston (2010) proposed that the capacity of an individual to use information and skills to effectively manage financial assets for the purpose of achieving financial soundness over their whole life is an example of what is meant by the term "financial literacy." The Organization for Economic Cooperation and Development (OECD) (2011) provided a comprehensive definition of financial literacy as the process by which individuals enhance their understanding of financial concepts and products through information, instruction, and/or objective advice, as well as the development of skills and confidence. The goal of this process is to help individuals become more aware of financial risks and opportunities, which will allow them to make informed choices and take other relevant actions to improve their financial well-being. It indicated that the following are essential components of financial literacy: money, saving, budgeting, debt literacy, financial goods, and self-assistance with financial matters.

Financial literacy was described by Lusardi and Mitchell (2014) as the capacity of an individual to understand economic information and to make proper decisions in connection to financial planning, the accumulation of wealth, debt, and pensions. In addition, Lusardi and Mitchell (2014) emphasized that financial literacy is defined as the ability of an individual to regulate economic information and make judgments that are pertinent in regard to the creation of wealth, pensions, financial planning, and debt. Being financially knowledgeable is therefore important for people to have in order to settle down and make decisions that are informed. According to Ali (2013) and Gallery, Newton, and Palm (2011), the focus of financial literacy is on essential financial tools such as saving money, creating a budget, purchasing insurance, and spending money on investments.

Because of the definitions, it is possible to draw the conclusion that financial literacy refers to the capacity of an individual to make decisions based on accurate information and to take appropriate actions in relation to issues that have an impact on their financial wealth and wellness. In addition to this, it attempts to evaluate the degree to which individuals comprehend financial matters and make decisions regarding their finances. With the deregulation of financial markets, improved access to credit, new technologies for dealing with money, and the rapid growth in marketing financial products, the need for financial literacy is continuously becoming more significant (Mandell, 2008; Murugiah, 2014; Njuguna & Otsola, 2011; Onyango, 2013). In light of this, the need for financially literate individuals is continuously becoming more significant.

Mandell (2008), for example, suggests that there should be a greater emphasis placed on increasing the level of financial literacy because doing so would make it possible for individuals and organizations to accomplish a number of goals in relation to enhancing public knowledge and understanding of the financial system, as well as improving consumer protection and reducing the number of financial frauds. Furthermore, Murugiah (2014) emphasized that the beginning of financial literacy begins in the home, where children are informed and schooled on how to manage money, which ultimately results in them spending wisely and saving on a consistent basis. In the future, this will make it easier for them to make decisions regarding their finances, which will ultimately lead to an improvement in their financial situation. Amber came to the conclusion that financial literacy need to be recognized as an essential component of retirement planning and ought to be considered an essential component of living in general.

In a similar vein, Mugerman, Sade, and Shayo (2014) emphasized that financial literacy has a favorable impact on the decision to save money and, as a result, should not be taken lightly regardless of the demographic factors of the individual. As a result of this, individuals may be vulnerable to a variety of threats due to their lack of knowledge on financial matters. One example is the findings of Kotze and Smit (2008), who demonstrated that a lack of knowledge about finances can have adverse effects or implications not just on an individual but also on the nation as a whole. The findings of Fernandes, Lynch, and Netenmeyer (2014) indicated that individuals who are not financially literate will be confronted with a number of financial issues. These challenges include poor record keeping of financial transactions, spending that exceeds budget, inadequate investment plans, inappropriate financial decisions, a lack of a culture of savings, and the waste of resources. Additional research (Collins, 2012; Wise, 2013) came to the same conclusions about these difficulties.

Levels of financial Literacy

When it comes to making positive and proactive financial decisions prior to retirement, the ability of employees to recognize their degree of financial literacy is vital since it helps them make such decisions. A person's level of financial literacy can be measured by their understanding in money management in regard to four essential variables, such as financial control, budgeting, living within one's means, and borrowing and debt literacy, as stated by Capuano and Ramsay (2011). Individuals can also be evaluated based on their level of financial literacy. Studies conducted by Gustman, Steinmeier, and Tabatabai (2010), Kempson (2009), and Brown (2013) have considered the management of one's financial resources to be a factor in determining one's level of financial literacy. On the other hand, a study conducted in South Africa by Fatoki (2014) determined the level of financial literacy of employees based on their knowledge of savings.

It was also discovered by Hastings and Mitchell (2011) that an individual's level of financial literacy might be determined by their amount of information regarding investments. They noted that people who are not aware of all the investing opportunities that are available to them have a low level of financial literacy, and this has an impact on them when it comes to planning for retirement. This finding was consistent with the findings of a study conducted by Agnew, Bateman, and Thorp (2012), who emphasized that persons who have high levels of financial literacy invariably have appropriate understanding in matters pertaining to investments. Collins (2012), Van Rooij, Lusardi, and Alessie (2011), and Worthington (2013) are some of the other studies that have added that the level of financial literacy among employees may be determined by determining their knowledge in areas such as retirement planning, resource management, and insurance in addition to retirement planning.

According to Bruhn and Zia (2011), De Bassa and Scheresberg (2013), Klapper and Panos (2011), and Wachira and Kihiu (2012), an individual's level of financial literacy or understanding in areas such as savings, investment, and resource management can also be determined by their existing expertise in the field of finance. According to the findings of Klapper and Panos (2011), for example, employees who are aware about financial concerns are able to make decisions that are relevant to their finances. It was also discovered by De Bassa and Scheresberg (2013) that people who have a high level of understanding in finance are more likely to anticipate retirement, and as a result, they are more likely to amass wealth and are more receptive to various investment opportunities.

In this regard, the research experiment utilized the numerous components that were mentioned before in order to evaluate the amount of financial literacy possessed by workers in the area under investigation. Specifically, elements such as knowledge in money management, knowledge in savings, knowledge in investment, knowledge in insurance and retirement planning and knowledge in finance (Capuano & Ramsay, 2011; Collins, 2012; De Bassa & Scheresberg, 2013; Fatoki, 2014; Klapper & Panos, 2011; Mwangi & Kihuu, 2012) were employed to access the employees' general level of financial literacy. Specifically, this is due to the fact that these components have been demonstrated through empirical evidence and have been widely acknowledged in research concerning financial literacy in a variety of nations, including Ghana (Owusu, 2015).

Measurement of financial literacy

The term "financial literacy" has garnered a lot of attention, and as a result, various educational institutions have developed a variety of methods to evaluate it. The time worth of money, risk diversification, and operations of the stock market were some of the monetary concepts that Klapper and Panos (2011) utilized in their study to assess financial literacy. These indicators, which included inflation and return, were also modified by Lusardi and Mitchell (2011). Additional modifications were made. They posed questions concerning these indicators using a Likert scale with five points, ranging from one to five. Respondents who had little to no information of any of the indicators gave a score of one, while those who had a higher level of knowledge indicated a score of five. Additional researchers from a variety of countries have modified these indicators to fit their needs. For example, Almenberg and Save-Soderbergh (2011) in Sweden, Alessie, van Rooij, and Lusardi (2011) in Italy, Sekita (2011) in Japan, Bucher-Koenen and Lusardi (2011) in Germany, and Githui and Ngare (2014) in Kenya are all examples of studies that have been conducted in their respective countries.

However, Carpena, Cole, Shapiro, and Zia (2011) proposed a more comprehensive measure of financial literacy in their research on the unpacking of the causal chain of financial literacy. This measure included fundamental financial attitudes and financial awareness, as well as the addition of numeracy skills in relation to fundamental knowledge about the stock market and compounding interest rates. According to their findings, the only thing that financial education does is improve financial attitudes and knowledge; it does not improve numeracy abilities. Additionally, Clark, Musardi, and Mitchell (2017) did a study on financial literacy. They used questions that have been evaluated in earlier studies to determine the respondents' level of financial awareness with regard to their financial situation. As part of their research, the researchers measured the respondents' level of financial literacy by utilizing a variety of variables, including inflation, risk diversification, tax offset, and interest rate. The accuracy of people's understanding on these financial factors was evaluated using these metrics.

The first three indicators were developed by Lusardi and Mitchell (2008, 2009, 2011a), as stated by Musardi and Mitchell (2016). These indicators were also utilized in the Health and Retirement Study as well as other national surveys conducted in the United States, including the National Longitudinal Survey of Youth, the American Life Panel, and the United States National Financial Capability Study. Also, Clark, Maki, and Morrill (2014) devised a questionnaire to inquire about employees' understanding of tax exemption concerns. The purpose of the questionnaire was to determine the respondents' knowledge regarding tax offsets. In a similar manner, Crossan, Feslier, and Hurnard (2011) evaluated the level of financial literacy of respondents by determining their level of knowledge of inflation, money illusion, the time value of money, and compound interest.

Ansong and Gyensare (2012), Beckmann (2013), Mahdavi and Horton (2014), Lusardi and Mitchell (2008), Olga and Kharchenko (2011), and Van Rooij, Lusardi, and Alessie (2007) are some of the other studies that have measured financial literacy in terms of demographic characteristics such as age, sex, education, working experience, and levels of income of the respondents. The study modified the primary indicators proposed by Carpena et al. (2011) in relation to the solicitation of respondents' financial knowledge regarding financial attitude and awareness. These indicators were derived from the measuring indicators that were presented before. Clark et al. (2016), Githui and Ngare (2014), Klapper and Panos (2011), Mitchell (2011), and the Organization for Economic Co-operation and Development (2015) are just some of the researches that have uncovered some of these indicators. For the purpose of accomplishing the research objectives of the study, these indications were rated on a scale that ranged from one to five points.

Concept of Retirement planning

A significant number of people are becoming increasingly concerned about retirement planning as a result of the uncertainties that are linked with living after retirement. According to Lusardi and Mitchell (2011), retirement is characterized by the decision to stop working on a regular basis, particularly due to the fact that one has reached a high age. They went on to say that it is a moment of golden relaxation in which the activities of living are designed by the individual retiree to maximize enjoyment rather than for the purpose of maximizing economic returns or profit after retirement. In point of fact, it is a time when one is able to build more realistic relationships with their friends, relatives, loved ones, and most importantly, with their community. According to Mullock and Turcotte (2012), retirement can be triggered by a number of factors, including the natural decline of physical capabilities that occurs with advancing age, a mental aptitude that is deteriorating, an inability to deal with a growing amount of labor, and a decreased resistance to disease. It could show itself in the shape of a voluntary retirement, a mandatory retirement, or an early retirement.

The process of planning for retirement has emerged as a primary concern for academics in light of this fact. The term "retirement planning" was coined by Magera (1999) and refers to a methodical approach to putting resources away with the intention of generating income in the future. According to Keizi (2006), it is also known as the process of developing and putting into action a collection of financial operations and forecasts that are intended to meet the financial requirements of an individual and their family during the course of retirement. As an additional point of interest, Keizi (2006) stated that the majority of people, in general, engage in other companies as preparation for retirement. This is due to the fact that individuals should make it a priority to engage in fundamental retirement planning activities throughout their active times and to ensure that their plans are regularly updated. According to Njuguna and Otsola (2011) and Worthington (2005), when planning for retirement, it is necessary to take into consideration such factors as income, debt, spending, long-term living arrangements, and estate planning.

During the process of planning for retirement, an individual is required to, among other things, construct a retirement budget, create a retirement plan, determine retirement income, get out of them, instill a culture of savings, and invest assets properly (Lusardi & Mitchell, 2011, 2014). Similarly, it has been revealed that one can prepare retirement plans by establishing a personal mission statement, knowing your personal vision in life, conducting SWOT analysis, stating retirement objectives, developing strategies and monitoring and evaluating those retirement strategies (Fornero & Monticone, 2011;

Klapper & Panos, 2011). Because it is a methodical approach to looking into the future, proper retirement plans enable an individual to be proactive rather than reactive in their approach to retirement planning. A person's perceptions and behaviors are motivated as a result of it, and it also guarantees the continual achievement of results.

Employees' Level Retirement Planning

According to research conducted by Agarwal, Amromin, Ben-David, Chomsisengpet, and Evanoff (2015), Kotze and Smith (2008), and Fernandez et al. (2014), retirement planning is an ongoing process that exposes employees to a number of circumstances that have the potential to decide the extent of their retirement plans. According to the findings of a study conducted by Kotze and Smith (2008), there are a number of factors that can determine the level of retirement planning that an individual participates in. These factors include spending more than the budget allows, bad financial record keeping, insufficient funds, and inappropriate financial judgments. A study was carried out by Beal and Delpachitra (2010) to investigate the elements that have an impact on the process of planning for retirement. According to the findings of the study, these elements were classified as follows: personal factors (marriage, own-family health, and pregnancy), lifecycle factors, external or work-related factors (working environment, job satisfaction), and financial reasons.

Additionally, Wise (2013) found that an individual's level of retirement planning can be defined by a number of criteria, including their capacity to make decisions regarding investments, their savings behavior, and their understanding regarding the management of money. These essential competences of money management include budgeting, saving, borrowing, and planning, according to Capuano and Ramsay (2011), who retrieved Wise's (2013) measurement of money management. Wise's (2013) measurement was retrieved from Capuano and Ramsay (2011). Therefore, if you do not have sufficient knowledge in certain areas or competences, it may have an impact on your retirement goals. This is important to keep in mind since these factors impact the extent of retirement planning that employees engage in, and as a result, they assist employees in getting ready for retirement. Therefore, it is appropriate to make certain that these issues are identified and worked toward in order to guarantee that they will not have an impact on one's retirement plans and, ultimately, one's life during retirement.

Empirical Review

In this part, reviews were offered that were connected to retirement planning and financial literacy. In order to support or reject the findings of the third research objectives of the study, the reviews were carried out in order to acquire sufficient information from previously conducted, previously published studies.

Using quantitative research methods, Lusardi and Mitchell (2011a) investigated the relationship between financial literacy and retirement planning in the United States of America (US). Through the use of a survey methodology, the research endeavored to investigate the impact that financial literacy had on the process of planning for retirement. The information that was gathered through the use of questionnaires was then analyzed through the application of statistical tools such as correlation and regression. In light of the findings of the study, it can be concluded that financial literacy has a strong relationship with retirement planning, and consequently, the former has a causal influence on the latter. According to the findings of the study, individuals who make preparations for retirement are able to amass a greater amount of savings for their retirement.

Additionally, several other research conducted in various nations came to the same conclusions. For example, Fornero and Monticone (2011) discovered that financial literacy has a significant and favorable impact on the process of preparing for retirement in Italy. Bucher-Koenen and Lusardi (2011) in Germany, Sekita (2011) in Japan, and Van Rooij et al. (2011) in the Netherlands also came to the same conclusions. According to the findings of a study that was carried out by Honekamp (2011) on the various effects of financial literacy on financial education in Germany, it was discovered that financial literacy has a bigger impact on retirement planning for households in Germany that have incomes that are higher than the typical average.

On the other hand, these findings were in contradiction to the findings of a study that was conducted by Crossan and colleagues (2011). They discovered that financial literacy does not have any impact on the planning of retirement. The research that they conducted was carried out in New Zealand, and it investigated the impact that financial literacy had on the process of planning for retirement. In addition, Klapper and Panos (2011) conducted a study in Russia to investigate the impact of financial literacy on retirement planning. They discovered that there is a negative correlation between financial literacy and retirement or pension planning in Russia. According to their hypothesis, a better level of financial literacy is inextricably linked to retirement planning and the investing of private pension funds. Therefore, they came to the conclusion that an increase in financial literacy led to a drop in the amount of planning done for retirement or pensions in Russia.

However, in a quantitative study on financial literacy and financial planning in France, Arrondel, Debbich, and Savignac (2013) explicitly looked at the association between financial literacy and retirement planning. This study was conducted in France. According to the findings of the study, there is a significant and favorable connection between financial literacy and retirement planning. A study was carried out by Doyo (2013) to investigate the impact that financial literacy has on the level of pension readiness among individuals working in the informal sector in Kenya. Through the use of a descriptive survey approach, the purpose of the study was to precisely investigate the relationship between financial literacy and planning for retirement in the area under investigation. Using a technique called stratified random sampling, the research was conducted with a total of 150 participants, and data was collected from them through the use of questionnaires. After conducting a correlation analysis on the data, it was discovered that the level of financial literacy had a substantial positive link with having preparedness for retirement.

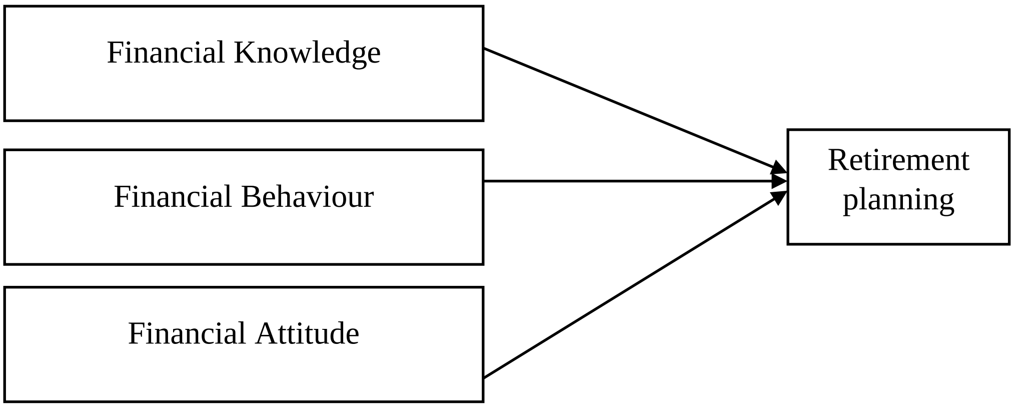
In a similar vein, Githui and Ngare (2014) carried out research on the topic of financial literacy and retirement planning in the informal sector in Kenya. In the informal sector of Kenya, the study investigated the influence that financial literacy has on the process of planning for retirement. According to the findings of the study, having a good understanding of finances has a beneficial effect on retirement planning in Kenya. According to the findings of the study, the ability to plan for retirement is directly proportional to the level of information one possesses regarding various financial matters. In his article, Gitari (2012) emphasized the importance of having a comprehensive understanding of financial matters in order to make sound and efficient decisions on retirement planning over the long run.

A study on financial literacy and retirement planning was carried out by Fatoki (2014) in South Africa. The findings of the study revealed that the former had a beneficial impact on the latter. The conclusion that Fatoki came to was that those who are financially literate are able to put some money aside for their retirement. The purpose of the research that Nejati, Ahmadi, and Lali (2015) carried out in Iran was to investigate the impact that financial literacy has on the planning of retirement and the wealth of households. The study focused on master's degree students in Business Administration at Islamic Azad University. Using a descriptive research design, the study was quantitative in character and utilized the research methodology. There were 59 individuals who were given questionnaires, and the data that was collected was analyzed using Pearson's correlation coefficient and regression analysis. According to the findings of the study, having a good understanding of finances has a beneficial impact on retirement planning, risk diversification, and savings planning at the university.

In addition, Meir, Mugerman, and Sade (2016) carried out research on the topic of financial literacy and retirement planning in Israel. The study was designed to investigate the impact that financial literacy has on the process of planning for retirement. Both the quantitative methodology and the survey design were utilized in the research. The study concentrated on two primary aspects of financial literacy: the manner in which one makes financial decisions and the level of financial information one possesses. Regression analysis was used to analyze the data, and the results showed that financial decision-making behavior had a positive link with retirement planning. On the other hand, when other variables were adjusted for, there was no significant relationship between financial knowledge and retirement planning. Their findings led them to the conclusion that having a better understanding of finances in connection to retirement savings improves one's capacity to plan for retirement.

Conceptual Framework

This section offered the conceptual framework of the study in an effort to provide a visual representation of the important factors that were investigated in the study. The framework was developed within the parameters of the variables that were being investigated in this study (financial literacy and retirement planning), and it was presented in Figure 1. It provided a more in-depth explanation of the link between the variables that were being considered, and it was possible to determine from Figure 1 that the dependent variable is retirement planning, while the independent variable is personal financial literacy. The implication is that any change in the independent variable (financial literacy), whether it be a positive or negative change, would immediately affect the dependent variable (retirement planning). Financial literacy has been shown to be a significant factor in determining whether or not one would plan for retirement.



Source: Authors Construct (2023)

Chapter Summary

This chapter presented the literature review of the study in relation to financial literacy and retirement planning. The chapter revealed the theory underpinning the study and also discussed the major variables under consideration. Empirical reviews in relation to the study were presented and the study concluded with a conceptual framework.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter illustrated the research design as well as the methodology employed while carrying out the study. The sections include research philosophy, research design, study area, target population, sampling procedure, the data collection instruments, data collection procedures, data processing, and analysis.

Research Philosophy

A philosophy or worldview is an elementary set of principles that guide action (Guba, 1990). It is a general positioning about the world and the nature of research that a researcher holds, impacting how research is conducted. Research philosophy may be referred to as a worldview or paradigm and is usually influenced by the academic discipline one may be involved in, the beliefs of supervisors or faculty, and prior research experience (Creswell, 2009). Before conducting research, the researcher must decide on the research philosophy adopted in the study. Creswell (2005) suggested that even though philosophical ideas may remain, to a large extent, hidden in the study, they must be identified as they impact research.

Positivism, constructivism, critical realism, and pragmatism are the four main philosophies of scientific research. But in this study, the positivism paradigm was adopted as the research philosophy. According to Travers (2001), as cited in Adam, Frimpong and Boadu (2017), the central principle of positivism is that researchers can take a scientific viewpoint when observing social behaviour, with an objective analysis possible. A positivist researcher starts with a theory, gathers data that supports or refutes the idea, and then makes necessary revisions where appropriate (Creswell, 2014). Subsequently, the type of worldview held inadvertently affects the research design used, such as quantitative, qualitative, and mixed design. Therefore, research built on a positivist philosophy inclines to be based on deductive theorising, where several propositions are generated for testing, with empirical verification then sought (Babbie, 2007).

In positivist studies, the role of the researcher is limited to data collection and interpretation objectively and is subject to quantifiable comments that lead to a statistical investigation. The observer views positivism that knowledge comes from human experience (Crowther & Lancaster 2008). The positivist philosophy was employed because it helped the researcher answer the research questions.

Research Design

Research design is the preliminary plan that stipulates the methods and procedures for collecting and analysing the study's needed information. The research design refers to the overall strategy used to incorporate the individual components articulately to ensure that all the research questions have been answered (De Vaus, 2001). The research plan or procedure encompasses the initial desire to conduct research, the general assumption, methodology, data collection, and detailed data analysis. The research design employed in this study has a lot of bearing on the reliability of the results arrived at and constituted the firm foundation of the research work's entire edifice (Kothari, 2004).

To achieve the purpose of this research, an explanatory research design was employed. Research design can be exploratory, descriptive, or explanatory (Engstrom & Salehi-Sangari, 2007). In Explanatory studies, Philips and Pugh (2000) described the relationship between various phenomena or variables and examine a causal relationship. Statistical tests are applied to data collected to explain the relationship among variables. An explanatory research design was used to gain a deeper understanding of the subjects to research to be discussed.

Research Approach

There are three research approaches: qualitative, quantitative, and mixed (Creswell, 2014). For this study, a quantitative research design was adopted by the researchers. Quantitative research is defined by Aliaga and Gunderson (2000), explaining phenomena by collecting numerical data analysed using mathematically based methods, particularly statistics. That indicates that research projects that collect data or information in numbers are quantitative research (Healey, 2010). The quantitative research approach will give a well-structured and formalised outcome. It deals with a broader spectrum of responses with restrictive options for the answer and generalises the results.

Creswell (2003) explains that using the quantitative method enables the researcher to use experiments and surveys to collect data, which is further analysed. Quantitative research design includes experimental design and non-experimental design. An example of the non-experimental design is a survey (Creswell, 2014), so the researcher adopted the survey research. Survey research provides a numeric description of a population's trends, opinions, or attitudes by studying a population sample. It uses questionnaires or structured interviews for data collection to generalise from a representative to the people (Fowler, 2008).

Population of the Study

According to Malhotra (1996), the study population refers to collecting objects or elements with the information the researcher seeks and with which references are made. Burns and Bush (2000) also explained the population as the entire group under study by the researcher, as indicated by the study's objectives. The population for this study consisted of all public sector employees in Ghana. The estimated size of the population was 10,733,927 employees.

Sample Size and Sampling Technique

Kumar (1999) explained that a sample is a sub-group of the population, an ideal representative of the entire population. Therefore, researchers usually cannot make direct observations of every individual in the people they are studying. Instead, they collect data from a subset of individuals and use those observations to make inferences about the entire population (Zickmund, Carr & Griffin 2013). Simple random sampling technique was employed. This was chosen because it gave respondents equal chance to be part of the study. In deciding on the sample size, it should be noted that the larger the sample size, the lower the likely error in generalising to the sample (Sim, Saunders, Waterfield & Kingstone, 2018). The study's required sample size was 385 based on a target population of 10,733,927 using the Krejcie and Morgan (1970) sample size determination method.

Data Collection Instrument

The researcher used primary data for this research. The data was collected through the use of a google docs survey form to solicit responses. The questionnaire carefully covered all the research objectives as far as the problem of the study was concerned. The respondent's questionnaires were developed after reviewing thorough literature on the issue for this study. The questionnaire was developed based on existing financial literacy measures: financial behaviour, financial knowledge, financial attitude, and retirement planning measures (OECD INFE, 2018; OECD INFE, 2015).

The researcher made some adjustments to the questionnaires to take into consideration the difference in countries. The format for the questionnaire was determined with the respondents in mind. The questions were brief, precise, and straightforward to avoid too much thinking by the respondents. There were discussions with experts who gave their inputs and advice on formatting the questionnaire correctly.

The questionnaire had five sections from A to E and cover all the research objectives in detail. Section A covered the respondent's demographic characteristics, such as gender, educational level, marital status, dependents, and educational background. Section B covered questions on financial knowledge. These were self-assessing questions to determine how the workers managed their finances. These questions will seek to find out whether workers have experience of the fundamental economic concept. Section C contained questions on financial behaviour, and these questions found out the financial activities of workers. Questions in section D was on the financial attitude of workers. Questions on preparation towards retirement were in section E. The questions focused on the sort of investment that the public sector employees had signed on to, which they can access after they have retired.

Using a questionnaire for data collection is very convenient, well-structured, and formal. But when distributed and the participants are engrossed in something else could lead to possible errors. Therefore, after the questionnaire had been prepared and vetted thoroughly by experts, it was pre-tested at a staff meeting. Unfortunately, the one question on financial behaviour that was repeated in the financial attitude was deleted from the questionnaire.

Data Collection Procedures

Data collection took approximately two months. First, the researcher asked for approval from the management of the institution. Then, the staff was informed about the ongoing research during staff meetings held once every month. The researcher sought staff consent, enlightened them about the purpose of the study. Finally, the researcher sent the questionnaire to the staff on their what's up platform, which they answered online. Data collection lasted for one month.

Validity and Reliability

To ensure content validity of the instrument, the study provided proper definition measuring items, scale scrutiny by experts and scale pre-testing. These were in line with the principles of McDaniel and Gates (1996). Reliability and validity are two key components to be considered when evaluating a particular instrument. The reliability of an instrument is measured by Cronbach's Alpha value (Saunders & Lewis, 2012). Pallant (2016) posited that Cronbach's alpha coefficient for variables is generated to validate the instrument's reliability. Pallant (2016) also indicated that scales with a Cronbach's alpha coefficient of 0.70 and above are considered reliable. However, studies such as Boohene, Agyapong and Asomaning (2012) and Mahmoud (2010) supported coefficient of 0.5. The results of the pre-test were used to assess the reliability of the instrument. The result is presented in Table 1.

Table 1: Questionnaire items and their reliability coefficients

Variable	Questionnaire Items	Sample	Cronbach's Alpha
Financial Behaviour	10	30	0.67
Financial Attitude	8	30	0.71
Retirement Planning	9	30	0.83

Source: Field Surey (2021)

Based on Pallant's (2016), Boohene Agyapong and Asomaning's (2012) criteria, all items showed a high level of reliability.

Data Processing and Analysis

The data collected on the google docs survey forms was exported into excel. The exported document that is the questionnaire was coded before it is entered into the SPSS. The keywords in each question were given a unique name and numbers assigned to them as codes. Codes was transferred to the response categories in the scale before data input. The quality of data input determines the quality of information output. To achieve accurate data entry, the researcher must practice effective coding, efficient data capture, access, and quality validation. The data entered was checked by three competent SPSS experts to ensure no mistakes to minimize errors in data entry and data processing. The structural equation model and descriptive statistics were employed to analyse the study's objectives.

Measurement of variables

Due to the wide recognition of this term, financial literacy has been measured in different ways by different scholars. Klapper and Panos (2011) for instance measured financial literacy using time value of money, risk diversification and operations of stock market. These indicators were also adapted by Lusardi and Mitchell (2011) and included inflation and return. They framed questions in relation to these indicators on a 5-point likert scale of 1 to 5 where respondents with little or no idea about any of the indicators indicated 1 while those with better knowledge indicated 5.

Demographic variables were measured using the dummy variable. Value 1 were attributed to males whereas 0 was attributed to females. Other demographic variables were attributed to the right values.

Ethical Considerations

Based on the 'Ethical Principles of Psychologists and Code of Conduct' as proposed by the American Psychological Association (APA), the following ethical considerations were observed in this study: institutional approval; informed consent, which enlightened the participants about the purpose of the study; establishing participants free will in participation or abandonment of the survey; reporting accurate methodologies and results; the absence of plagiarism in the survey; taking credit only for this study and giving credit where it is due; and sharing of research data for verification (American Psychological Association, 2017).

Chapter Summary

In conclusion, this chapter presented the study's research design and methodology while discussing research philosophy, the research design, the population, the instruments used, processes involved in data collection, data analysis, and ethical considerations.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This study sought to examine the financial literacy and retirement planning among government workers in Ghana. This chapter presented the results and discussion of the study. In addition, the chapter covered the analysis and findings of the research using both descriptive and inferential statistics. Specifically, the characteristics of the respondents were discussed.

Demographic Characteristics of the Respondents

The analysis evaluated the demographic profiles of the gathered data from the respondents. The respondents were asked to state their sex, age, the highest level of education, marital status. Table 2 shows the demographic characteristics of the respondents.

Table 2: Demographic Characteristics

Variable	Frequency	Percent
Gender		
Male	231	60.0
Female	154	40.0
Age		
Below 30 years	135	35.1
30 to 40 years	79	20.5
41 to 50 years	103	26.8
51 to 60 years	66	17.1
Over 60 years	2	0.5
Marital Status		
Married	207	53.8
Single	148	38.4
Divorced	13	3.4
other	17	4.4
Educational Level		
Middle School/JHS	19	4.9
SHS	38	9.9
Diploma	88	22.9
Degree	178	46.2
Masters	48	12.5
Others	14	3.6
Income Level		
Less than 1000	25	6.5
1001 to 2000	76	19.7
2001 to 3000	40	10.4
3001 to 4000	129	33.5
4001 to 5000	98	25.5
more than 5000	17	4.4
Total	**385**	**100.0**

Source: Field Survey (2023)

Out of 385 respondents, 231 were males. This represented 60 percent of the respondents. One hundred and fifty-four (154) of the respondents were females. This also represented 40 percent of the respondents.

One hundred and thirty-five (135) of the respondents were below 30 years. This represented 35.1 percent of the respondents. One hundred and three (103) of the respondents were between the ages of 41 to 50 years. This represented 26.8 percent of the respondents. Seventy-nine (79) of the respondents were between the ages of 30 to 40 years. This represented 20.5 percent of the respondents. Sixty-six (66) of the respondents were between the ages of 51 to 60 years. This represented 17.1 percent of the respondents. Two (2) of the respondents were over 60 years. This represented 0.5 percent of the respondents.

Two hundred and seven (207) of the respondents were married. This represented 53.8 percent of the respondents. One hundred and forty-eight (148) of the respondents were single. This represented 38.4 percent of the respondents. Seventeen (17) of the respondents had other marital status. This represented 4.4 percent of the respondents. Thirteen (13) of the respondents were divorced. This represented 3.4 percent of the respondents.

One hundred and seventy-eight (178) of the respondents were holding degree. This represented 46.2 percent of the respondents. Eighty-eight (88) of the respondents were holding diploma. This represented 22.9 percent of the respondents. Forty-eight (48) of the respondents were holding Master's degree. This represented 12.5 percent of the respondents. Thirty-eight (38) of the respondents were holding SHS. This represented 9.9 percent of the respondents. Nineteen (19) of the respondents were holding SHS certificate. This represented 4.9 percent of the respondents. Fourteen (14) of the respondents were holding other certificate. This represented 3.6 percent of the respondents.

One hundred and twenty-nine (129) of the respondents were earning 3001 to 4000 cedis. This represented 33.5 percent of the respondents. Ninety-eight (98) of the respondents were earning between 4001 to 5000 cedis. This represented 25.5 percent of the respondents. Seventy-six (76) of the respondents were earning 1001 to 200 cedis. This represented 19.7 percent of the respondents. Forty (40) of the respondents were earning between 2001 to 3000 cedis. This represented 10.4 percent of the respondents. Twenty-five (25) of the respondents were earning less than 1000 cedis. This represented 6.5 percent of the respondents. Finally, seventeen (17) of the respondents were earning more than 5000 cedis. This represented 4.4 percent of the respondents.

Level of financial literacy among government workers in Ghana

The first objective of the study was to analyse the level of financial literacy among government workers in Ghana. Descriptive statistic was used to analyse the study's objectives. The result has been presented on Table 3.

Table 3: Descriptive Statistics

	Mean	Std. Deviation
I carefully budget and track my monthly expenses.	4.26	.906
I prefer to live in the present and don't worry much about long-term financial planning.	4.24	.779
I believe in enjoying my money now and not worrying too much about saving	4.20	.954
I avoid investing because I find it confusing or risky.	4.17	.932
I often make impulse purchases without considering the impact on my budget.	4.13	.943
Saving money is a priority for me, even if it means making sacrifices.	4.12	.853
I am comfortable taking financial risks to potentially earn higher returns.	4.11	.909
I prefer to avoid financial risks and opt for safer, more stable options.	4.09	.965
I feel confident in my understanding of basic financial terms such as budgeting, savings, and investments.	4.08	.861
I struggle to save money and live paycheck to paycheck.	4.08	.884
I actively work to pay off my debts and avoid accumulating more.	4.07	.902
I have a well-defined financial plan for both short-term and long-term goals.	4.07	.977
I consistently save a portion of my income for future needs.	4.04	.974

I find financial terminology confusing and struggle to grasp basic financial concepts.	4.04	.751
I am confident in my understanding of various investment options.	4.04	1.053
I feel overwhelmed when it comes to managing my finances.	3.97	.904
I have a well-defined financial plan for my short-term and long-term goals.	3.96	.931
I do not have a clear financial plan and make decisions on a day-to-day basis.	3.90	.990
I am confident in my ability to manage my money effectively.	3.88	.956
I often carry credit card balances and struggle with debt.	3.84	1.022
I am well-informed about different investment options (e.g., stocks, bonds, mutual funds).	3.77	1.145
I lack knowledge about investment opportunities and their potential risks and returns.	3.75	1.184
I have limited understanding of how to create and follow a budget.	3.73	1.171
I have a good understanding of how credit works, including credit scores and reports.	3.72	1.190
I am unsure about the factors that influence credit scores and how to improve them.	3.71	1.192
I am knowledgeable about creating and managing a personal budget.	3.71	1.266

Source: Field Survey (2023)

The descriptive statistics has been presented on Table 3. From Table 3, “I carefully budget and track my monthly expenses” recorded an average of 4.26 with a corresponding standard deviation of 0.906. This was an item with a highest average On average, respondents strongly agree (mean of 4.26) that they carefully budget and track their monthly expenses. The relatively low standard deviation (0.906) suggests that there is relatively less variability in responses, indicating a higher level of agreement among respondents.

“I prefer to live in the present and don't worry much about long-term financial planning” was the next item with a higher average. This recorded an average of 4.24 with a corresponding standard deviation of 0.779. On average, respondents tend to agree (mean of 4.24) that they prefer living in the present and don't worry much about long-term financial planning. The lower standard deviation suggests a somewhat consistent agreement among respondents.

"I believe in enjoying my money now and not worrying too much about saving" was the next item with a higher average. This recorded an average of 4.20 with a corresponding standard deviation 0.954. On average, respondents agree (mean of 4.20) with the idea of enjoying money now and not worrying too much about saving. The higher standard deviation indicates more variability in responses, suggesting a wider range of opinions.

"I avoid investing because I find it confusing or risky" was the next item with a higher average. This recorded an average of 4.17 with a corresponding standard deviation 0.932. On average, respondents agree (mean of 4.17) that they avoid investing due to finding it confusing or risky. The standard deviation suggests some variability in responses, indicating differing levels of agreement among participants.

"I often make impulse purchases without considering the impact on my budget" was the next item with a higher average. This recorded an average of 4.13. This recorded a standard Std. Deviation: 0.943. On average, respondents agree (mean of 4.13) that they often make impulse purchases without considering the impact on their budget. The standard deviation suggests some variability in the extent of impulsive spending.

"Saving money is a priority for me, even if it means making sacrifices" was the next item with a higher average. This recorded an average of 4.12 with a corresponding standard deviation of 0.853. On average, respondents agree (mean of 4.12) that saving money is a priority, even if it means making sacrifices. The standard deviation suggests moderate variability in responses, indicating differing levels of agreement among participants.

"I am comfortable taking financial risks to potentially earn higher returns" was the next item with a higher average. This recorded an average of 4.11 with a corresponding standard deviation of 0.909. On average, respondents agree (mean of 4.11) that they are comfortable taking financial risks for potentially higher returns. The standard deviation suggests some variability in comfort levels with financial risk.

"I prefer to avoid financial risks and opt for safer, more stable options" was the next item with a higher average. This recorded an average of 4.09 with a standard deviation of 0.965. On average, respondents agree (mean of 4.09) that they prefer avoiding financial risks and opting for safer, more stable options. The higher standard deviation indicates some variability in preferences for risk.

"I feel confident in my understanding of basic financial terms such as budgeting, savings, and investments" was the next item with a higher average. This recorded an average of 4.08 with a corresponding standard deviation of 0.861. On average, respondents agree (mean of 4.08) that they feel confident in their understanding of basic financial terms. The standard deviation suggests moderate variability in confidence levels.

"I struggle to save money and live paycheck to paycheck" was the next item with a higher average. This recorded an average of 4.08 with a corresponding standard deviation of 0.884. On average, respondents agree (mean of 4.08) that they struggle to save money and live paycheck to paycheck. The standard deviation suggests some variability in the extent of financial struggles.

"I actively work to pay off my debts and avoid accumulating more" was the next item with a higher average. This recorded an average of 4.07 with a standard deviation of 0.902. On average, respondents agree (mean of 4.07) that they actively work to pay off debts and avoid accumulating more. The standard deviation suggests some variability in the level of commitment to debt management.

"I have a well-defined financial plan for both short-term and long-term goals" was the next item with a higher average. This recorded an average of 4.07. This had a corresponding standard deviation of 0.977. On average, respondents agree (mean of 4.07) that they have a well-defined financial plan for both short-term and long-term goals. The standard deviation indicates some variability in the extent to which participants have a well-defined plan.

"I consistently save a portion of my income for future needs" was the next item with a higher average. This recorded an average of 4.04 with a corresponding standard deviation of 0.974. On average, respondents agree (mean of 4.04) that they consistently save a portion of their income for future needs. The standard deviation suggests some variability in the consistency of saving habits.

"I find financial terminology confusing and struggle to grasp basic financial concepts" was the next item with a higher average. This recorded an average of 4.04 with a corresponding standard deviation of 0.751. On average, respondents agree (mean of 4.04) that they find financial terminology confusing and struggle to grasp basic financial concepts. The lower standard deviation indicates less variability, suggesting a more consistent agreement on this statement.

"I am confident in my understanding of various investment options" was the next item with a higher average. This recorded an average of 4.04 with a corresponding standard deviation of 1.053. On average, respondents agree (mean of 4.04) that they are confident in their understanding of various investment options. The higher standard deviation suggests more variability in confidence levels regarding investment knowledge.

"I feel overwhelmed when it comes to managing my finances" was the next item with a higher average. This recorded an average of 3.97 with a corresponding standard deviation of 0.904. On average, respondents somewhat agree (mean of 3.97) that they feel overwhelmed when it comes to managing their finances. The standard deviation suggests some variability in the degree of feeling overwhelmed.

"I have a well-defined financial plan for my short-term and long-term goals" was the next item with a higher average. This recorded an average of 3.96 with a corresponding standard deviation of 0.931. On average, respondents somewhat agree (mean of 3.96) that they have a well-defined financial plan for both short-term and long-term goals. The standard deviation indicates some variability in the extent to which participants have a clear plan.

"I do not have a clear financial plan and make decisions on a day-to-day basis" was the next item with a higher average. This recorded an average of 3.90 with a corresponding standard deviation of 0.990. On average, respondents somewhat agree (mean of 3.90) that they do not have a clear financial plan and make decisions on a day-to-day basis. The standard deviation suggests some variability in planning approaches.

"I am confident in my ability to manage my money effectively" was the next item with a higher average. This recorded an average of 3.88 with a corresponding standard deviation of 0.956. On average, respondents somewhat agree (mean of 3.88) that they are confident in their ability to manage money effectively. The standard deviation suggests some variability in confidence levels.

"I often carry credit card balances and struggle with debt" was the next item with a higher average. This recorded an average of 3.84 with a corresponding standard deviation of 1.022. On average, respondents somewhat agree (mean of 3.84) that they often carry credit card balances and struggle with debt. The standard deviation indicates some variability in the extent of credit card debt struggles.

"I am well-informed about different investment options (e.g., stocks, bonds, mutual funds)" was the next item with a higher average. This recorded an average of 3.77 with a corresponding standard deviation of 1.145. On average, respondents somewhat agree (mean of 3.77) that they are well-informed about different investment options. The higher standard deviation suggests more variability in levels of knowledge about investments.

"I lack knowledge about investment opportunities and their potential risks and returns" was the next item with a higher average. This recorded an average of 3.75 with a corresponding standard deviation of 1.184. On average, respondents somewhat agree (mean of 3.75) that they lack knowledge about investment opportunities and their potential risks and returns. The higher standard deviation indicates more variability in levels of knowledge about investments.

"I have limited understanding of how to create and follow a budget" was the next item with a higher average. This recorded an average of 3.73 with a corresponding standard deviation of 1.171. On average, respondents somewhat agree (mean of 3.73) that they have a limited understanding of how to create and follow a budget. The higher standard deviation suggests more variability in levels of understanding.

"I have a good understanding of how credit works, including credit scores and reports" was the next item with a higher average. This recorded an average of 3.72 with a corresponding standard deviation of 1.190. On average, respondents somewhat agree (mean of 3.72) that they have a good understanding of how credit works, including credit scores and reports. The higher standard deviation indicates more variability in levels of understanding.

"I am unsure about the factors that influence credit scores and how to improve them" was the next item with a higher average. This recorded an average of 3.71 with a corresponding standard deviation of 1.192. On average, respondents somewhat agree (mean of 3.71) that they are unsure about the factors influencing credit scores and how to improve them. The higher standard deviation suggests more variability in levels of understanding about credit scores.

"I am knowledgeable about creating and managing a personal budget" was the next item with a higher average. This recorded an average of 3.71 with a corresponding standard deviation of 1.266. On average, respondents somewhat agree (mean of 3.71) that they are knowledgeable about creating and managing a personal budget. The higher standard deviation indicates more variability in levels of knowledge about budgeting. The study's findings correspond to studies by Opoku (2021).

Perceived level of retirement planning among government workers in Ghana

The second objective of the study was to analyse the perceived level of retirement planning among government workers in Ghana. The descriptive statistics were employed in the analysis. The result has been presented on Table 4.

Table 4: Descriptive Statistics

	Mean	Std. Deviation
I am knowledgeable about different retirement investment options.	4.50	.503
I find the variety of retirement investment options confusing.	4.46	.501
I understand how Social Security works and how it will contribute to my retirement income.	4.32	.764
I struggle to save regularly for my retirement.	4.31	.748
I have limited knowledge about Social Security and its role in my retirement finances.	4.30	.798
I have a clear idea of the age at which I plan to retire.	4.29	.832
I consistently contribute to a retirement savings account.	4.23	.886
I feel financially prepared for my retirement.	3.68	1.118
I am concerned about my financial readiness for retirement.	3.61	1.171

Source: Field Survey (2023)

The descriptive statistics have been presented on the table 4. From the Table 4, "I am knowledgeable about different retirement investment options" was the first item with a higher average. This recorded an average of 4.50 with a corresponding standard deviation of 0.503. On average, respondents strongly agree (mean of 4.50) that they are knowledgeable about different retirement investment options. The low standard deviation indicates that there is relatively little variability in responses, suggesting a high level of agreement among participants regarding their knowledge of retirement investments.

"I find the variety of retirement investment options confusing" was the first item with a higher average. This recorded an average of 4.46 with a corresponding standard deviation of 0.501. On average, respondents strongly agree (mean of 4.46) that they find the variety of retirement investment options confusing. The low standard deviation suggests that there is relatively little variability in responses, indicating a high level of agreement among participants regarding the complexity of retirement investment options.

"I understand how Social Security works and how it will contribute to my retirement income" was the first item with a higher average. This recorded an average of 4.32 with a corresponding standard deviation of 0.764. On average, respondents agree (mean of 4.32) that they understand how Social Security works and how it will contribute to their retirement income. The standard deviation suggests some variability in understanding among participants.

"I struggle to save regularly for my retirement" was the first item with a higher average. This recorded an average of 4.31 with a corresponding standard deviation of 0.748. On average, respondents agree (mean of 4.31) that they struggle to save regularly for their retirement. The standard deviation suggests some variability in the extent of struggle among participants.

"I have limited knowledge about Social Security and its role in my retirement finances" was the first item with a higher average. This recorded an average of 4.30 with a corresponding standard deviation of 0.798. On average, respondents agree (mean of 4.30) that they have limited knowledge about

Social Security and its role in their retirement finances. The standard deviation suggests some variability in the level of knowledge about Social Security among participants.

"I have a clear idea of the age at which I plan to retire" was the first item with a higher average. This recorded an average of 4.29 with a corresponding standard deviation of 0.832. On average, respondents agree (mean of 4.29) that they have a clear idea of the age at which they plan to retire. The standard deviation suggests some variability in retirement planning ages among participants.

"I consistently contribute to a retirement savings account" was the first item with a higher average. This recorded an average of 4.23 with a corresponding standard deviation of 0.886. On average, respondents agree (mean of 4.23) that they consistently contribute to a retirement savings account. The standard deviation suggests some variability in the consistency of contributions among participants.

"I feel financially prepared for my retirement" was the first item with a higher average. This recorded an average of 3.68 with a corresponding standard deviation 1.118. On average, respondents somewhat agree (mean of 3.68) that they feel financially prepared for their retirement. The higher standard deviation indicates more variability in feelings of financial preparedness.

"I am concerned about my financial readiness for retirement" was the first item with a higher average. This recorded an average of 3.61 with a corresponding standard deviation of 1.171. On average, respondents somewhat agree (mean of 3.61) that they are concerned about their financial readiness for retirement. The higher standard deviation indicates more variability in levels of concern among participants.

Assessment of Measurement Models for the Study

The measurement models that were used for the investigation are the primary emphasis of this section. The evaluation of the indicator loadings comes first in this part of the section. Indicator loadings, internal consistency reliability (also known as composite reliability), convergent validity (AVE- average variance extracted), and discriminant validity are some of the aspects of the measurement model that are evaluated throughout the process (Fornell-Lacker and HTMT). In order to provide indications for the evaluation of the measurement model, a dependable PLS algorithm was put through its paces. The findings are summarized in the tables that are shown below.

Assessing Indicator Loadings

The data in Table 3 reveals that some of the indications have been removed. In order to make the overall model more reliable, we eliminated any and all indicators that had a loading score lower than the suggested threshold of 0.7, which was established by Hair et al (2016). 18 of the 35 measurement items scored significantly over the threshold, which was established at 0.7, while all of the ones that fell within the individual variables were kept.

Table 5: Cross Loadings

	Financial Attitude	Financial Behaviour	Financial Knowledge	Retirement Planning
FA1	**0.817**	0.59	0.264	0.267
FA2	**0.795**	0.569	0.211	0.229
FA3	**0.878**	0.585	0.357	0.352
FA4	**0.872**	0.572	0.266	0.225
FA5	**0.852**	0.492	0.259	0.181
FA6	**0.886**	0.591	0.306	0.245
FA7	**0.872**	0.549	0.303	0.239
FA8	**0.884**	0.602	0.243	0.227
FB1	0.609	**0.821**	0.492	0.37
FB2	0.568	**0.866**	0.456	0.372
FB3	0.587	**0.897**	0.315	0.471
FB4	0.559	**0.9**	0.354	0.487
FB5	0.625	**0.896**	0.321	0.392
FB6	0.59	**0.902**	0.403	0.391
FK7	0.336	0.404	**0.957**	0.588
FK8	0.295	0.432	**0.961**	0.611
RP1	0.292	0.463	0.632	**0.945**
RP2	0.262	0.424	0.532	**0.926**

Source: Field Survey (2023)

The indicators of financial behaviour, financial attitude, financial knowledge and retirement planning that loaded at 0.7 or higher, as shown in Table 2 were maintained. 6 out of 10 of the indicators used to measure financial behaviour loaded above 0.7. Two (2) out of the 8 indicators used to measure the financial knowledge recorded above the threshold. Two (2) out of nine (9) of the indicators used to measure retirement planning were also maintained since it loaded above the threshold. All the indicators used to measure financial attitude were maintained. That is, 8 out of 8 indicators were maintained.

Assessing Internal Consistency Reliability

In this particular investigation, the composite reliability was used in order to determine the level of internal consistency and dependability possessed by the various structures. Cronbach's alpha is not the most effective way to quantify internal consistency; the composite reliability is a more acceptable metric (Rossiter, 2002). According to the findings shown in Table 4, which show that all of the latent variables investigated in this research are trustworthy since their loadings were all very close to the 0.7 criterion. Financial attitude received the highest score of composite reliability (0.965), followed by the financial behaviour factor (0.95). This was followed by financial knowledge which loaded 0.914 composited reliability. Retirement planning had the least composite reliability of 0.872. In addition, the findings of the convergence validity are shown in Table 4.

Table 6: Validity and Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Financial Attitude	0.949	0.965	0.957	0.735
Financial Behaviour	0.942	0.95	0.954	0.775
Financial Knowledge	0.913	0.914	0.958	0.92
Retirement Planning	0.859	0.872	0.934	0.876

Source: Field Survey (2023)

Before a data collection instrument can be considered dependable, Cronbach (1951) suggests that its Cronbach alpha value should be at least 70 percent. According to the findings shown in the table that is located above, the levels of reliability achieved were higher than those considered to be acceptable (Cronbach's alphas >.70, Average Variance Extracted >.50, and composite reliability >.70), as suggested by researchers (Fornell & Larcker, 1981). In addition, the factor loadings, which ranged from 0.7 and above, demonstrated high convergent validity. The discriminant validity of the measurement model was also evaluated as part of the overall evaluation process.

Assessing Discriminant Validity

In order to establish discriminant validity, a construct has to demonstrate that it is singular and can reflect phenomena that are not captured by any of the other constructs in the model (MacKinnon, 2008). In order to determine the discriminant validity of the HTMT and the Fornell-Lacker criterion's results, this research was carried out. The Fornell-Larcker criteria is a comparison that is made between the square root of the AVE values and the correlations of the latent variables (Fornell & Larcker, 1981). To be more specific, the square root of the average variance explained for each construct need to be higher than the greatest correlation it has with any other construct (Hair et al, 2013). According to the findings in Table 5, the square root of each variable has a correlation that is much higher than its correlations with the other constructs that were investigated in this research. This indicates that every construct is one of a kind and that no two constructions capture the same phenomena in the same way.

Table 7: Fornell-Lacker Criterion

	Financial Attitude	Financial Behaviour	Financial Knowledge	Retirement Planning
Financial Attitude	**0.858**			
Financial Behaviour	0.667	**0.881**		
Financial Knowledge	0.328	0.436	**0.959**	
Retirement Planning	0.297	0.475	0.625	**0.936**

Source: Field Survey (2023)

The performance of the Fornell-Larcker criteria is quite low, particularly when the indicator loadings of the constructions that are being considered differ just little from one another (e.g., all indicator loadings vary between 0.60 and 0.80). The efficacy of the Fornell-Larcker criteria in identifying discriminant validity difficulties increases when indicator loadings fluctuate more significantly; nonetheless, the criterion's performance in evaluating the overall discriminant validity remains very low (Voorhees, Brady, Calantone, & Ramirez, 2009). Henseler, Ringle and Sarstedt (2015) suggest evaluating the heterotrait monotrait ratio (HTMT) of the correlations as a potential solution. According to Henseler and colleagues (2015), a latent construct is said to have discriminant validity when the HTMT ratio of the construct is less than 0.850. The findings are provided in Table 6, and they reveal that the HTMT values are significantly higher than 0.850.

Table 8: Heterotrait-Monotrait Ratio (HTMT)

	Financial Attitude	Financial Behaviour	Financial Knowledge	Retirement Planning
Financial Attitude				
Financial Behaviour	0.704			
Financial Knowledge	0.346	0.477		
Retirement Planning	0.316	0.521	0.702	

Source: Field Survey (2023)

Assessing the Structural Model

Table 6 presents the findings, which reveal that HTMT values are much lower than 0.850. The results of determining whether or not the indicators in this research exhibit multicollinearity are shown in Table 6. In the context of PLS-SEM, a possible collinearity issue is indicated by a tolerance value of 0.20 or lower and a VIF value of 5 or higher, respectively (Hair et al., 2011). To be more explicit, if the Variation Indicator Fit level of an indicator is 5, it suggests that the other formative indicators connected with the same construct account for eighty percent of the indicator's variance.

Based on the data that were obtained from this study, it was determined that there was no multicollinearity between the indicators.

Table 9: Collinearity amongst Constructs

	VIF
Financial Attitude -> Retirement Planning	1.807
Financial Behaviour -> Retirement Planning	1.991
Financial Knowledge -> Retirement Planning	1.239

Source: Field Survey (2023)

Additional proof that the standard method does not include any bias may be seen in Table 6, which presents the VIF's results. According to the criteria that were proposed by Kock and Lynn (2012), the occurrence of a VIF value that is greater than 3.3 is proposed as an indication of pathological collinearity, and it is also proposed as an indication that a model may be contaminated by common method bias. Both of these indications were proposed as a result of the work that was done by Kock and Lynn (2012). Both of these signals are founded on the standards that Kock and Lynn put up in their proposal (2012). Because of this, we are able to say that the model is free from the problem of vertical or lateral collinearity as well as common method bias if all of the VIFs that come from a comprehensive collinearity test have a value that is equal to or lower than 3.3 (Kock). In addition, we are able to say that the model is free from the problem of common method bias (2013).

Assessing Coefficient of Determination and Predictive Relevance

According to Hair et al. (2014), a level of significance of 0.25, 0.5, or 0.75 for a structural model's coefficient of determination (R^2) is considered to have a low level of significance, moderate level of significance, and large level of significance, respectively. In addition, the author said that a predictive relevance (Q^2) of 0.02, 0.15 and 0.35, as well as an effect size (f^2) of 0.02, 0.15 and 0.35, are each regarded as being little, mid, and large, respectively, for structural models. The following conclusion is one that may be drawn from the data that is shown in Table 7: Financial behaviour, financial knowledge and financial attitude showed a moderate coefficient of determination (0.445) and together they account for 44.5 percent of the variation in retirement planning. The results show that the model has a modest level of predictive relevance when it is applied to the endogenous variable. This is based on the examination of the predictive relevance of the model (0.209). This indicates that the independent variables are capable of generating accurate predictions about the dependent variable. The results of the impact size indicate that each variable has a very little influence on the endogenous variable.

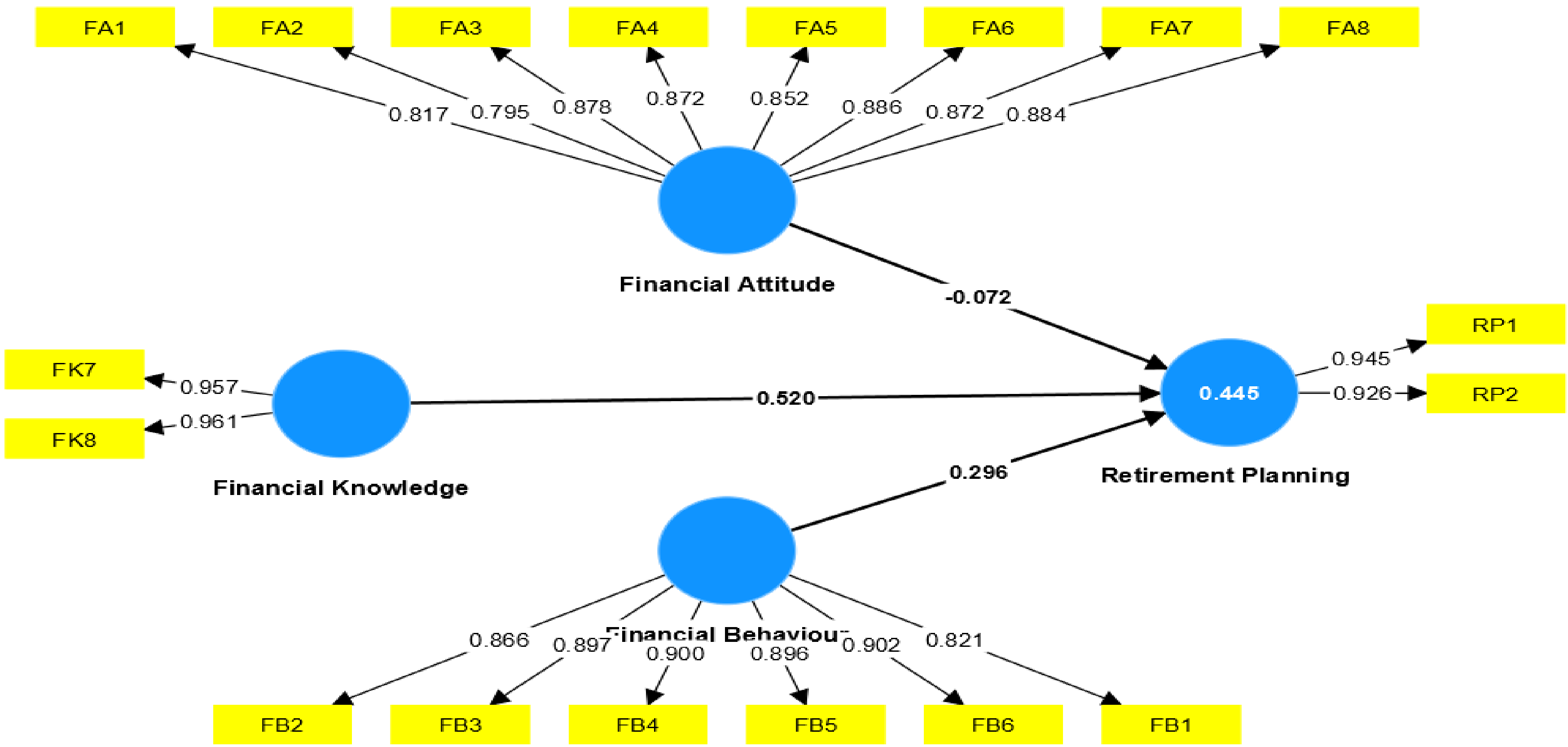


Figure 2: Structural Equation Model
Source: Field Survey (2023)

Table 10: Regression Output

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Financial Attitude -> Retirement Planning	-0.072	-0.055	0.086	0.83	0.407
Financial Behaviour -> Retirement Planning	0.296	0.294	0.121	2.446	0.014
Financial Knowledge -> Retirement Planning	0.52	0.508	0.126	4.118	0.000

Source: Field Survey (2023)

Financial literacy and Retirement planning

The third objective of the study was to analyse the effect of financial literacy on retirement planning. Financial literacy was demarcated into three components. These components included financial attitude, financial behaviour and financial knowledge. From the table 10, there was a positive and significant relationship between financial behaviour and retirement planning [B=0.296; t(385)=2.446; $p < 0.05$]. A unit increase in financial behaviour would lead to a 0.296 increase in retirement planning. Financial behavior plays a crucial role in retirement planning, as it directly impacts an individual's ability to build a sufficient nest egg for a comfortable retirement. Regular saving is a key aspect of retirement planning. Financial behavior that includes consistent savings habits throughout one's working years contributes to the accumulation of funds for retirement. Individuals who prioritize saving and contribute regularly to retirement accounts are more likely to build a substantial retirement fund.

The way individuals invest their money can significantly affect their retirement wealth. Investment decisions, such as asset allocation and risk tolerance, are crucial in determining portfolio growth. Those who make informed and strategic investment decisions are likely to experience higher returns, potentially resulting in a larger retirement portfolio. Managing and reducing debt is important for financial well-being. High levels of debt, especially as retirement approaches, can limit the ability to save and invest for the future. Individuals with effective debt management strategies are better positioned to allocate more of their income toward retirement savings, leading to a stronger financial foundation.

Budgeting is essential for maintaining financial discipline. Effective budgeting helps individuals control spending, save more, and allocate resources to long-term financial goals, including retirement. Those with strong budgeting skills are more likely to have the financial discipline needed to consistently contribute to retirement accounts. Understanding financial concepts, including investment options, retirement accounts, and tax implications, is crucial for making informed decisions. Individuals with higher financial literacy are better equipped to navigate the complexities of retirement planning, make optimal investment choices, and avoid costly mistakes.

Establishing and prioritizing long-term financial goals, such as homeownership, education, and retirement, shapes financial behavior. Those who prioritize and actively work toward their long-term financial goals, including saving for retirement, are more likely to achieve financial security in retirement. Behavioral biases, such as overconfidence, loss aversion, or procrastination, can affect decision-making related to retirement planning. Understanding and mitigating behavioral biases is essential. For example, overcoming procrastination and starting retirement savings early can have a significant positive impact on the final retirement portfolio. Life events, such as job changes, marriage, or unexpected expenses, can influence financial behavior. Individuals who can adapt their financial plans to accommodate life changes are more likely to maintain a resilient retirement plan.

There was a positive and significant relationship between financial knowledge and retirement planning [$B=0.520$; $t(385)=4.118$; $p < 0.05$]. A unit increase in financial knowledge would lead to a 0.520 increase in retirement planning. Financial knowledge plays a pivotal role in shaping the effectiveness of retirement planning. A well-informed individual is better equipped to make informed decisions, navigate complex financial products, and optimize their retirement savings. Knowledge about different retirement accounts, such as 401(k)s, IRAs, and pension plans, enables individuals to choose the most suitable options for their circumstances. Informed decisions regarding the selection and utilization of retirement accounts can lead to tax advantages and optimal investment opportunities.

Financial knowledge allows individuals to understand various investment options, assess risk, and make informed decisions regarding asset allocation and portfolio diversification. Informed investment decisions can potentially result in higher returns, contributing to a more robust retirement portfolio. Financial knowledge helps individuals develop effective budgeting strategies, allocate funds for savings, and understand the importance of consistent contributions to retirement accounts. Those with financial knowledge are more likely to implement successful budgeting and saving strategies, leading to sufficient retirement savings.

Financially literate individuals are more likely to engage in long-term financial planning, setting specific goals and creating strategies to achieve them. Long-term planning, including retirement planning, is more effective when individuals have a clear understanding of financial principles and concepts. Knowledge about financial risks, including market fluctuations, inflation, and longevity risk, allows individuals to make informed decisions to manage and mitigate these risks. Informed risk management strategies contribute to a more secure and resilient retirement plan.

Understanding how Social Security and pension plans work, including eligibility, benefits, and potential adjustments, is crucial for retirement planning. Knowledgeable individuals can optimize Social Security claiming strategies and maximize benefits, enhancing their overall retirement income. Financial knowledge extends to estate planning, including understanding the importance of wills, trusts, and beneficiary designations. Informed estate planning decisions contribute to the efficient transfer of wealth and protection of assets for heirs, impacting the overall retirement legacy.

Financially knowledgeable individuals are better equipped to adapt to economic changes, policy updates, and shifts in the financial landscape. Adaptability ensures that retirement plans remain relevant and effective in the face of evolving financial conditions. Financial knowledge helps individuals recognize and avoid scams, fraud, and common financial pitfalls that could jeopardize their retirement savings. Awareness of potential risks safeguards retirement assets and preserves financial well-being.

Markowski et al., (2020) found similar results as males and females' level of retirement varies with each other. They found demographic characteristics have effect on retirement planning. Hasan et al., (2021) found that income level can influence retirement planning.

There was no significant relationship between financial attitude and retirement planning [B=-0.072; t(385)=0.83; $p > 0.05$]. The finding is consistent with studies such as Gallego-Losada et al., (2022), Cupak et al., (2019) and Cahill et al., (2019)

Chapter Summary

The chapter analyzed the objectives of the study. The study used the structural equation model. Tables were used to present the study's results. The study found that financial behaviour and financial knowledge on retirement planning among public sector workers in Ghana.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Introduction

It just so happens that this is the very last chapter of the research. In this chapter, we will go through the results and conclusions, as well as the policy implications and suggestions that stem from the research. In addition, the chapter provides some ideas for additional research.

Summary

This study was aimed to examined the effect of financial literacy on retirement planning. Specifically, the study sought; to determine the level of financial literacy among government workers in Ghana; to examine the perceived level of retirement planning among government workers in Ghana; to examine the effect of financial literacy on retirement planning among government workers in Ghana.

The study was centered on the expectancy theory. The study employed the explanatory research design since the study tested the relationship between the various variables. The data collection instruments were questionnaire. The study employed the quantitative research approach. The simple random sampling technique was used in selecting a respondent of 385. Descriptive statistics and structural equation model were employed to analyse the objectives of the study.

Conclusion

In conclusion, understanding and evaluating individual financial attitudes, behaviors, and knowledge are essential components of effective financial planning, including retirement planning. The items discussed earlier provide insights into how individuals perceive and engage with various aspects of personal finance.

Positive financial behaviors, such as consistent saving, prudent investment decisions, and effective debt management, contribute to a solid financial foundation for both short-term and long-term goals.

Financial literacy is a critical factor influencing financial decision-making. A higher level of financial knowledge empowers individuals to make informed choices regarding savings, investments, and retirement planning.

Retirement planning is influenced by a combination of financial behavior and knowledge. Effective retirement planning involves consistent saving, strategic investment decisions, and a clear understanding of retirement accounts and options.

Regular savings and sound investment decisions are crucial for building a robust retirement portfolio. These habits, influenced by financial behavior and knowledge, contribute to financial security in retirement.

Managing and reducing debt is a key aspect of financial well-being. Effective debt management strategies free up resources for retirement savings and ensure a more stable financial future.

Strong budgeting skills are foundational to effective financial management. Budgeting allows individuals to allocate resources wisely, prioritize financial goals, and maintain discipline in their spending and saving habits.

Prioritizing and actively working toward long-term financial goals, including retirement, sets the stage for financial success. Establishing a clear plan and adapting to life changes are vital components of achieving these goals.

Confidence in financial management is closely tied to both behavior and knowledge. Financially confident individuals are more likely to engage in proactive financial planning and feel better prepared for future challenges.

Financial knowledge significantly influences retirement planning by enhancing an individual's ability to make informed decisions about retirement accounts, investments, budgeting, risk management, and long-term financial goals.

Adaptability to changing financial landscapes and awareness of potential risks, scams, and pitfalls are crucial for safeguarding financial well-being, especially during retirement.

Recommendations

Based on the findings of the study, the following recommendations were made:

- Invest in Financial Education: Prioritize financial education to improve your understanding of key concepts, investment options, and retirement planning strategies. Utilize reputable sources, attend workshops, or consider consulting with a financial advisor to enhance your knowledge.
- Establish a Clear Budget: Develop a detailed budget that reflects your income, expenses, and savings goals. Track your spending patterns to identify areas where adjustments can be made to increase savings for retirement.

- Create a Comprehensive Financial Plan: Develop a comprehensive financial plan that includes short-term and long-term goals, emergency funds, debt reduction strategies, and retirement savings. Review and update the plan regularly to adapt to changing circumstances.
- Prioritize Retirement Savings: Make retirement savings a priority by consistently contributing to retirement accounts such as 401(k)s, IRAs, or other employer-sponsored plans. Take advantage of employer matching contributions if available.
- Diversify Your Investments: Understand the importance of diversification in your investment portfolio. Consider a mix of assets based on your risk tolerance, time horizon, and financial goals to optimize returns and manage risk effectively.
- Manage Debt Effectively: Develop and implement a plan to manage and reduce outstanding debts. Prioritize high-interest debts and consider refinancing options to lower interest rates, freeing up more funds for retirement savings.
- Stay Informed About Social Security: Learn about how Social Security works and how it fits into your retirement income. Stay informed about changes to Social Security policies and regulations that may impact your benefits.
- Consider Professional Advice: If needed, seek the advice of a qualified financial advisor. A professional can provide personalized guidance, help you navigate complex financial decisions, and ensure your retirement plan aligns with your unique goals.

- Adapt to Life Changes: Be adaptable to life changes, such as job transitions, changes in family circumstances, or unexpected expenses. Adjust your financial plan accordingly and continue to prioritize your retirement savings.
- Build Emergency Savings: Establish an emergency fund to cover unexpected expenses. Having a financial safety net can prevent the need to dip into retirement savings during emergencies.
- Monitor and Reevaluate Regularly: Regularly monitor your financial progress and reassess your goals, especially as you approach retirement. Adjust your plan as needed to ensure it remains aligned with your financial objectives and lifestyle.
- Cultivate Financial Confidence: Build confidence in your financial decision-making by continually educating yourself, seeking professional advice when needed, and celebrating small financial victories along the way.

Suggestions for further studies

Due to time constraints, this research was cross sectional and was also restricted to the SMEs sector in the Ghana. In future, longitudinal study should be undertaken to assess the effect of financial literacy on retirement planning. Such a study will have the potential to reveal if the practices leading to retirement planning which is measured at one time will be the same or vary from the outcomes at a later point in time. This can help in the decision that management may take at each point in time.

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APPENDIX

QUESTIONNAIRES

UNIVERSITY OF CAPE COAST

COLLEGE OF DISTANCE EDUCATION

Please note that, your answers to the questions below will be used for academic purposes only and your responses will be treated with highest confidentiality. Please tick the appropriate box to indicate your preferred answer

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Gender: Male [ ] Female [ ]
2. Age: Below 30 years [ ] 30-40 [ ] 41-50 years [ ]
51- 60 years [ ] Over 60 years [ ]
3. Marital status: Married [ ] Single [ ] Divorced [ ] Other [ ]
4. Educational Level: Middle School/ Junior High School [ ]
Senior High School [ ] Diploma [ ] Degree [ ] Masters [ ]
Other [ ]
5. Income Level Less than 1000 [ ] 1001 – 2000 [ ]
2001 – 3000 [ ] 3001 – 4000 [ ] 4001 – 5000 [ ]
> 5000 [ ]

SECTION B: FINANCIAL LITERACY

On a scale of 1 – 5, please rate your level of agreement to each of these statements. With 1 – Least Agreement and 5 – Highest Agreement

No		1	2	3	4	5
	Financial Behaviour					
1	I carefully budget and track my monthly expenses.					
2	I often make impulse purchases without considering the impact on my budget.					
3	I consistently save a portion of my income for future needs.					
4	I struggle to save money and live paycheck to paycheck.					
5	I am confident in my understanding of various investment options.					

6	I avoid investing because I find it confusing or risky.					
7	I actively work to pay off my debts and avoid accumulating more.					
8	I often carry credit card balances and struggle with debt.					
9	I have a well-defined financial plan for my short-term and long-term goals.					
10	I do not have a clear financial plan and make decisions on a day-to-day basis.					
	Financial Attitude					
1	I am confident in my ability to manage my money effectively.					
2	I feel overwhelmed when it comes to managing my finances.					
3	I have a well-defined financial plan for both short-term and long-term goals.					
4	I prefer to live in the present and don't worry much about long-term financial planning.					
5	Saving money is a priority for me, even if it means making sacrifices.					
6	I believe in enjoying my money now and not worrying too much about saving.					
7	I am comfortable taking financial risks to potentially earn higher returns.					
8	I prefer to avoid financial risks and opt for safer, more stable options.					
	Financial Knowledge					
1	I feel confident in my understanding of basic financial terms such as budgeting, savings, and investments.					
2	I find financial terminology confusing and struggle to grasp basic financial concepts.					
3	I am knowledgeable about creating and managing a personal budget.					
4	I have limited understanding of how to create and follow a budget.					
5	I am well-informed about different investment options (e.g., stocks, bonds, mutual funds).					
6	I lack knowledge about investment opportunities and their potential risks and returns.					
7	I have a good understanding of how credit works, including credit scores and reports.					
8	I am unsure about the factors that influence credit scores and how to improve them.					

SECTION C: RETIREMENT PLANNING

On a scale of 1 – 5, please rate your level of agreement to each of these statements. With 1 – Least Agreement and 5 – Highest Agreement

No	Factors	1	2	3	4	5
1	I feel financially prepared for my retirement.					
2	I am concerned about my financial readiness for retirement.					
3	I am knowledgeable about different retirement investment options.					
4	I find the variety of retirement investment options confusing.					
5	I consistently contribute to a retirement savings account.					
6	I struggle to save regularly for my retirement.					
7	I understand how Social Security works and how it will contribute to my retirement income.					
8	I have limited knowledge about Social Security and its role in my retirement finances.					
9	I have a clear idea of the age at which I plan to retire.					

THANK YOU