UNIVERSITY OF CAPE COAST

FINANCIAL LITERACY AND RETIREMENT PLANNING OF ADMINISTRATIVE STAFF OF UNIVERSITY OF CAPE COAST

ANDREW NKETSIAH-ESSUON

2023

UNIVERSITY OF CAPE COAST

FINANCIAL LITERACY AND RETIREMENT PLANNING OF ADMINISTRATIVE STAFF OF UNIVERSITY OF CAPE COAST

BY

ANDREW NKETSIAH-ESSUON

Dissertation submitted to the Department of Finance of the School of Business, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Business Administration degree in Finance.

APRIL 2023

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 the University of elsewhere.

Candidate's Signature: …………………………… Date: …………………

Name: Andrew Nketsiah-Essuon

Supervisors' 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: Prof. Samuel Kwaku Agyei

ABSTRACT

The study examined the financial literacy and retirement planning of administrative staff of the University of Cape Coast. The study was guided by explanatory research design and quantitative in nature. Data was collected from 357 administrative staff of UCC through simple random sampling and was analysed by employing partial least square estimation technique. The main finding of the study was that the level of financial literacy among the administrative staff of UCC is demonstrated by staff adequate knowledge in financial investments, insurance packages, budgeting, saving, debt management, and good personal financial decisions among others. Also, the study found that staff who develop a retirement budget, retirement plan, have enough idea of retirement income and saving could enhance their retirement planning. It was discovered by the study that people who make good financial decisions and good control over financial issues have advantage of planning for their retirement. Hence, it was recommended that the administrative staff of UCC should continue to implement their financial literacy ideas for their retirement. Again, the administrative staff of UCC should seek financial advice from experts on how they engage in credible investment, business and save money towards their retirement. Finally, the administrative staff of UCC should engage in concrete measures such as workplace financial education required to further strengthen their financial knowledge, behaviour, attitudes and skills in order to prepare sufficiently for their retirement.

KEY WORDS

Financial Attitudes

Financial Behaviour

Financial Knowledge

Financial Skills

Retirement Planning

ACKNOWLEDGEMENTS

I first and foremost thank the Almighty God for his protection and grace throughout this journey. I am very grateful for his Grace.

I also want to thank my supervisor, Prof. Samuel Kwaku Agyei for his expert direction, counsel, support and generosity which he directed at this work.

Secondly, I would like to extend my profound gratitude to my Wife, Ama Arhin, my children, and my family for their support and encouragement.

Finally, my appreciation goes to the Management and Administrative Staff of UCC for helping me with all the necessary information about the study.

DEDICATION

I dedicate this work to my parents.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURE

CHAPTER ONE

INTRODUCTION

In developing economies like Ghana where retirees do not receive adequate pension benefits, the importance of retirement planning cannot be downplayed (Adam, Frimpong and Boadu, 2017). Financial literacy has proven to result in several behaviours and one of the most significant of these behaviours is retirement planning (Amoah, 2018). Financial illiteracy can have an adverse impact on the workers ability to save and secure a comfortable retirement (Sarpong - Kumankoma, 2020). This study therefore seeks to examine the influence of financial literacy on retirement planning among the administrative staff of University of Cape Coast.

Background to the Study

After the global financial crisis in the years 2007 and 2008, researchers and policy makers have been increasingly interested in the lack of knowledge in financial management in various industries and workplaces (Lusardi and Mitchell, 2014). According to Giesler and Veresiu (2014), " financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate , short-term decision –making and sound , long –range financial planning, while mindful of life events and changing economic conditions".

Financial literacy enhances the confidence of people which helps them to take financial decisions for their pension schemes (Agnew, Szykman, Utkus & Young, 2007). Decade ago, workers having the basic knowledge of creating and keeping accounts at banks and other financial institutions was enough to assure them of their survival and comfortability during and after years of active service. However, in recent times, this basic knowledge is not enough and workers need to have in-depth financial knowledge that will enable them differentiate between financial products in the financial markets thus, financial products that can help them even during their years of retirement (Lusardi, Alessie & Rooji, 2008).

Financial literacy and application of the knowledge acquired reduces the rate at which people fall prey to the schemes of unscrupulous financial services and financial products that are not in their best interest especially after their retirement (Atia, 2012). For this reason, people who want to secure their financial well-being even after retirement invest in enhancing their financial literacy (Lusardi, 2015). Several studies conducted has proven that financial literacy is an essential way to enhance the quality of life of people before and after retirement (Knapp, 1991; Voydanoff, 1990; Lusardi & Mitchell, 2011; Lusardi, 2015; Adam et al., 2017).

Retirement planning involves making tough choices and decisions before retirement (Lusardi &Mitchell, 2007). In the year 2014, more than half of the American retirees were not confident they would survive and live comfortably during retirement. Thirty-seven percent (37%) of these American retirees were confident about having enough money to live well even during retirement and 33% were moderately confident and the remaining 30% were not sure about their financial well-being during retirement (Employee Benefit Research Institute, 2013, 2014)

This means that sixty-three percent (63%) of the Americans are not confident about their financial well-being during retirement and hence the need for financial literacy which they lack (Boddy, Dokko, Hershbein & Kearney, 2015). The lack of financial literacy resulted in poor retirement planning in

America (Kefela, 2010). In China, the rapidly eroding conventional family support system has been the main reason why many workers are engaging in retirement planning and hence the demand for financial literacy (Lusardi & Mitchell, 2011).

In most developing countries like Ghana, the people do not have adequate retirement planning measures put in place that can take care of them in their retirement period (Tan & Singaravelloo, 2020). They do not have saving culture and have very little knowledge on financial literacy that can help them live comfortably for the rest of their lives during and after active service of work. The Ghanaian social security system fails to provide the retirees adequate income which affects their financial well-being. However, if they had adequate financial literacy they would have put measures in place to prepare for their retirement and not depend totally on their social security systems (Nguyen, Belas, Habanik & Schonfed, 2017).

A survey published by the Ghana Statistical Service in 2016 showed that about 64.3% of Ghanaian workers are financially illiterate and this has resulted in poor investing culture, bad savings, poor money management, excessive debt, lack of financial planning etc all of which can lead to jeopardy in their retirement goals (Kefela, 2010). A report made by World Bank in the year 2017 on the financial situation of Ghanaian retirees showed that 74.5% are financially constrained during their years of retirement. This is because they are financial illiterates and rely solely on their mandated SSNIT contributions which are woefully insufficient to cover their requirements.

Most Ghanaian workers including workers of University of Cape Coast do not prioritise issues of their retirement planning when they are in active service due to their financial illiteracy and this affects the quality of their life after active service (Adam, Boadu & Frimpong, 2018). However, according to the expectancy theory, the expectation of employees have an influence on their conduct and behaviours. Thus employees who expect to be financially independent even during retirement put measures in place to ensure that they plan for their retirement by enhancing their financial literacy (Agyei, Adam, Agyemang, 2019). This study therefore sought to examine the influence of financial literacy on retirement planning among the administrative staff of University of Cape Coast.

Statement of the Problem

In South Africa, more than ten percent of the people work beyond their retirement age. Thus they reach their retirement age without adequately planning for retirement (Antoni, Saayman & Vosloo, 2020; Zeka, 2017; Zeka & Matchaba-hove, 2016; Nkoutchou & Eiselen, 2012; Willows, 2019; Bulter, 2011) This may be because they do not understand the essence of financial planning for their retirement income (Bechard, 2015; Botha et al., 2014; Zeka & Matchaba- hove, 2016; Zeka , 2016). This means that South Africans South Africans who are concerned about their retirement financial well-being seek means to enhance their financial literacy but the rate of financial literacy in South Africa is very low (Zeka, 2016; Willows ,2019; Butler , 2011).

In Kenya, the issue of retirement dependency has become a major concern of their government in recent times (Githui & Ngare, 2014; Njuguna, 2010; Mitchell, 2011) a research conducted by the Institute for Pension Supervisors (2008) revealed that old age poverty in Ireland stands at 30.6%, in USA, 26.9%, in Australia, 26.9%, in Japan, 10.3% , in German 8.8%, in United Kingdom, 9.9%, In Japan, 10.3% , in Kenya 56% and in other African countries, higher percentages were recorded (Njuguna, 2010). The low rate of financial literacy in Kenya has been one of main causes of workers' poor retirement planning especially in the Kenyan informal sector.

In Netherland, a study conducted by the Dutch Central Bank household survey showed that the level of financial literacy among the Dutch was very low and the situation did not seem to improve between the years 2005 and 2010. There was the need to increase financial literacy and pension awareness in the Netherlands (Panos &Wilson, 2020). In countries with emerging economies like Ghana, Kenya, and Nigeria, the level of financial literacy has proven to be extremely low and have a negative influence on the successful retirement plan of employees during their active working periods (Onyango, 2014). The review of literature relevant to the subject of this study has shown that the rate of financial illiteracy in most countries whether developed or developing is very high and the need for financial literacy among employees is very essential (Lucey, 2018).

Most Ghanaian retirees struggle financially during retirement and depend on their families. This is as a result of the low level of financial literacy among these workers (Nunoo & Andoh, 2012). The Ghana Statistical Service has revealed that 64.3% of workers in Ghana are financially illiterates and the World Bank report also showed that 74.5% of Ghanaian pensioners are poor and survive on their SSNIT contributions which are miserably inadequate to meet their needs. This shows the need for financial literacy among Ghanaian workers to aid them in their retirement planning process.

Several studies have been conducted on the essence of financial literacy on the retirement planning of employees in and outside Ghana (Rooji, Lusardi & Alessie, 2009; Sarpong-Kumankoma, 2020; Young, See & Baronovich, 2012). However, these studies were not conducted on the workers of educational institutions like University of Cape Coast (Agyei, Adam & Agyemang, 2019; Panos & Wilson, 2020; Adam, 2017). Over the years now, most of the administrative staff of the University of Cape Coast complain about their financial well-being after their active years of service after retirement. However, the review of several literature has proven that most of these studies were conducted within the banking, automobile, and textile industries (Almenberg, Save-Soderbergh, 2011; Niu & Zhou, 2018; Kalmi & Ruuskanen, 2017; Sekita, 2011; Boisclair, Lusardi, Michaud, 2015) and have not looked at the level of financial literacy among non-teaching staff of University of Cape Coast and its influence on their retirement planning decisions. It is this background that this study sought to examine the influence of financial literacy on retirement planning among the administrative staff of University of Cape Coast.

Purpose of the Study

The purpose of the study is to examine the influence of financial literacy on retirement planning among the administrative staff of the University of Cape Coast.

Specific Objectives of the Study

Specifically, the study sought to:

1. Assess the level of financial literacy among the administrative staff of University of Cape Coast.
2. Assess the level of retirement planning among the administrative staff of University of Cape Coast.
3. Asses the relationship between financial literacy and retirement planning among the administrative staff of University of Cape Coast.

Research Questions

1. What is the level of financial literacy among the administrative staff of University of Cape Coast?
2. What is the level of retirement planning among the administrative staff of University of Cape Coast?
3. What is the relationship between financial literacy and retirement planning among the administrative staff of University of Cape Coast?

Significance of the Study

The findings of this study could be of immense benefit to several diverse stakeholders. For instance, the Ministry of Employment and Labour relations together with other partners in the finance sector of Ghana may find this study extremely useful as the results of the study may provide useful managerial insights that could help policy formulation in the area of financial literacy and retirement planning of workers. The results of this study may provide information about the dynamics of the interactions among the constructs and how they relate with each other.

This may provide guidance on how financial institutions in conjunction with other stakeholders as such heads of departments can improve the level of the dependent variable (retirement planning). This information can be acted up by appropriate government agencies to promote healthy retirement planning climate for workers in Ghana, especially those in Public institutions. Students and researchers alike may find this study very useful as it will provide information that can serve as source of literatures, especially the interactions among financial literacy and retirement planning. Suggestions for further studies as well as research gaps may be offered for researchers; especially those in financial management, to act upon to fully uncover the nature of interrelationships among the constructs, especially in the context of developing countries' educational context.

The findings of the study may also contribute immensely to the creation and building knowledge in the areas of financial literacy and retirement planning in Ghana specific context. This may provide enough evidence to validate claims from other empirical studies conducted outside Africa and in developed economies. Furthermore, the findings of this study may prove extremely helpful for Human Resource Practitioners and labour experts in Ghana as it will provide scientifically proven facts about the state of financial literacy and how these elements interact with each other to influence retirement planning in Ghana's public sector institutions.

Delimitation of the Study

The study was carried out to assess the influence of financial literacy on retirement planning in University of Cape Coast. Specifically, the study targeted administrative staffs (non-teaching senior members, non –technical senior staff and non-technical junior staff) who are permanently and currently working in the University of Cape Coast. The target population therefore included 3,289 administrators (Directorate of Human Resource, University of Cape Coast, 2021).

Organisation of the Study

The study is divided into five chapters. Chapter one dealt with the introduction of the study, background of the study, statement of the problem, objectives, research questions, significance, delimitation, limitation and organisation of the study. Chapter two provides a review of related literature of the study with emphases on a conceptual review, theoretical framework as well as an empirical analysis of the study while the third chapter outlines the methodology of the study. Chapter four presented on the data analysis and result discussion. Chapter five summarizes and offered recommendations and conclusion for the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

A review of earlier, relevant literature is a vital aspect of every academic research, according to Adams, Smart, and Huff (2017), since a successful review offers a strong basis for increasing knowledge. The study aids theory building, closes regions where there is a profusion of research, and reveals places where research is needed. The theoretical, empirical, and conceptual frameworks that put this investigation in context are discussed in this section. The theoretical framework investigates the ideas that best explain the link between financial literacy and retirement planning. The empirical review, on what other scholars have done concerning this subject matter while the conceptual framework displays the pictorial relationship between these variables.

Theoretical Review

The theoretical review describes the theories that are central to this research, which attempt to clarify the research issue and express previously published arguments for verification and critique in light of the study's conclusions. The Theory of Planned Behaviour and the Expectancy Theory were used to establish the link between financial literacy and retirement planning. These theories were chosen because they are well-suited to exploring the link between financial literacy and retirement planning.

The Theory of Planned Behaviour

The theory of planned behaviour by Ajzen (1985, 1988, and 1991) has been beneficial to researchers in defining the relationship between attitude and behaviour over the years now. According to the theory of planned behaviour, the behaviour of individuals is predicted by their intention. The attitude of people influence their behaviours in their decision making. In the context of this study, the attitude of individuals to learn more about their finances or the knowledge of financial management influences their retirement planning behaviours. Thus, financial literacy goes a long way to influence the retirement planning decisions and behaviours of workers.

The Expectancy Theory

The expectancy theory, posited by Lewin (1943) stated that a person's perception influenced their behaviours. Vroom (1964) and Bolles (1972) conducted further studies and added to this theory that human's behaviour is as a result of their expectancy, instrumentality and valence. Expectation explains that a person's expectation will influence their behaviour and also performance depends on effort. Instrumentality also means performance leads to results and valence means the importance a person attaches to a perceived outcome.

The results an individual will produce comes from the combination of the Valence, Expectancy and instrumentality (Mandel and Klein, 2007). Oliver (1974) stated that the behaviour of a person depends on the outcome desired. This theory was used in the context of this study to explain that workers who have expectation of enhancing their financial well-being even after retirement will engage in retirement planning. Also with the instrumentality, which posits that performance leads to results, employees who engage in improving their financial knowledge will yield positive rewards such as proper retirement planning and finally, valence which describes the importance a person attaches to a final outcome shows the importance employees attach to financial well-being even during retirement. Thus employees of University of Cape Coast will not bother to be financially literate when they perceive that financial literacy yields no results. For this reason, employees who expect to be financially dependent will engage in retirement planning.

Conceptual Review

Financial Literacy

According to Mahdzan and Tabiani (2013), financial literacy can be defined as "how people manage their money in terms of insuring, investing, saving and budgeting". Financial literacy can also be defined as the use of knowledge to plan, organize and control all forms of financial resources effectively for financial well-being throughout the life-time of a person (Suwanaphan, 2013). Financial literacy can also be defined as the knowledge and skills acquired that can help in the making of effective financial decisions (Sabri & Jeun, 2014).

Individuals who are financially literates have knowledge about inflation rate, compound interest, interest rate and financial risks (Sabri & Jeun, 2014). Research conducted earlier on revealed that financial literacy is very low among several people and have insufficient knowledge to make the best financial decisions in relation to credit cards, investments, motgages etc. (Lusardi & Mitchell, 2007; Lusardi et al., 2010; van Rooij et al., 2011). Financial literacy has contributed to enhancing the attitude of savings (Delafrooz & Paim, 2011).

Money management has been recognized as a significant determinant of the level of financial literacy by several studies (Gustman, Steinmeier & Tabatabai, 2010; Kempson, 2009, Brown, 2013). A study by Fatoki (2014) in South Africa determined employees' level of financial literacy based on their knowledge in savings. Hastings and Mitchell (2011) also defined the level of a person's financial literacy by their attitude towards investment. The study further posited that individuals who are unable to recognize good investment opportunities are financial illiterates and are unable to plan properly for their retirement.

Capuno and Ramsay (2011) stated that a person's level of financial literacy is determined by the person's control of his finances, budgeting practices, living within their means, knowledge about borrowing and debt literacy. Financial literacy is characterized as a certain type of information, as well as the capacity or abilities to use that knowledge, as well as perceived understanding, responsible financial behaviour, and financial experiences (Hung, Parker & Yoong 2009). According to Atkinson and Messy (2012), financial literacy is a mix of awareness, knowledge, and skills. Financial knowledge, skills, attitude, and behaviour are required to make effective financial decisions and achieving financial objectives.

Financial literacy, according to another definition, is "having the necessary financial knowledge and skills on specific issues to confidently take effective action that best realizes an individual's personal and financial goals" (Beale, Calder, Hayes, Johnson, & Rose, 2015). Financial literacy, according to Buckland (2010), is impacted by an individual's ability to manage his or her resources in order to attain his or her financial goals. Financial literacy refers to financial knowledge and abilities, such as financial numeracy.

Financial Knowledge

Financial knowledge is one of the most important aspects of financial literacy, and it refers to a consumer's comprehension of financial concepts that allows them to make well-informed financial decisions (Wilhem & Chao 2005). This means that a customer must understand fundamental financial and economic concepts including saving and investing, time worth of money, debt management, and insurance (Walstad, Rebeck, and McDondald 2010; Skagerlund, Lind, Strömbäck, Tinghög, and Västfjäll, 2018). Savings and investments are two examples of financial knowledge (Swart, 2012). Questions about the risk-return relationship, risk diversification, and how stocks work (Lusardi & Mitchell 2011) may also be included. Retirement planning, which includes questions about retirement ideas, is another aspect of financial knowledge (Zeka, 2017).

Financial Numeracy

According to Skagerlund, et al. (2018), numeracy relates to a person's capacity to comprehend numbers, percentages, and mathematical techniques. Financial numeracy, according to Lusardi (2012), refers to a consumer's ability to do calculations that aid in financial decision-making. Financial numeracy, according to Huhmann and McQuitty (2009), relates to both financial ability and financial literacy. Financial capacity relates to a consumer's ability to absorb financial product information and data, whereas financial literacy refers to a consumer's understanding of financial ideas. Financial numeracy will be used in this study to refer to a consumer's ability to do financial computations. These financial calculations might include a person's ability to execute simple math, comprehend compound interest, comprehend inflation, and comprehend the time worth of money (Lusardi & Mitchell 2009).

Measurement of financial literacy

Financial literacy has been measured in a variety of ways by different researchers due to its widespread recognition. For example, Klapper and Panos (2011) used time value of money, risk diversification, and stock market activities to assess financial literacy. Lusardi and Mitchell (2011) modified these measures, and incorporated inflation and return. They asked questions regarding these indicators on a 5-point Likert scale of 1 to 5, with respondents who had little or no awareness of any of the indicators answering 1 and those who had more knowledge answering 5. Other scholars in many nations have adopted these indicators. For example, in Sweden, Almenberg and Save-Soderbergh (2011), in Italy, Alessie, van Rooij, and Lusardi (2011), in Japan, Sekita (2011), in Germany, Bucher-Koenen and Lusardi (2011), and in Kenya, Githui and Ngare (2014).

In their study on unpacking the causal chain of financial literacy, Carpena, Cole, Shapiro, and Zia (2011) proposed a broader measure of financial literacy that included basic financial attitudes, financial awareness, and numeracy skills in relation to basic knowledge about stock market and compounding interest rates. They came to the conclusion that financial education improves financial attitude and awareness rather than numeracy abilities. Clark, Musardi, and Mitchell (2017) also performed a financial literacy research in which they assessed respondents' financial knowledge using questions that had previously been examined in other studies. They measured respondents' financial knowledge using variables such as inflation, risk diversification, tax offset, and interest rate in their study. People's awareness of these financial factors were examined using these metrics.

According to Musardi and Mitchell (2016), Lusardi and Mitchell (2008, 2009, 2011a) developed the first three indicators, which were also used in the Health and Retirement Study and other national surveys in the United States, including the National Longitudinal Survey of Youth, the American Life Panel, and the US National Financial Capability Study. Clark, Maki, and Morrill

(2014) designed a questionnaire to test employees' understanding of tax exemption problems. Similarly, Crossan, Feslier, and Hurnard (2011) assessed financial literacy by gathering information from respondents.

Other studies have examined financial literacy using demographic factors such as age, gender, education, job experience, and income levels (Ansong & Gyensare, 2012; Beckmann, 2013; Mahdavi & Horton, 2014; Lusardi & Mitchell, 2008; Olga & Kharchenko, 2011; Van Rooij, Lusardi & Alessie, 2007). The study modified the primary metrics proposed by Carpena et al. (2011) in regard to asking respondents' financial attitude, and awareness, based on the aforementioned measuring indicators. Thus, this study measured financial literacy based on financial attitude and financial awareness (Clark et al., 2016; Githui & Ngare, 2014; Klapper & Panos, 2011; Mitchell, 2011; OECD, 2015).

Retirement Planning

Koloski et al. (2001) define retirement planning as "a broad collection of cognitions and behaviours toward the occurrence of separation from employment." Although the definition is helpful, it does not explain what cognition and behaviour entail. Traditional retirement planning models often focus on the economic components of retirement planning: a country's social insurance scheme, individual pension plans, and personal savings (Ali & Frank, 2019). An individual must design a retirement budget, construct a retirement plan, determine retirement income, get out of them, instil a savings culture, and invest assets properly during retirement planning (Lusardi & Mitchell, 2011, 2014).

Similarly, 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) have all been shown to help people prepare retirement plans. Because it is a methodical approach of looking into the future, proper retirement plans enable an employee to be proactive rather than reactive. It also guarantees that outcomes are consistently achieved and stimulates one's perceptions and behaviours.

Retirement planning, according to Magera (1999), is a systematic method of putting money aside with the intention of providing future income. It is also known as creating and implementing a set of financial forecasts and operations caters for an individual's and family's financial requirements throughout retirement (Boisclair, Lusardi & Michaud, 2017). Most individuals, according to Kimiyagahlam, Safari and Mansori (2019), participate in other activities as a means of preparing for retirement. This is because it is critical to engage in basic retirement planning activities during one's working years and to keep such plans up to date. Income, debt, bills, long-term living arrangements, and estate planning are all factors to consider while planning for retirement (Njuguna & Otsola, 2011; Worthington, 2005).

Because of the uncertainties that come with retirement, retirement planning has become a serious issue for many individuals. This is because retirement entails giving up one's normal job, especially as one becomes older (Lusardi & Mitchell, 2011). They went on to say that it is a time of golden leisure when a retiree's activities of daily living are planned to maximize rather than for the sake of monetary gain or profit. It is, without a doubt, an era of transition relating to friends, relatives, loved ones, and, most importantly, with oneself in a more realistic manner one's neighbourhood.

Retirement is triggered by a variety of factors, including advanced age, when physical abilities gradually deteriorate, falling mental capacity, and inability to work, to deal with an increase in workload and a decrease in sickness resistance (Turcotte, et al., 2012). It might be voluntary, obligatory, or a combination of the two untimely retirement. As a result, researchers have turned their attention to retirement planning. Retirement planning, according to Kimiyagahlam et al. (2019), is a systematic method of putting money aside with the intention of providing future income. It's also known as planning and implementing a set of projections and financial operations to meet an individual's and family's financial demands throughout retirement (Keizi, 2006).

Most individuals, according to Keizi (2006), engage in other enterprises as a means of preparing for retirement. This is because it is critical to engage in basic retirement planning activities during one's working years and to keep such plans up to date. Income, debt, bills, long-term living arrangements, and estate planning are all factors to consider while planning for retirement (Njuguna & Otsola, 2011). Ali and Frank (2019) takes a different approach to retirement planning, claiming that it is the beginning of the retirement process. This procedure begins years before the actual day of retirement and is frequently more complicated than anticipated (Phua & McNally, 2008). Because the goal of this study is to look at the impact of financial literacy on retirement planning, it seems reasonable to concentrate on the financial side of the retirement planning decisions and activities.

Retirement planning, according to studies, is a constant process that exposes employees to a variety of circumstances that might influence their retirement decisions (Agarwal, Amromin, Ben-David, Chomsisengpet &

Evanoff, 2015; Kotze & Smith, 2008; Fernandez et al., 2014). According to a research by Kotze and Smith (2008), various variables can influence one's degree of retirement planning, including spending above one's budget, bad financial record keeping, insufficient finances, and poor financial judgments. Beal and Delpachitra (2010) investigated the factors that impact retirement planning. Personal factors (marriage, own-family health, and pregnancy), lifecycle factors, external or work-related factors (working environment, job satisfaction), and financial issues were all included in the study.

According to Wise (2013), characteristics such as one's capacity to make investment judgments, savings behaviour, and understanding of money management may all influence one's level of retirement planning. Wise's (2013) money management measurement was derived from Capuano and Ramsay (2011), who listed budgeting, saving, borrowing, and planning as core money management abilities. As a result, a lack of knowledge or abilities in these areas might have an impact on retirement planning (Ali et al., 2019). It is important to highlight that these elements influence employees' retirement planning and, as a result, assist them in preparing for retirement. It is therefore necessary to identify and address these variables in order to guarantee that they do not damage one's retirement plans and, ultimately, one's life during retirement.

Empirical Review

Financial literacy and Retirement Planning

Kafari (2019) conducted a study on financial literacy and retirement planning among Ghanaian employees at Ghana Grid Company. The study used quantitative research approach and an explanatory research design. One hundred and sixty-nine employees were randomly sampled and given questionnaires. However, 110 respondents returned their questionnaires resulting in a 65.1% response rate. SPSS version 24 was used for the analysis of the study using tools such as percentages, frequencies, means, standard deviations and linear regressions for the objectives of the study. The study found that financial literacy has a significant positive moderate influence on retirement planning.

Antoni, Saayman and Vosloo (2020) conducted a study to assess the relationship between financial literacy and retirement planning in South Africa. A quantitative research approach was adopted for the study. Closed – ended questionnaire were distributed to collect primary data from the respondents. One hundred and twenty-two (122) employees in the government sector were used for the study. The study used SPSS for the analysis of the objectives using multiple regression. The study revealed that the respondents who indicated that they had financial knowledge had retirement products and investments even during their active working years. Those who were financial illiterates had no financial plans for their years of no active service as workers of the South African government. This proved that, financial literacy is positively associated with retirement planning.

Another study was conducted by Githui and Ngare (2014) to examine the influence of financial literacy on retirement planning in the informal sector in Kenya. The study used SPSS version 17 to analyse its objectives. Two hundred and fifty (250) respondents were used for the study. The study found that financial literacy has a significant positive impact on retirement planning.

Sarpong- Kumankoma (2021) conducted a study on the effect of financial literacy and retirement planning in Ghana. The study used primary data by distributing questionnaires to workers of large business organisations in the formal sector. The sample size for the study was 100 and responses were taken from each of the regions in Ghana. The study revealed that most of the respondents are financial illiterates. The study further revealed that financial literacy is significantly and positively associated with retirement planning.

Godwyll (2018), also studied the effect of financial literacy on retirement planning among employees in Ghana Immigration service. Data collected were analysed using SPSS version 21. Questionnaires were distributed for the data collection. The study revealed that there is a positive effect of financial literacy on retirement planning and preparation. The workers of Ghana Immigration service are knowledgeable about financial management hence a higher level of financial literacy in the institution.

Boisclair, Lusardi and Michaud (2015) studied the impact of financial literacy on retirement planning in Canada. The study found that financial literacy is strongly associated with financial literacy however most of the respondents were financial illiterates. Kalmi and Ruuskanen (2017) also studied financial literacy and retirement planning in Finland. The study found that there exists a statistically significant positive relationship between financial literacy and retirement planning. Data was collected for this study using face-to-face interviews and internet or mail – based surveys.

According to Botha et al. (2014), retirement planning is separated into three stages (2014). The first stage is to begin retirement planning, which entails working and saving money in preparation of retirement. The second phase is retirement planning, which involves thinking about things like the tax implications of receiving benefits before retiring. The person must ensure that he or she has sufficient capital and that it is preserved during the retirement period in the third phase, post-retirement planning (Botha et al. 2014).

One of the most prevalent reasons for failing to effectively plan for retirement is a lack of financial literacy. In their study of the relationship between the two, Lusardi and Mitchell (2011) revealed that financial literacy is strongly linked to retirement planning. Individuals who couldn't answer financial inquiries were less likely to prepare and succeed in their planning, which was proven to be critical for planning. Furthermore, persons who have a better knowledge of compounded interest and risk diversification have bigger asset holdings, according to research (Lusardi & Mitchell 2011).

Van Rooij, Lusardi, and Alessie (2011) looked at the link between financial knowledge and planning for retirement in the Netherlands. According to Van Rooij et al., households with better financial knowledge are more likely to plan for retirement (2011). Brown and Craf (2013) investigated the relationship between financial literacy and retirement planning in Swiss families, finding that those who plan for retirement are more likely to be financially literate.

Lusardi and Mitchell (2011a) performed a quantitative research in the United States on financial literacy and retirement planning (US). The study used a survey methodology to investigate the impact of financial literacy on retirement planning. Data was collected via questionnaires, and the results were analyzed using correlation and regression statistical methods. Financial literacy is substantially connected with retirement planning, according to the study, and the former has a direct influence on the latter. According to the findings, persons who prepare for retirement are able to save more money for retirement.

Furthermore, comparable results were found in other research conducted in other nations. Fornero and Monticone (2011) in Italy discovered that financial literacy had a substantial favorable influence on retirement planning, and Bucher-Koenen and Lusardi (2011) in Germany, Sekita (2011) in Japan, and Van Rooij et al. (2011) in the Netherlands found similar results. In a research performed by Honekamp (2011) on the various impacts of financial literacy on financial education in Germany, it was discovered that financial literacy had a bigger impact on retirement planning for households with higher incomes. These findings, however, contradicted those of Crossan et al. (2011), who showed that financial literacy had no influence on retirement planning. Their research looked at the impact of financial literacy on retirement planning and was conducted in New Zealand.

In addition, Klapper and Panos (2011) showed that financial literacy is adversely connected with retirement or pension planning in Russia in their study on the influence of financial literacy on retirement planning. They claimed that increased financial literacy is inextricably linked to retirement planning and the investing of private pension funds. As a result, they came to the conclusion that increased financial knowledge in Russia resulted in a drop in retirement or pension planning. In contrast, Arrondel, Debbich, and Savignac (2013) looked at the association between financial literacy and retirement planning in a quantitative study in France. The research discovered a substantial link between financial literacy and retirement planning.

Doyo (2013) investigated the impact of financial literacy on pension preparation among Kenyans working in the informal sector. Using a descriptive survey approach, the study attempted to investigate the association between financial literacy and pension preparation in the study region. The study employed a stratified random sample procedure to choose 150 participants and used questionnaires to collect data from them. Financial literacy has a strong positive association on pension preparation, according to data analysis employing correlation.

A research on financial literacy and retirement planning in Kenya's informal sector was done by Githui and Ngare (2014). The influence of financial literacy on retirement planning in Kenya's informal sector was investigated in this study. Financial literacy has a favorable influence on retirement planning in Kenya, according to the study. The study found that the more one's financial education, the better one's capacity to plan for retirement.

Gitari (2012) emphasized the need of having a thorough understanding of financial concerns in order to make sound long-term financial decisions about retirement planning. Fatoki (2014) did research on financial literacy and retirement planning in South Africa and discovered that the former had a good impact on the latter. Individuals who are financially savvy, Fatoki concluded, are able to put money aside for retirement.

In Iran, Nejati, Ahmadi, and Lali (2015) investigated the impact of financial literacy on retirement planning and household wealth, concentrating on master's students in Business Administration at Islamic Azad University. The research was quantitative, and it used a descriptive research design. 59 participants were given questionnaires, and the results were analyzed using Pearson's correlation coefficient and regression analysis. Financial literacy has a favorable impact on retirement, risk diversification, and savings planning at the university, according to the study.

Meir, Mugerman, and Sade also performed a research in Israel on financial literacy and retirement planning (2016). The goal of the study was to investigate the relationship between financial literacy and retirement planning. The study used a quantitative technique as well as a survey strategy. Financial decision-making behaviour and financial knowledge were the two key components of financial literacy studied in this study. When other factors are controlled, regression analysis revealed that financial decision-making behaviour is favorably connected to retirement planning, although financial knowledge has no meaningful association with retirement planning. They came to the conclusion that financial literacy improves one's capacity to prepare for retirement savings.

Also, the increased retirement planning that comes as a result of people's financial skills once again might probably emanate from some empirical reasons. For instance, it has been posited that people knowing where to find the financial advice they need to make and recognise a good financial investment could plan properly for their retirement (Alkhawaja & Albaity, 2022; Kakinuma, 2022; Méndez Prado, Zambrano Franco, Zambrano, Chiluiza García, Everaert & Valcke, 2022; Mohd, Kasim, Muda, Ismail & Md Zin, 2022; Sunderaraman, Barker, Chapman & Cosentino, 2022; Suri & Jindal, 2022).

Similarly, some scholars (Mitchell, 2017; Fang, Hao & Reyers, 2022; Eberhardt, Post, Hoet & Brüggen 2022; Ketkaew et al., 2022; Mustafa et al., 2023) posited that individuals level of financial literacy are demonstrated in their broad knowledge in investments (stocks, bonds, mutual funds), insurance packages, budgeting, saving, debt management, good personal financial decisions, financial records, good control over financial issues and the management of resources available to them.

Lessons from the Empirical Review

After reviewing the articles, it was found that financial literacy leads to higher retirement planning in both developing and developed economies. Employees within the formal and informal sector require financial literacy to ensure enhanced retirement planning. Of all the articles reviewed, only the study conducted on the financial literacy and retirement planning of workers in the Ghana immigration service have high financial literacy rate. However, the relationship between financial literacy and retirement planning as well as the effect of financial literacy and retirement planning have proven to have the same results in Ghana and outside Ghana.

The uniformity in the results prove that all the influence of financial literacy on retirement planning is positive and significant at all places of study. Other lessons learned from the empirical review informed the conduct of this empirical investigation as a whole. The majority of research employed empirically established scales to measure their constructs, and this study followed suit in order to improve the validity of the scales used to evaluate the constructs (Kafari, 2019; Lusardi and Mitchell, 2016). Because empirical research addressed data collection in a similar fashion, the study used structured questionnaires for primary data collection as well.

The respondents' thoughts on the items in the different subscales that were utilized to test the constructs from the point of view of this study were measured using a 5-point Likert scale. The majority of empirical investigations took this technique (Clark, Maki & Morrill, 2014; Crossan, Feslier & Hurnard, 2011). The use of self-administered questionnaires as a key data collecting method was motivated by the fact that online data collection methods gave poor response rates (Save-Soderbergh, 2011; Bucher-Koenen & Lusardi, 2011), hence this strategy was chosen to enhance the response rate in this study.

According to the study's scope, no empirical research have looked at the interaction of empirical correlations between the two dimensions in a Ghanaian educational institution. The majority of the research (Kafari, 2019; Githui & Ngare, 2014; Ansong & Gyensare, 2012) employed SPSS to handle and analyze their data. Because of the higher degree of application of these approaches in the context of the investigation, the study also used SPSS for data processing and analysis of the set research objectives.

Cronbach's Alpha was utilized to evaluate the reliability of the primary data obtained, which was a step in the right direction because most of the empirical research reviewed employed a similar approach to test reliability (Rad, 2006; McDermott & Stock, 1999). The use of principal component factor analysis for testing the validity of the scales was largely influenced by McDermott and Stock's comparable technique (1999).

Conceptual Framework

The conceptual framework of this study reflects the objectives set for the study. The framework shows that financial literacy influence retirement planning. The framework also shows that there are four main dimensions of financial literacy used in this study. The conceptual framework is shown in Figure 1.

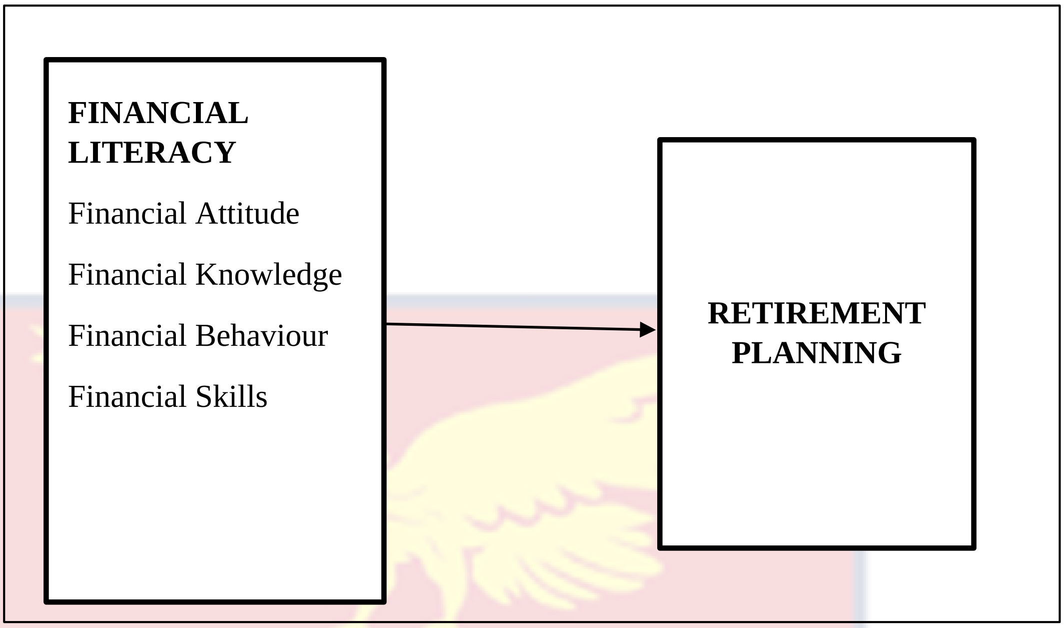

Figure 1: Conceptual Framework of the Study

Source: Author's Own Construct (2023)

Based on the framework above, dimensions of financial literacy within various organisations include financial knowledge, financial behaviour, financial attitudes and financial skills. This study will employ these aspects in determining the effect of financial literacy on retirement planning at the University of Cape Coast. The conceptualization based on the model, therefore, hypothesizes that retirement planning is influenced by the financial literacy of the employees. The framework provides a conceptualization of the relationship between aspects of financial literacy and retirement planning.

The conceptualization is not a construct on its own but measuring items of retirement planning through effective and efficient provision of financial literacy. The framework shows that based on the dimensions of providing financial literacy, employees may improve their retirement planning decisions. The framework of this study notes that proper financial literacy can be the reason for which employees' retirement planning decisions at University of Cape Coast may be enhanced.

Chapter Summary

The chapter reviewed the Theory of planned Behaviour and the Expectancy Theory. The empirical studies showed that workers who were financial literates made good retirement planning decisions. Even though the review shows that a high level of financial literacy and employee retirement planning are positively correlated, this study sought to find out if some of these claims are valid for this study area since financial literacy and retirement planning are based on context. The current study incorporates the findings reported; antecedents used and recommendations made by these researchers to expand the literature on financial literacy and retirement planning within a Ghanaian context.

CHAPTER THREE

RESEARCH METHODS

Introduction

This study seeks to examine and establish the relationship between financial literacy and retirement planning. This section deals with the systematic analysis of all methods and procedures engaged during the conduct of this research. This encompasses the various methods employed, the sampling technique used, and the approach taken to conduct the research as well as a theoretical background on the various statistical tools used. It also gives a detailed description of research area as well as the sample size. It explains why causal research design as well as the qualitative research approach are best suited for this work.

Research Design

A research design is a key component of every good research. The research design provides fundamental layouts for the conduct of the research (Creswell & Piano, 2007). The three possible forms of research designs are the exploratory, descriptive and explanatory research designs (Robson, 2002; Polit & Beck, 2008). The explanatory or causal research design was used in this research to provide basis for understanding the relationship between financial literacy and retirement planning (Boru, 2018). While descriptive studies may ask 'what' kind of question, causal studies seek to ask 'why' and 'how' (Grey, 2014). Since the research seeks to find out how financial literacy affects employee retirement planning, causal research design appeared the most suited design for the research.

Additionally, the usage of the causal research design supports the quantitative orientation of the study. Thus, since the formulated research objectives were tested via appropriate statistical techniques, it became necessary to numerically measure the variables and constructs under investigation. Furthermore, the study adopted the explanatory research design because of the type of statistical application that was used for the processing of the primary data (SPSS application). This application supports the usage of statistical techniques for examining cause-and-effect relationship between variables or constructs as the case may be (Kumar, Syan, Kaur & Hundal, 2020; Ansari & Raza, 2020).

Research Approach

The study employed the quantitative research approach based on the nature of the study purpose under consideration, specific objectives/hypotheses and the nature of the primary data to be collected and analyzed. The constructs were by nature measurable and subjectable to statistical manipulation. According to Creswell (2014) quantitative approach deals with explaining phenomena by collecting numerical data that are analyzed using mathematically based methods, in particular, statistics. Quantitative methods, normally using deductive logic, seek regularities in human lives, by separating the social world into empirical components called variables which can be represented numerically as frequencies or rate, whose associations with each other can be explored by statistical techniques, and accessed through researcher-introduced stimuli and systematic measurement (Ben-Shlomo, Brookes & Hickman, 2013; Rahman, 2017).

This approach typically begins with data collection based on a hypothesis or theory and it is followed with application of descriptive or inferential statistics (Tashakkori & Teddlie, 2003). Quantitative methods are frequently described as deductive in nature, in the sense that inferences from tests of statistical hypotheses lead to general inferences about characteristics of a population. Quantitative methods are also frequently characterized as assuming that there is a single "truth" that exists, independent of human perception (Guba & Lincoln, 1994). The quantitative findings are likely to be generalized to a whole population or a sub-population because it involves the larger sample which is randomly selected (Carr, 1994). Some limitations relating to quantitative research approach are that quantitative research approaches take snapshots of a phenomenon: not in-depth, and overlook test-takers' and testers' experiences as well as what they mean by something (Rahman, 2017).

Study Organization

The study was conducted at the University of Cape Coast, in the Central Region of Ghana. The University of Cape Coast is a public research institution. The study specially targeted administrative staff of the University of Cape Coast. Six colleges make up the University of Cape Coast, each college has its own set of faculties, schools, and departments and the administrative duties of these colleges, faculties, schools and departments are performed by the senior non- teaching members as well as the senior and junior administrative staff.

Targeted Population

According to Krieger (2012), a population refers to all the members any well-defined class of people, events or objects. The targeted population included only the administrative staffs working in the University. A total of 3,289 administrative staffs were targeted for this research.

Sampling Technique

Sampling means taking any portion of a population or universe as representative of that population (Osuala, 2007). The number of subjects in the population was too many to be handled and as such a sample size of 357 which is approximately 10% of the entire population was determined using the Yaro Yamane statistical formula which was developed in 1967 for finding sample size of a finite population. The formula is given as: $n= N/[1+N(e)^2$, where n is the sample size, N is the finite population (3289 total number of Administrators) and e is the level of significance (0.05). According to Twumasi (2001), 10% or more of the target population gives a fair representation upon which findings can be generalized.

Once the sample size was obtained, the simple random sampling technique was used to select the participants of the study. The lottery method was employed to select the various participant of the study. Each participant was given a serial number. The serial numbers were written on papers and folded into a container. The container was then shaken after which a paper was selected and the serial number was recorded. This was done until the sample size for the study was obtained (Sarstedt, Bengart, Shaltoni & Lehmann, 2018).

Data Collection Instrument

The main instrument used for obtaining primary data was structured questionnaire. A questionnaire is a set of printed questions to be answered by a number of people, especially as part of a survey. Questionnaires can be open-ended or close ended. A set of close-ended questions were used to obtain information from participants. The questions were very clear and distinct to prevent any misunderstanding. These types of questions provided the participants with a set of options to choose their response from. The structure of the questionnaire is displayed at Appendix A.

The questionnaire relied mainly on the 5- point Likert scale in obtaining responses from participants. The study relied on empirically validated scales for measuring the constructs under investigation. Then financial literacy scale was adapted from these empirically validated sources (Kafari, 2019; Lusardi & Mitchell, 2011). Retirement planning sub-scale was also adapted from this source (Kafari, 2019; Musardi & Mitchell, 2016). The usage of the validated scales was operationalized to fit the context of the study. The choice of structured questionnaire for the measurement of the variables in the context of the study is based on the fact that if offers opportunity to statistically determine the reliability and validity of such scales, hence reducing measurement errors (Pallant, 2005).

Data Collection Procedure

An introductory letter obtained from the University of Cape Coast was sent to the authorities of the institution to seek for their permission before data was collected. This was done to seek the consent of the respondents to participate in the survey. Again, ethical clearance was sought from the University pf Cape Coast before the structured questionnaires were distributed. All respondents willingly agreed to participate in the survey. The drop and pick method of data collection was used in obtaining data. One advantage of this method is that participants have enough time with questionnaire and hence a more accurate response are obtained (Mutindi, Namusonge & Obwogi, 2013).

It also ensured that respondents were free to answer the questions without being influenced indirectly by the presence of the researcher or the person administering the questionnaire (Trentelman, Irwin, Petersen, Ruiz & Szalay, 2016). Also, the knowledge that someone will be returning to pick up completed questionnaires places subtle and sufficient psychological pressure on the prospective respondents (Trentelman, et al., 2016). Researchers however have no control over how long respondent take to complete the questionnaire and hence might affect sampling if the participant takes too long to respond is. The data collection exercise took four months (March-June, 2021). A total of 228 questionnaires were issued out to respondents. 225 questionnaires were retrieved for the analysis. Therefore, a response rate of 98.68% was obtained.

Data Processing and Analysis

Evaluating the research questions formulated for this study was done by employing Partial Least Squares estimation technique (PLS-SEM) strategy. It has been argued that the utilisation of PLS-SEM keep researchers from bias estimate of items loadings (Götz, Liehr-Gobbers & Krafft, 2010). Hair et al. (2016) advanced that PLS-SEM helps to test and analyse the nexus among variables of interest. This is because the tool has the ability to evaluate the nexus in model constructs simultaneously (Hair et al., 2014). For the purposes of this study, PLS-SEM was used to determine the β values, p-values, collinearity, Variance Inflation Factor (VIF), R^2, effect size (f^2) and predictive relevance (Q^2) for each of the hypotheses in the study.

Ethical Consideration

Sobočan Bertotti and Strom-Gottfried (2019) stated that observing ethics is a means of avoiding fraud or protecting human subjects. Several measures were put in place to ensure that data was rightfully obtained from all respondents without infringing on the rights. An introductory letter from the School of Business was sent to the administration to seek the formal consent of the targeted population (Kovacs, 1985). All participants were adequately informed about the research and what was required of them after they all made informed decisions as to whether they will participate in the study or not. The nature and objectives of the research were explained in details to all respondents. This ensured that respondents understood what was expected of them (Fouka & Mantzorou, 2011).

Each participant's decision to participate was independent of any external influence or coercion on the part of the researcher. The anonymity and confidentiality of responded was protected by not revealing their identity in the sampling process as well as during the reporting of results obtained. Probability sampling was employed in collecting data so that each member of the sampling frame had equal chance of being selected (Towsend & Wallace, 2014). The final research report was checked for plagiarism to prevent any question of authenticity. All cited sources were correctly referenced.

Chapter Summary

This chapter provided a detail and specific information on the various methods employed during the research work. This research established the fact that causal research design was best suited for this research work. The research also established with empirical evidence the various procedures for collecting, analyzing and reporting data. It also highlighted on the decisions taken to ensure the validity and reliability.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter focused on the data collected for this study. In addition to the presentation, the chapter is dedicated to addressing preliminary tests on the study data. This chapter discussed the effect of financial literacy (financial knowledge, financial behaviour, financial attitude and financial skill) on retirement planning and the findings that emanated from the study.

Demographic Characteristics of Respondents

This section presented on the respondents' demographic characteristics such as gender, age, educational level, marital status, number of dependents, years of work experience and income levels. As presented in Table 1, it can be indicated that 43.7% of respondents represent males and 56.3% represent females hence, it can be confirmed that the females are more than the males in this study. The result also shows that the ages between 24-28 years represent 14.0%, 29-33 years represent 28.5%, 34-38 years indicates 42.0%, 39-43 years represent 8.8%, and above 43 years represent 6.7%. Items on respondents' educational levels shows that, respondents who hold HND certificate represent 28.8%, First Degree records 75.1% and Second Degree document 1.1%.

Besides, demographic information on respondents' marital status indicates that 16.8% are single, 79.0% are married and 4.2% are divorced. While 91.0% respondents indicated that they have 1-5 dependents, 9.0% confirmed that, they have between 6-10 dependents. Also, the items measuring the number of years respondents have worked with the university documented that, 23.0% represent 1 – 5 years, 6 – 10 years represent 70. 0% and 11 – 15 years represent

7.0 %. In addition, respondents earn monthly income ranging from GHS 1,000-2,000 represent 42.6%, GHS 2,001-3,000 represent 28.0%, GHS 3,001-4,000 represent 16.5% and GHS 4,001-5,000 indicate 12.9 %. Moreover, information on respondent position indicates that 65.0% are junior staff, 23.4% are senior staff and 12.6% represent senior members (See Table 1).

Table 1: Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Gender		
Male	156	43.7
Female	201	56.3
Age (years)		
24 –28	50	14.0
29 –33	102	28.5
34 –38	150	42.0
39–43	31	8.8
Above 43	24	6.7
Educational Level		
HND	85	23.8
First Degree	268	75.1
Second Degree	4	1.1
Marital Status		
Single	60	16.8
Married	282	79.0
Divorced	15	4.2
Number of Dependent		
1-5	325	91.0
6-10	32	9.0
Years of Work Experience		
1– 5 years	82	23.0
6– 10 years	250	70.0
11– 15 years	25	7.0
Income Levels (GHS)		

1000-2000	152	42.6
2001-3000	100	28.0
3001-4000	59	16.5
4001-5000	46	12.9
Current Position		
Junior Staff	232	65.0
Senior Staff	80	22.4
Senior Member	45	12.6

Source: Nketsiah-Essuon (2023)

Common Method Bias

The number of items used in this study is ten times more than financial literacy (thus, financial knowledge, financial behaviour, financial attitudes and financial skills) constructs. Chin (1998) opined that studies with large data of this kind should not face problems relating to indicator loadings and path coefficient. In this regard, the study used Harman's one-factor test and the factor for 20.132 which is lower than 50% as proposed (Podsakoff et al., 2003) (See Table 2). Moreover, the full collinearity test from the PLS technique findings of the Variance Inflation Factor (VIFs) were also used to confirm the presence of common method bias. It can be affirmed from Table 8 that the VIFs are less than the threshold of 3.3 as proposed by Kock (2015).

Table 2: Extraction Sum of Square Loadings

	Extraction sum of square loadings		
Factor	Total	% of variance	Cumulative %
1	13.435	20.132	20.132

Extraction Method: Principal Axis Factoring.

Model Fit

Lohmöller (1989) argued that rms Theta values in measurement models should be lower than 0.12 to be declared as a well-fitting model. The author further stressed that, figures larger than 0.12 means a poor-fitting model. Following Lohmöller (1989), it can be affirmed that, the model for this study has rms Theta value of 0.107, thereby, confirming that the model is fit for the study. It has been advanced that a SRMR value of 0 simply means that a model is fit for assessment. However, a measurement model may generate a SRMR value of 0.064 (Henseler et al., 2014). Hu and Bentler (1999) however, argued that a structural model becomes fit for a study once a SRMR value is less than 0.08. Based on the Hu and Bentle's (1999) SRMR threshold value submission, the SRMR value of 0.055 has been recorded in the model and it is considered as fit (see Table 3).

Table 3: Model Fit

	Saturated Model	Estimated Model
SRMR	0.055	0.087
d_ULS	3.317	6.923
d_G	2.062	2.294
Chi-Square	2113.334	2287.655
NFI	0.684	0.679
rms Theta	0.107	

Source: Nketsiah-Essuon (2023)

Checking for Reliability and Validity of the Model

The study's model assessment started with the researcher looking at the model's measurement to determine its reliability and validity. A loading becomes reliable when its outer loadings are higher than 0.7 (Henseler, Ringle

& Sarstedt, 2015). As displayed in Table 4, it clear that most of the outer loadings are above 0.7. However, the items that loaded below 7.0 have not been removed from the model because of the attainment of the Average Variance Extracted (AVE) values (See Table 4). In determining the reliability of the constructs in the study, the composite reliability of each construct was used. From Table 4, it can be seen that the composite reliability ranges from 0.887 to 0.969. This result shows that the reliability of the constructs have been met (Hair et al., 2014).

In addition, the AVE values were used to determine the convergent validity for each construct. Chin (1998) and Hair et al. (2014) argued that the AVE should be 0.5 or higher. As displayed in Table 4, the model has attained the accepted AVE values, ranging from 0.656 to 0.722, thereby confirming the convergent validity for each construct. The Cronbach alpha values for the items range from 0.859 to 0.917. Bryman and Bell (2011) recommend Alpha ≥.7 to demonstrate adequate reliability. Table 4 therefore confirms that all the constructs have met the threshold of Cronbach alpha.

Table 4: Summary of Measurement of Scale

Latent Variable	Indicators	Mean	SD	Loadings	CR	AVE	Cronbach Alpha
Financial Knowledge					**0.944**	**0.722**	**0.917**
	FK1	5.434	1.149	0.808			
	FK2	5.826	1.033	0.923			
	FK3	5.801	0.963	0.886			
	FK4	6.031	0.188	0.841			
	FK5	5.905	0.198	0.824			
Financial Behaviour					**0.887**	**0.656**	**0.867**
	FB1	6.042	0.844	0.773			
	FB2	6.042	0.989	0.818			
	FB3	6.042	0.793	0.847			

	FB4	6.042	0.859	0.830			
	FB5	6.042	0.968	0.721			
Financial Attitudes					**0.964**	**0.703**	**0.907**
	FA1	5.877	0.988	0.764			
	FA2	5.728	1.201	0.570			
	FA3	5.697	1.338	0.851			
	FA4	5.882	1.106	0.877			
	FA5	5.826	1.063	0.875			
	FA6	5.586	1.047	0.908			
Financial Skills					**0.953**	**0.712**	**0.896**
	FS1	6.042	1.262	0.950			
	FS2	6.107	1.055	0.931			
	FS3	6.171	0.991	0.930			
	FS4	6.119	0.918	0.888			
	FS5	6.185	0.958	0.929			
	FS6	5.812	1.397	0.868			
Retirement Planning					**0.969**	**0.706**	**0.859**
	RP1	6.116	1.133	0.919			
	RP2	6.048	1.103	0.849			
	RP3	6.021	1.081	0.865			
	RP4	6.224	1.007	0.858			
	RP5	6.146	0.793	0.771			
	RP6	6.121	0.859	0.777			
	RP7	5.952	0.968	0.669			
	RP8	5.877	0.988	0.768			
	RP9	5.728	1.201	0.539			
	RP10	6.016	1.133	0.919			

Source: Nketsiah-Essuon (2023)

Fornell and Larcker (1981) criterion is one of the accepted method for evaluating discriminant validity of a structural model (Hair et al., 2016). Hair et al. (2016) advanced further that discriminant validity of a structural model can be determined when the AVE values of each construct are higher than the squared value of the correlation between the constructs. Following Hair et al. (2016), it can be indicated that all the constructs met the requirement for discriminant validity. This also goes to confirm the discriminant validity of the model (see Table 5).

Table 5: Fornell–Larcker criterion for Determining Discriminant Validity

	FK	FB	FA	FS	RP
FK	0.654				
FB	0.551	0.716			
FA	0.561	0.574	0.753		
FS	0.554	0.623	0.734	0.748	
RP	0.615	0.553	0.627	0.633	0.705

Source: Nketsiah-Essuon (2023)

Note: Financial Knowledge (FK), Financial Behaviour (FB), Financial Attitude (FA), Financial Skill (FS) and Retirement Planning (RP).

Evaluating the Research Questions

Fritzsche and Oz (2007) reasoned that evaluating research questions can start once a correct measurement has been designed. In this regard the following research questions below were evaluated.

RQ1. Assess the level of financial literacy among the administrative staff of University of Cape Coast?

The descriptive summary and analysis for the level of financial literacy among the administrative staff of UCC were determined by using means and standard deviation is shown in table 7 below.

Table 6: The Level of Financial Literacy among the Administrative Staff of UCC

	N	Mean	Std. Deviation
I have adequate knowledge about investments (stocks, bonds, mutual funds), insurance packages, budgeting, saving and debt management	357	4.89	.495
I know how to take good personal financial decisions, keep good financial records, good control over financial issues, manage resources available to me and live within my means	357	4.79	.492
I don`t struggle to set financial goals for myself and spend less money on less important things	357	4.70	.506
I know how to make complex financial decisions and recognize a good financial investment	357	4.68	.493

Source: Nketsiah-Essuon (2023)

The result in Table 6 shows that I have adequate knowledge about investments (stocks, bonds, mutual funds), insurance packages, budgeting, saving and debt management had the highest mean with standard deviation score (M=4.89; SD=0.495). This means that majority of the respondents have in-depth knowledge on what to plan for towards their retirement. It is also established from Table 6 that, I know how to take good personal financial decisions, keep good financial records, good control over financial issues, manage resources available to me and live within my means recorded the next highest responses (M=4.79; SD=0.492). This also means that respondents know the kind of financial decision to make for their retirement. Furthermore, I don`t struggle to set financial goals for myself and spend less money on less important things had (M=4.70; SD=0.506). Likewise, I know how to make complex financial decisions and recognize a good financial investment scored (M=4.68, SD=0.493).

This finding resonate with the results of some scholars (Mitchell, 2017; Fang, Hao & Reyers, 2022; Eberhardt, Post, Hoet & Brüggen 2022; Ketkaew et al., 2022; Mustafa et al., 2023) that individuals level of financial literacy are usually demonstrated in their broad knowledge in investments (stocks, bonds, mutual funds), insurance packages, budgeting, saving, debt management, good personal financial decisions, financial records, good control over financial issues and the management of resources available to them.

RQ2. What is the level of retirement planning among the administrative staff of University of Cape Coast?

The descriptive summary and analysis for the level of retirement planning among the administrative staff of UCC were determined by using means and standard deviation is shown in table 7 below.

Table 7: The Level of Retirement Planning Among the Administrative Staff of UCC

	N	Mean	Std. Deviation
I have developed a retirement budget	357	4.90	.480
I have a retirement plan	357	4.88	.478
I have enough idea of my retirement income	357	4.86	.499
I don`t struggle to instil a saving culture	357	4.82	.490
I invest my funds the way I want it	357	4.77	.475
I pay more attention to my income when preparing towards retirement	357	4.75	.478
When taking decision on retirement, I focus on long-term living arrangement	357	4.72	.470
I have a personal mission statement	357	4.65	.466
I don`t struggle to prepare a retirement plan	357	4.60	.483
I monitor and evaluate my retirement strategies	357	4.57	.462

Source: Nketsiah-Essuon (2023)

From Table 7, it can be established that among the items measuring the level of retirement planning among the administrative staff of UCC, I have developed a retirement budget had the highest mean with standard deviation score (M=4.90; SD=0.480). The finding implies that respondents prepare their financial budget in order to save for the future. This is also followed by I have a retirement plan (M=4.88; SD=0.478). Also, I have enough idea of my retirement income had (M=4.86; SD=0.499). This also means that individuals who have comprehensive idea on how they may survive after retirement will eventually plan towards it. Similarly, the item that I don`t struggle to instil a saving culture recorded (M=4.82, SD=0.490), I invest my funds the way I want it (M=4.77, SD=0.475), I pay more attention to my income when preparing towards retirement (M=4.75, SD=0.478),when taking decision on retirement, I focus on long-term living arrangement (M=4.72, SD=0.470), I have a personal mission statement (M=4.65, SD=0.466), I don`t struggle to prepare a retirement plan (M=4.60, SD=0.483) and I monitor and evaluate my retirement strategies (M=4.57, SD=0.462).

The study findings are consistent with the submission of Zambrano et al. (2022) that people who develop a retirement budget, save more retirement income, pay attention to their income when preparing towards retirement makes the right retirement decision. Others studies (Alkhawaja & Albaity, 2022; Suri & Jindal, 2022) documented that retirement planning could come from peoples' plan on their long-term living arrangement.

RQ3. What is the relationship between financial literacy and retirement planning among the administrative staff of University of Cape Coast?

This objective was to examine the relationship between financial literacy and retirement planning among the administrative staff of UCC. The data analyzed using Partial Least Square-Structural Equation Modelling (PLS-SEM) analytical approach.

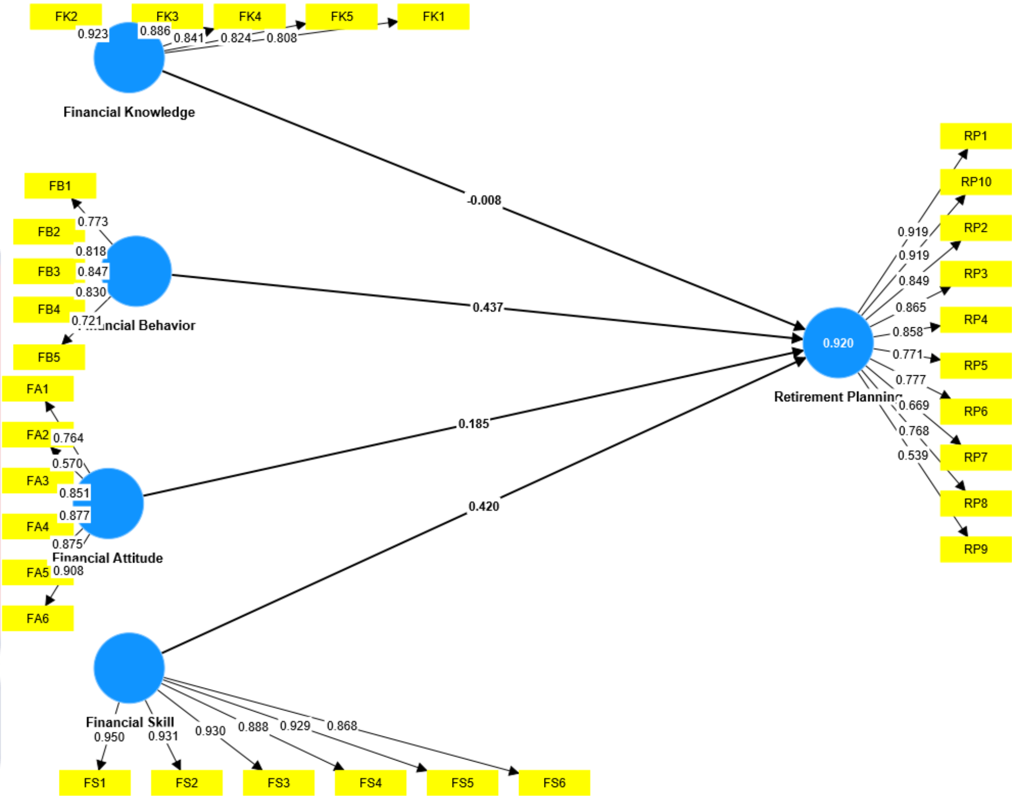

Figure 2: Path Modelling and Factor Loading Results

As disclosed in Table 8 and Figure 2, the R^2 value in the structural model has been presented. The model depicted by the research question shows that financial literacy (financial knowledge, financial behaviour, financial attitude and financial skill) described 0.920% of variation in retirement planning. This therefore, can be justified that the R^2 value is good enough to make it possible for the interpretation of the path coefficients. According to Götzet al. (2010), a Q^2 figure bigger than zero is said to have a predictive relevance. Therefore, a Q^2 = 0.352 indicate that financial literacy (financial knowledge, financial behaviour, financial attitude and financial skill) has a large predictive relevance for retirement planning.

Evaluating the study question was established by examining the path coefficient and its related p-value. From Table 8, the path coefficient (β = -0.008, p= 0.741) establish a negative relationship between financial literacy (financial knowledge) and retirement planning. The implication of this result is that financial knowledge as a dimension of financial literacy does not lead to retirement planning contrary to expectation that, financial literacy (financial knowledge) connect retirement planning positively. Although, the study found a negative relationship between financial knowledge and retirement planning, the researcher argues that financial knowledge as a dimension of financial literacy enhance retirement planning. This is because once an individual has financial knowledge in stocks, bonds, mutual funds, insurance packages, savings and debt management, it is more likely that such an individual will plan towards his or her retirement (Mitchell, 2017; Fang, Hao & Reyers, 2022; Gallego-Losada, Montero-Navarro, Rodríguez-Sánchez & González-Torres, 2022; Harahap, Thoyib, Sumiati & Djazuli, 2022; Park & Martin, 2022; Rostamkalaei, Nitani & Riding, 2022; Yeh & Ling, 2022).

The path coefficient (β = 0.437, p = 0.000) also indicates a significant positive nexus between financial literacy (financial behaviour) and retirement planning. This result connects with the notion that good financial behaviour links positively with individuals retirement planning. Some reasons could principally account for this result. Primarily, Eberhardt, Post, Hoet and Brüggen (2022) opined that people who make good financial decisions and take good control over their financial issues will have advantage of planning for their retirement. Next, Gallego-Losada, Montero-Navarro, Rodríguez-Sánchez and González-Torres (2022) is of the opinion that people being able live within their means and keep good financial records can directly influence their retirement planning. Also, Ingale and Paluri (2022) stressed that financial literacy initiative in the form of good financial behavior create a feeling in individuals that, it is important for them to plan towards their retirement. Some scholars (see

Ketkaew, Van Wouwe, Jorissen, Cassimon, Vichitthamaros & Wongsaichia, 2022; Vieira, Rosenblum & Matheis, 2022) have concluded that financial literacy (financial behavior) is related to retirement planning positively.

Besides (β = 0.185, p = 0.000) indicates a significant relationship between financial literacy (financial attitude) and retirement planning. The implication of this result is that excellent financial attitudes lead to retirement planning. The finding resonate with the empirical work of Ansari, Albarrak, Sherfudeen and Aman (2022), Ghadwan, Wan-Ahmad and Hanifa (2022), Goyal, Kumar, Xiao and Colombage (2022), Graña-Alvarez, Lopez-Valeiras, Gonzalez-Loureiro and Coronado (2022), Hill and Pfund (2022), Mustafa, Islam, Asyraf, Hassan, Royhan and Rahman (2023) and Noone, Earl, Stephens, Rafalski, Allen, Alpass, and Topa (2022) that individuals who set their financial goals, spend less money on less important things among others have the propensity to plan for their retirement better.

Further, consistent with existing financial literacy literature, financial skill enhance retirement planning (β = 0.420, p = 0.000). The increased retirement planning that comes as a result of people's financial skills once again might probably emanate from some empirical reasons. For instance, it has been posited that people knowing where to find the financial advice they need to make and recognise a good financial investment could plan properly for their retirement (Alkhawaja & Albaity, 2022; Kakinuma, 2022; Méndez Prado, Zambrano Franco, Zambrano, Chiluiza García, Everaert & Valcke, 2022; Mohd, Kasim, Muda, Ismail & Md Zin, 2022; Sunderaraman, Barker, Chapman & Cosentino, 2022 Suri & Jindal, 2022).

Table 8: Summary of Findings

IV	DV	Path coeff.	S. E	t-Stats	P-Values	R^2	f^2	Q^2	VIF
FK	**RP**	-0.008	0.066	0.452	0.741	0.920	0.332	0.352	2.000
FB	**RP**	0.437	0.067	5.225	0.000	0.920	0.323	0.325	1.232
FA	**RP**	0.185	0.047	3.549	0.000	0.920	0.024	0.352	1.260
FS	**RP**	0.420	0.087	0.027	0.000	0.920	0.020	0.352	1.735

Source: Nketsiah-Essuon (2023)

Note: Independent Variables (IV), Dependent Variable (DV), Financial Knowledge (FK), Financial Behaviour (FB), Financial Attitude (FA), Financial Skill (FS) and Retirement Planning (RP).

.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter concludes the study and makes vital recommendations for the administrative staff of UCC and for future research works in the above subject matter.

Summary of the Study

The study assessed the level of financial literacy among the administrative staff of UCC; assessed the level of retirement planning among the administrative staff of UCC and examined the effect of financial literacy (financial knowledge, financial behaviour, financial attitude and financial skill) on retirement planning among the administrative staff of UCC. Primary data was collected from 357 staff of UCC. SPSS and Partial least square estimation technique was used to analyze the study data. The applicable literature and research questions have been discussed and evaluated accordingly. The study employed explanatory research design. Additionally, the theory of planned behaviour and the expectancy theory have been reviewed as well.

Key Summary Findings

The Level of Financial Literacy among the Administrative Staff of UCC

The first objective was to assess the level of financial literacy among the administrative staff of UCC. The study discovered that the level of financial literacy among the administrative staff of UCC is usually demonstrated by staff adequate knowledge in financial investments (thus, stocks, bonds, mutual funds), insurance packages, budgeting, saving, debt management, good personal financial decisions, good financial records, good control over financial issues and the management of resources available to them among others (Mitchell, 2017; Fang, Hao & Reyers, 2022; Eberhardt, Post, Hoet & Brüggen 2022; Ketkaew et al., 2022; Mustafa et al., 2023).

The Level of Retirement Planning among the Administrative Staff of UCC

The second objective assessed the level of retirement planning among the administrative staff of UCC. The finding provides confirmation that staff who develop a retirement budget, retirement plan, have enough idea of retirement income, saving and a focus on long-term living arrangement could enhance their retirement planning (Zambrano et al., 2022; Alkhawaja & Albaity, 2022; Suri & Jindal, 2022).

Financial Literacy (Financial Knowledge, Financial Behaviour, Financial Attitudes and Financial Skills) and Retirement Planning

The third objective was to determine the effect of financial literacy (financial knowledge, financial behaviour, financial attitude and financial skill) on retirement planning among the administrative staff of UCC. The study affirms the position of the theory of planned behaviour that of staff retirement planning is driven by their financial knowledge, financial behaviour, financial attitudes and financial skills (Ajzen 1985, 1988, 1991). However, the study revealed a negative nexus between financial literacy (financial knowledge) and retirement planning. Though, the study found a negative nexus between financial knowledge and retirement planning, the researcher argues that financial knowledge as a dimension of financial literacy enhance retirement planning.

This is because once an individual has financial knowledge in stocks, bonds, mutual funds, insurance packages, savings and debt management, it is more likely that such an individual will ultimately plan towards his or her retirement (Mitchell, 2017; Fang, Hao & Reyers, 2022; Gallego-Losada, Montero-Navarro, Rodríguez-Sánchez & González-Torres, 2022; Harahap, Thoyib, Sumiati & Djazuli, 2022; Park & Martin, 2022; Rostamkalaei, Nitani & Riding, 2022; Yeh & Ling, 2022).

The study also revealed a significant positive nexus between financial literacy (financial behavior) and retirement planning. Some reasons were advanced for this result (Eberhardt, Post, Hoet & Brüggen 2022; Ketkaew et al., 2022; Vieira, Rosenblum & Matheis, 2022; Gallego-Losada et al., 2022). The scholars postulated that people who make good financial decisions and take good control over their financial issues have advantage of planning for their retirement.

Similarly, the study documented that the relationship between financial literacy (financial attitude) and retirement planning is positive and significant (Ansari, Albarrak, Sherfudeen & Aman 2022; Ghadwan, Wan-Ahmad & Hanifa, 2022; Goyal, Kumar, Xiao & Colombage, 2022; Graña-Alvarez etb al., 2022; Hill & Pfund 2022; Noone et al., 2022; Mustafa et al., 2023). It has been advanced in the study that staff who set financial goals, spend less money on less important things among others have the propensity to plan for their retirement better.

Moreover, the study found that the increased retirement planning that comes as a result of staff financial skills once again might probably emanate from some empirical reasons. For instance, it has been posited that staff knowing where to find the financial advice they need to make and recognise a good financial investment could plan properly for their retirement (Alkhawaja & Albaity, 2022; Kakinuma, 2022; Méndez Prado, Zambrano Franco, Zambrano, Chiluiza García, Everaert & Valcke, 2022; Mohd, Kasim, Muda, Ismail & Md Zin, 2022; Sunderaraman, Barker, Chapman & Cosentino, 2022; Suri & Jindal, 2022).

Conclusion

The study assessed the level of financial literacy among the administrative staff of UCC; assessed the level of retirement planning among the administrative staff of UCC and the effect of financial literacy (financial knowledge, financial behaviour, financial attitudes and financial skills) on retirement planning among the administrative staff of UCC. Accordingly, the study affirmed the administrative staff of UCC have sufficient knowledge in financial investments (stocks, bonds, mutual funds), insurance packages, budgeting, saving, debt management, good personal financial decisions, good financial records, good control over financial issues and the management of resources available to them because they are financially literate. Furthermore, the study documented that staff who develop a retirement budget, retirement plan, have enough idea of retirement income, saving and a focus on long-term living arrangement could enhance their retirement planning.

Despite the fact the study recognised a negative linkage between financial knowledge and retirement planning, the researcher argues that financial knowledge as a dimension of financial literacy enhance retirement planning. This is because once an individual has about stocks, bonds, mutual funds, insurance packages, savings and debt management, it is more likely that such an individual will plan towards his or her retirement. Also, found that people who make good financial decisions and good control over financial issues will have advantage of planning for their retirement.

It has been advanced in the study that individuals who set financial goals, spend less money on less important things among others have the propensity to plan for their retirement better. Besides, the study found that the increased retirement planning that comes as a result of people's financial skills once again might probably emanate from some empirical reasons such as people knowing where to find the advice they need to make decisions involving money, make complex financial decisions and recognize a good financial investment could plan properly for their retirement

Recommendations

The study makes available a number of considerable recommendations for the administrative staff of UCC:

1. Principally, because it has been recognised that administrative staff of UCC have sufficient knowledge about investments (stocks, bonds, mutual funds), insurance packages, budgeting, saving, debt management, have good personal financial decisions, good financial records, good control over financial issues and the management of resources available to them, it is important that they implement the

aforementioned financial literacy elements for their retirement. It is good for them to recognise that, this initiative will be difficult for them to do but they will benefit at the long run.

2. Further, the administrative staff of UCC should seek financial advice from experts on how they engage in credible investment, business and save money towards their retirement. This is also important since they may not be able to work after their retirement.
3. Finally, due to the low level of financial knowledge on retirement planning observed in the study, the administrative staff of UCC specifically, the young, old, low-income earners and the less educated should engage in concrete measures such as workplace financial education required to further strengthen their financial knowledge, behaviour, attitude and skills in order to enable them prepare sufficiently for their retirement. It is believed that this initiative will impact on their probability of saving for retirement.

Suggestions for Further Research

Further study on financial literacy and retirement planning should be extended further in other sectors to confirm the nexus in this study. Also future study should test the moderating effect of financial education on the nexus between financial literacy and retirement planning.

REFERENCES

Alkhawaja, S. O., & Albaity, M. (2022). Retirement saving behavior: Evidence from UAE. *Journal of Islamic Marketing*, *13*(2), 265-286.

Ansari, Y., Albarrak, M. S., Sherfudeen, N., & Aman, A. (2022). A study of financial literacy of investors—A bibliometric analysis. *International Journal of Financial Studies*, *10*(2), 36.

Bagozzi, R. P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*(1), 74-94.

Chin, W. W. (1998). The partial least squares approach to structural equation modelling. *Modern methods for business research*, *295*(2), 295-336.

Chin, W. W., Marcolin, B. L. & Newsted, P. N. (2003). A partial least square approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic mail emotion/adoption study. *Information Systems Research*, *14*(2), 189-217.

Eberhardt, W., Post, T., Hoet, C., & Brüggen, E. (2022). Exploring the first steps of retirement engagement: a conceptual model and field evidence. *Journal of Service Management*, (ahead-of-print).

Fang, J., Hao, W., & Reyers, M. (2022). Financial advice, financial literacy and social interaction: what matters to retirement saving decisions?. *Applied Economics*, *54*(50), 5827-5850.

Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39-50.

Fritzsche, D., & Oz, E. (2007). Personal values' influence on the ethical dimension of decision making. *Journal of Business Ethics*, *75*(4), 335-343.

Gallego-Losada, R., Montero-Navarro, A., Rodríguez-Sánchez, J. L., & González-Torres, T. (2022). Retirement planning and financial literacy, at the crossroads. A bibliometric analysis. *Finance Research Letters*, *44*, 102109.

Ghadwan, A., Wan Ahmad, W. M., & Hanifa, M. H. (2022). Financial Planning for Retirement: The Mediating Role of Culture. *Risks*, *10*(5), 104.

Götz, O., Liehr-Gobbers, K. & Krafft, M. (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In *Handbook of partial least squares* (pp. 691-711). Springer, Berlin, Heidelberg.

Goyal, K., Kumar, S., Xiao, J. J., & Colombage, S. (2022). The psychological antecedents of personal financial management behavior: a meta-analysis. *International Journal of Bank Marketing*, (ahead-of-print).

Graña-Alvarez, R., Lopez-Valeiras, E., Gonzalez-Loureiro, M., & Coronado, F. (2022). Financial literacy in SMEs: A systematic literature review and a framework for further inquiry. *Journal of Small Business Management*, 1-50.

Hair, J., Hult, G., Ringle, C. & Sarstedt, M. (2014). *A primer on partial least squares structural equation modelling*. Thousand Oaks, CA.: SAGE Publications.

Hair, J. F., Sarstedt, M., Hopkins, L. & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modelling (PLS-SEM). *European Business Review*, *25*(2), 106-121

Hair, J. F., Hult, G. T. M., Ringle, C. & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.

Harahap, S., Thoyib, A., Sumiati, S., & Djazuli, A. (2022). The Impact of Financial literacy on Retirement Planning with Serial Mediation of Financial Risk Tolerance and Saving Behavior: Evidence of Medium Entrepreneurs in Indonesia. *International Journal of Financial Studies*, *10*(3), 66.

Hill, P. L., & Pfund, G. N. (2022). Purposeful retirement expectations and their associations with retirement planning. *Aging & Mental Health*, *26*(9), 1882-1888.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic management journal*, *20*(2), 195-204.

Ingale, K. K., & Paluri, R. A. (2022). Financial literacy and financial behaviour: A bibliometric analysis. *Review of Behavioral Finance*, *14*(1), 130-154.

Kakinuma, Y. (2022). Financial literacy and quality of life: A moderated mediation approach of fintech adoption and leisure. *International Journal of Social Economics*, (ahead-of-print).

Ketkaew, C., Van Wouwe, M., Jorissen, A., Cassimon, D., Vichitthamaros, P., & Wongsaichia, S. (2022). Towards sustainable retirement planning of wageworkers in Thailand: a qualitative approach in behavioral segmentation and financial pain point identification. *Risks*, *10*(1), 8.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (IJeC)*, *11*(4), 1-10.

Méndez Prado, S. M., Zambrano Franco, M. J., Zambrano Zapata, S. G., Chiluiza García, K. M., Everaert, P., & Valcke, M. (2022). A Systematic Review of Financial Literacy Research in Latin America and The Caribbean. *Sustainability*, *14*(7), 3814.

Mitchell, O. S. (2017). Financial knowledge and key retirement outcomes: an overview of the issue. *Journal of Pension Economics & Finance*, *16*(3), 273-276.

Mohd Padil, H., Kasim, E. S., Muda, S., Ismail, N., & Md Zin, N. (2022). Financial literacy and awareness of investment scams among university students. *Journal of Financial Crime*, *29*(1), 355-367.

Mustafa, W. M. W., Islam, M., Asyraf, M., Hassan, M., Royhan, P., & Rahman, S. (2023). The Effects of Financial Attitudes, Financial Literacy and Health Literacy on Sustainable Financial Retirement Planning: The Moderating Role of the Financial Advisor. *Sustainability*, *15*(3), 2677.

Noone, J., Earl, J., Stephens, C., Rafalski, J., Allen, J., Alpass, F., & Topa, G. (2022). An application of the resource-based dynamic process model in the context of retirement planning. *Work, Aging and Retirement*, *8*(3), 225-240.

Park, H., & Martin, W. (2022). Effects of risk tolerance, financial literacy, and financial status on retirement planning. *Journal of Financial Services Marketing*, 1-10.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of applied psychology, 88*(5), 879.

Rostamkalaei, A., Nitani, M., & Riding, A. (2022). Self-employment, financial knowledge, and retirement planning. *Journal of Small Business Management*, *60*(1), 63-92.

Sunderaraman, P., Barker, M., Chapman, S., & Cosentino, S. (2022). Assessing numerical reasoning provides insight into financial literacy. *Applied Neuropsychology: Adult*, *29*(4), 710-717.

Suri, A., & Jindal, L. (2022). Financial literacy for well-being: Scientific mapping and bibliometric analysis. *Citizenship, Social and Economics Education*, *21*(3), 209-233.

Vieira, K. M., Rosenblum, T. O. A., & Matheis, T. K. (2022). And tomorrow, how will it be? Developing a Financial Preparation for Retirement Scale (FPRS). *Journal of Behavioral and Experimental Finance*, *35*, 100709.

Yeh, T. M., & Ling, Y. (2022). Confidence in financial literacy, stock market participation, and retirement planning. *Journal of Family and Economic Issues*, *43*(1), 169-186.

APPENDICES

APPENDIX A: QUESTIONNAIRE FOR STAFF