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Financial Literacy among SHS Teachers in the Tamale Metropolis.

By

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DECLARATION

I hereby declare that this work is the outcome of my own independent research and has not been submitted by anyone for any academic award in this and any other university. All materials refereed in the work have been accordingly acknowledged.

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DEDICATION

I dedicate this work to my entire family for their unwavering support. To the friends who have been with me throughout, I am grateful.

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ABSTRACT

Literature on financial literacy has been explored extensively, however there still exist a gap in financial literacy among teachers in second cycle schools in Ghana. The financial literacy of Tamale's SHS teachers is examined in this study. The OLS regression estimation method was used in the study to estimate the influences of age, gender, and socio-economic status on financial literacy among 359 teachers from a variety of subject areas. Findings from the study show that men have more financial knowledge the women. It also shows that men and highincome earners have better financial behavior and financial attitude. We further find that younger people, high income earners and men have high financial literacy. We conclude that overall financial literacy among teachers is very low. The study recommends that government and other stakeholders must put in measures to train teachers in finance and finance related matters so they can better manage their financial lives. Financially literate teachers are better placed to guide their student in their formative years of studies.

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CHAPTER ONE

INTRODUCTION

1.0 Background of study

Governments, players in the public and private sectors, and other stakeholders are now focused on financial literacy because financial literacy has grown to be a major problem on a global scale (Atkinson and Messy, 2012). This has court interest from researchers, organisations, developed and emerging economies over the last decade. These stakeholders worldwide have made conscious efforts at improving the financial well-being of their citizens by giving them financial knowledge because it allows them make sound financial decisions (Garg and Singh, 2018). Individuals with financial knowledge are better placed to make proficient savings management, borrowing and investment decisions. People who understand savings management and other financial products are able to impact their households positively (Deuflhard, Georgarakos and Inderst, 2019).

Financial literacy has the potential to reduce indebtedness, improve people's financial situation and allow them to reach a successful financial state (Potrich *et al.*, 2015). As a consequence, mitigating stress and depression induced by financial instability (Matey, Duut and Kombian, 2021). Individuals with knowledge in finance are able to appreciate their personal financing activities and relate with the macroeconomics of the country. The lack of financial knowledge can prove to be dangerous for economies. It is argued that the seeming lack of consumer financial knowledge was a huge contributory factor in the global financial crisis (Mundial, 2014).

In Africa, poverty is prevalent in most countries on the continent and it is argued to be partly as a result of low levels of financial literacy. Financial literacy will inform financial inclusion which has been found empirically to be positively related with poverty reduction. People continue to be in poverty because of limited availability and usage of financial instruments(products) including savings, investment as well as insurance. Financial literacy should be a strategy for poverty reduction and improving wellbeing of people (Refera, Dhaliwal and Kaur, 2016).

There has been a number of occurrences that has resulted in depositors of funds with financial institutions losing funds and being victims of Ponzi schemes. Many Ghanaian depositors have lost considerable number of their investments with institutions who take funds for investments.

The latest is ‘menzgold’ who are yet to refund depositors funds by Amponsah-Mensah (2021) who argues that the limited financial literacy level partly accounted for this and suggest the need for greater financial literacy to educate investors about their responsibilities. Some professional workers in the security, health and education sectors were part of these group. It raises questions about their financial aptitude.

Studies have shown that people who do not work in the financial sector are less likely to understand finance and hence are more likely to fall victim to unsuspecting and dubious investment schemes. It is obvious that this would include teachers in senior high schools. Therefore, it is imperative to evaluate the extent of financial literacy among teachers in Ghanaian second-cycle institutions. The financial literacy of teachers in senior high schools in the Tamale metropolis will be the main concentration of this research.

1.1 Problem statement

Finance literacy is very instrumental in achieving successful economic outcomes Potrich, Vieira and Kirch (2015a) because individuals have to make some decisions that affect their financial dealings and workings almost on a daily basis. However, research findings have demonstrated that numerous individuals possess insufficient fundamental financial understanding, leaving them inadequately prepared to make prudent financial choices

(Klapper, Lusardi and Van Oudheusden, 2015). Financial products and services have become very complex in this technological era and therefore it raises the need for formal and informal sector workers to possess some financial knowledge which includes but not limited to knowledge on investment, savings, insurance and credit sources capacity to form rational and informed financial choices. Developed and developing nations have put in policies and programs to enhance the financial literacy of their citizens, efforts they believe can enhance access to financial services and provide a path to poverty reduction (Gerardi, Rosen and Willen, 2010). Even though it is essential to enhance financial literacy in developing countries, literature has shown very little has been achieved.

In Ghana, there have also been a number of efforts to raise the financial literacy levels of Ghanaians over the years. Notable amongst them is the Ministry of Finance's programme on financial literacy and awareness countrywide. This programme was rolled out in 2015 to boost the financial literacy of the Ghanaian people and to widen the net of financial inclusion with an eye on progressive economic development (Daisie, 2019). However, there continuous to be high cases of investors being victims of Ponzi schemes.

Teachers are very essential in the training of young people in the country. A financially literate teacher will invariably impart the knowledge to the students and increase financial literate population in the country. It is important that financial literacy levels of teachers are improved to help them manage their money and make judicious investment. Studies have focused on the financial literacy among university students (Ansong and Gyensare, 2012; Mireku, 2015; Isomidinova, Singh and Singh, 2017), women (Potrich, Vieira and Kirch, 2015b) the youth (Garg and Singh, 2018). Some studies have been done on financial literacy of teachers in higher-education (Surendar and Sarma, 2017). None of these studies have focused on teachers at the secondary level.

Jiang *et al.* (2020), who note that advanced literacy is reasonably high among middle-aged respondents but rather low among younger respondents. This level is slightly lower among respondents above the age of 60, indicating that there may be a nonlinear link between age and financial literacy. Mireku (2015) found a low level of knowledge of students in Ghanaian universities in investment, general finance and insurance. There is however a satisfactory level of financial literacy among teachers in higher education and a high level in technical and nontechnical teachers (Surendar and Sarma, 2017). But what is unclear is the financial literacy levels of teachers in second cycle schools in Ghana. This study seeks to assess the level of financial literacy among SHS teachers in the Tamale Metropolis.

1.2 Objectives of the study

This research cantered on the financial literacy of senior high school (SHS) teachers, assessing their preparedness in making financial choices. Furthermore, it aimed to pinpoint the factors influencing different levels of financial literacy among SHS teachers. In order to attain the overarching goal, the study was guided by the subsequent specific objectives;

1. To investigate the level of financial literacy of senior high school teachers in Tamale metropolis
2. To determine the effect of age and gender on financial literacy levels among teachers in senior high school in Tamale metropolis
3. To investigate the effect of socio-economic factors on financial literacy levels among senior high school Teacher

1.3 Research questions

1. What degree of financial literacy do teachers of senior high schools possess?
2. Does gender and age determine difference in financial literacy among SHS teachers in the Tamale Metropolis?

3. Is the level of financial literacy of the Tamale Metropolis' SHS Teachers dependent on their socioeconomic status?

1.4 Significance of the Study

Policymakers, practitioners, and academicians will all be considered when evaluating the significance of this study.

The study will influence policy by offering insightful information to those in charge of planning curriculum and referential courses that incorporate financial literacy in order to guarantee that teachers have a proper and useful understanding of financial products.

For practice, teachers will be adequately be informed about the financial instruments and are capable to make wise financial decisions regarding them. This will aid players in the financial sector to profit by designing their products to fit teachers' comprehension. Their interactions with teachers will be greatly facilitated by this study.

For academics, the research will add sufficient knowledge to the body of literature because it will fill in the gaps where no other studies of this population have been conducted in a similar manner.

1.5 Scope and limitation of the study

The study took place within Tamale metropolis. The study participants were Senior High School Teachers. Sample of 359 teachers were studied though the minimum sample size of 184 was obtain from (De Vaus, 2002). The data collected was in the 2021/2022 academic years. The study will be impacted by the level of knowledge Senior High School teachers have on financial literacy. This study is not applicable to Junior High School and Primary school teachers because they share no similar characteristics.

1.6 Research methodology

Data from the respondents was gathered using a standardized questionnaire. Nearly every aspect of financial literacy was covered in the poll. Some of the topics reviewed included general financial knowledge, financial aptitude, financial attitude, rates of return, and price stability. The Youth Financial Literacy Short Scale was used in this study (Potrich, Vieira and Paraboni, 2020). The survey consists of twelve questions, which are divided into three groups according to financial knowledge, attitude, and behaviour. The survey was utilized since it had all the components required to evaluate financial literacy. Financial knowledge was the main emphasis of earlier evaluations of financial literacy, but Kimiyaghalam and Safari (2015) argue that this is insufficient for assessing financial literacy. The questionnaire appears to be capable of investigating financial literacy or evaluating a person's capacity to make good financial decisions because it contains financial knowledge, abilities, and attitude, all of which clearly fit into generally acknowledged criteria of financial literacy (OECD, 2014). Utilizing SPSS, data analysis is carried out. The adjusted sample size of 184 teachers representing 24.7% of the total population. The study used an online questionnaire which made it possible to collect more data from 366 respondents. As a result, a sample size of 366 respondants was employed for the study. The study analysed the data using cross tabulation and multiple regression model of OLS.

1.7 Organization of the study

There are five (5) sections in the thesis. The study's background is explained in the first section. Additionally, it includes a description of the problem, the objectives and research questions of the study, as well as its limitations. The second section contains a thorough analysis of the financial literacy literature. The third portion provides a detailed explanation of the research methodology. Chapter four (4) presents the analysis, conclusions, results of the data analysis and relevant discussion are also offered. The fifth Part contains the overview, recommendations for future study and policy direction, as well as the conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a detailed overview of research that has already been done on financial literacy. It further seeks to present a conceptual, theoretical and empirical evidence on financial literacy of teachers in the second cycle institution. This chapter has three major parts which are: the conceptual review which will be discussed in section 2.1 and places much emphasis on concepts such as financial literacy, digital financial literacy, financial inclusion and the financial literacy components (financial awareness, financial conduct and financial attitude). section 2.2 which is the second part of this chapter talks about the theoretical review. This part focuses on the various theories around financial literacy. Theories such as the self-efficacy and the goal setting theory of motivation would be the focus of discussion. Also, in section 2.3 of this chapter, more light will be thrown on previous studies that have been done on financial literacy among various individuals but most especially among teachers in the second cycle institutions.

2.1 Conceptual Review

Financial literacy is a broad concept. This part of the review looks at financial literacy in great detail. Therefore, financial literacy as a concept and its determinants, such as financial awareness, financial conduct, and financial attitude, are discussed. Also, concepts such as financial inclusion and digital financial literacy would be reviewed.

2.1.1 Financial Literacy

Extensive research has been conducted on the subject of financial literacy. Financial literacy has been defined in a variety of ways by authors and researchers in the field of behavioral finance. According to early researchers, financial literacy refers to the capacity to comprehend, scrutinize, control, and convey information regarding financial circumstances that influence one's financial well-being. (Anderson *et al.*, 2000; De Clercq and Venter, 2009). This definition seems to equate financial literacy to knowledge of financial matters only. However, several authors have classified this way of viewing financial literacy to be inadequate. As a result of this Servon and Kaestner (2008), defined the concept as the able of a person to understand and apply financial principles is another definition of financial literacy. This encompasses the capacity to render prudent financial choices, speak confidently about money and financial matters, plan ahead, and make day-to-day financial decisions. According to the OECD (2005) Financial literacy entails the competency and confidence of consumers and investors to grasp financial concepts and instruments, recognize potential financial risks and opportunities, make well-informed decisions, identify sources of assistance, and engage in advantageous actions aimed at improving their financial welfare. The capacity to use financial education has been referred to as financial literacy (Baron-Donovan *et al.*, 2005). Since 2000, previous studies on financial literacy, according to Remund (2010), has focused on five (5) dimensions. The categories include an individual's capability to handle finances, their capacity to think critically about financial issues, their capacity to make wise financial choices, and their confidence in their ability to accurately predict future financial demands. Additionally, there are two sorts of financial literacy: application and comprehension (financial knowledge) (Huston, 2009). Others have suggested that it goes beyond comprehending financial concepts and requires the capacity to put what has been learned into practice. Despite the fact that several definitions have been proposed, including one proposed by Nector, Stoney and Stradling (1992); Commission (2003);

Godsted and McCormick (2007) refer to financial literacy as the capacity to handle money effectively and make informed decisions. This definition could be broadened to encompass "assisting individuals in making knowledgeable and self-assured choices across various aspects of their budget management, expenditures, savings, as well as their utilization of financial products and services, spanning routine banking to loans, investments, and long-term planning" (Morgan, 2003). Huston (2010) claims that there is no agreement on what exactly qualifies as financial literacy. After carrying out an in-depth examination of the literature, Huston (2010) defined financial literacy as the power to comprehend and use one's financial information. These standards appear to be consistent with previous ideas of standardized literacy, making them appropriate for our study.

2.1.2 Components of Financial Literacy

Financial literacy has been argued to be the ability to manage money, understand investment and to be able to discuss issues of finance. Reviewing financial literacy, Remund (2010) observes that the notion is primarily concerned with the knowledge and abilities required to fulfil the needs of life in a civil society. This suggests that literacy is not just about reading and writing but includes the ability to understand and use the knowledge acquired in a certain area of life (for example, politics, environment, health, finance etc) to function well in a society.

The concept of financial literacy also has been misunderstood by some researchers. Some even equate financial literacy to knowledge of financial matters only. However, some academics contend, it is merely a component of financial literacy, if not its very foundation (Kimiyaghalam and Safari, 2015). Furthermore, Kimiyaghalam and Safari (2015) defined Financial literacy is a blend of knowledge, competencies, attitudes, and actions that serve as essential components in the journey toward making prudent financial choices and ultimately attaining individual financial welfare. Also, in the creation of the "youth financial literacy short scale," Potrich, Vieira and Paraboni (2020) conducted both qualitative and quantitative assessments, leading to the determination that financial knowledge, financial attitude, and financial behavior (skills) are valid indicators for gauging financial literacy. This suggests that, financial literacy is not only about financial knowledge but a combination of several components. The most popular being, financial knowledge, financial skills and financial attitudes.

2.1.2.1 Financial Knowledge

Financial knowledge, which has a deeper significance, differs conceptually from financial literacy. Huston (2010) has developed financial literacy in two ways.: through conceptual usage and knowledge application. Financial knowledge refers to the comprehension of a financial topic, whereas application (use) relates to the use of one's own financial knowledge. For instance, a person must be capable of and confident using personnel finance applications so as to be considered financially well-being. An individual who wants to form intellegent financial choices and avoid the trap of pushing unhealthy financial products and services should invest in financial education, which involves increasing their comprehension of financial ideas and understanding the choices of accessible financial instruments and services, understand how to handle money matters or seek guidance to improve one's both current and future financial stability (Hung, Parker and Yoong, 2009). According Herdjiono and Damanik (2016), Financial knowledge is the capacity one has with regards to various financial issues, financial instruments, and financial abilities. Individual financial knowledge is what drives financial decision-making Ida and Dwinta (2010) you must become knowledgeable about decisionmaking processes and tools if you want to get financial expertise. Financial knowledge is measured using indicators from studies by Herdjiono and Damanik (2016) and Ida and Dwinta (2010) that have been modified for the research's focus on, personal financial understanding, skills in fund management, knowledge of wealth accumulation, comprehension of borrowing, and expertise in money investment.

According to Shuttleworth (2011), having financial knowledge also refers to one's power to comprehend finance topics and applying that knowledge to make prudent financial choice. This notion suggests that financial knowledge and financial literacy can be used interchangeably. Financial literacy was once equated with financial knowledge for a very long time. However, the literature says otherwise (Hilgert, Hogarth and Beverly 2003; Bucher-Koenen *et al.* 2017).

Some academics consider it to be merely a component of financial literacy (Kimiyaghalam and Safari, 2015). Financial literacy explanations given in the literature is "theoretical understanding of finance issues" (Huston, 2010). This means that financial knowledge only addresses one part of financial literacy, which is primarily concerned with comprehending and applying financial concepts and information. This means that consumers must be aware of both simple and complex financial ideas like investments and savings, the time value of money, insurance and debt management (Walstad, Rebeck and MacDonald, 2010).

2.1.2.2 Financial Behavior (skills)

The terms used to define financial behavior vary widely. Financial behavior, according to Lusardi, Mitchell and Curto (2010), is connected to a person's capacity to steer their own finances in a manner that would produce favorable results. Additionally, Keuangan (2010) highlighted that an individual's financial management activities, such as planning, managing, and overseeing their finances, is associated to their financial behavior. Financial behavior, according to Tezel (2015), as "the ability to grasp the consequences of financial decisions and to make accurate choices pertaining to cash management, safety measures, as well as opportunities for budgeting and planning." Financial behavior involves the capability to address day-to-day financial affairs, encompassing tasks like planning, budgeting, monitoring, handling, controlling, researching, and storing (Kerlinger, 2002). Consumption patterns, the management of cash flow, saving and investing practices, and credit management constitute the four factors that can impact an individual's financial behavior (Dew and Xiao, 2011).

Any human activity that influences financial conduct could be categorized as financial behavior. Common financial activities include utilizing cash, credit, savings, and more contemporary digital financial products. Examples of unfavorable financial behavior encompass inadequate budgeting and the accumulation of excessive debt, both of which can lead to financial challenges (Council, 2016). Financial attitude is one element that may influence financial management behavior (Pankow, 2012). According to Siegel and Shim (1991), a person's actions will determines whether or not he is effective in managing his funds. Additionally, according to Gitman and Zutter (2004), an individual's financial behavior includes how they choose to manage their sources of financing (money) for funding, how much working capital they need, and when to retire.

Everyone's daily life must include some kind of financial behavior. In order to execute financial transactions, borrow money, save money, invest, and plan for retirement, people must, in fact, possess the necessary and relevant financial knowledge and abilities (Lusardi and Mitchell, 2011; Allgood and Walstad, 2016).

Financial behavior is said to be the conduct that people participate inn while handling their own money, seen through the lens of psychology and the routines they follow to make judgments regarding their financial activities (Humaira and Sagoro, 2018). Meanwhile Al Kholilah and Iramani (2013), sees financial behaviour as the ability to organize, process, check, supervise, regulate, look for, and store assets or monies in one's life. From a psychological standpoint, personal behaviors can represent human characteristics. Based on the above journal, one can apply the study of Al Kholilah and Iramani (2013) and Humaira and Sagoro (2018) that is modified for the study, specifically: bills settlement on time, putting money aside for savings, not engaging in erratic spending, supervising financial management, and evaluating financial management.

The relationship between human behavior and financial management can be seen in financial behavior (Xiao, Tang and Shim, 2009). The objective of financial behavior is to comprehend and anticipate the systemic impacts of the financial market through a psychological lens. As per various specialists, financial behavior influences one's financial contentment (Joo and Grable, 2004; Coşkuner, 2016).

2.1.2.3 Financial Attitude

A person's attitude is defined as their propensity to value something in a certain manner, whether a judgment, a problem, an item, or an event (Bahsin, no date). Pankow (2012) contrasted this by defining financial attitude as a mental state, viewpoint, and assessment concerning finances. When someone responds to questions in surveys or with certain groups, their attitude is what they think and feel about their personal finances (Johan, Rowlingson and Appleyard, 2021). In their study, Johan, Rowlingson and Appleyard (2021) surveyed four domains of financial attitudes, specifically money management, risk management, future planning and selecting financial instruments, and staying informed.

The term financial attitude refers to a person's attitude toward money (Pankow, 2012). These elements of attitude, which are inextricably linked to human thought and can affect financial judgment and, ultimately, financial satisfaction, Falahati, Sabri and Paim (2012) assert that the financial attitude significantly affects financial satisfaction.

Financial attitudes can be thought of as a psychological trait that can be shown when evaluating financial management techniques with varying degrees of agreement (Parotta, 1996). The phrase Financial attitudes encompass the evaluation of your mindset, viewpoints, and judgement concerning the environment you inhabit.", This is used to describe how financially we perceive our mindset, viewpoints, and discernment about the world we live in Pankow (2003).The degree of financial problems and financial attitude are related, according to Herdjiono and Damanik (2016).

A condition that people have regarding money and then apply to their attitudes is referred to as having financial attitudes. This is in line with the theory put forth by Marsh (2006), according to which an individual's financial attitude refers to how they view their own financial issues, which are evaluated based on how they react to a statement or opinion.

According to his research Herdjiono and Damanik (2016), There exists a connection between financial attitudes and financial challenges. Consequently, there is a belief that an individual's financial behaviour is influenced by their financial attitude. Besri (2018) lists six concepts for financial attitude, including the following: Obsession: Personal financial perceptions and management goals in the future, Power: Money is being employed here as a means of social control. In other words, money can provide a solution to the issues at hand, Effort: people who profit from their business endeavours, Dissatisfaction: Feelings are unsatisfied with their level of wealth, Storage: There is a propensity to save money, and Security: The idea that keeping money private is preferable to using financial services like banks and cooperatives.

2.1.3 Digital Financial Literacy

The growth and expansion in technology has brought to the fore the need for digital financial literacy to increase availability of financial services and instruments. The increased number of mobile phones have propelled the use of mobile money and digital wallets for transactions, Digital financial literacy has the potential of increased financial sophistry of users to be able to process financial information (Morgan, Huang and Trinh, 2019). Research have shown that the ‘gig’ economy has the potential to accelerate at a faster pace understanding of financial and investment services for individuals to better achieve better financial resilience.

Individuals need to be effectively equipped with financial and digital literacy (Kass-Hanna, Lyons and Liu, 2022).

Individuals are able through financial literacy to learn and manage their investments, savings, retirement plans with borderless ease and convenience. The expansion of mobile money has become an important catalyst for increased understanding, use and patronage of financial services. Due to the advancements in technology, Sub-Saharan Africa has witnessed remarkable enhancements in the realms of financial knowledge, financial education, and financial attitudes. In a research project focused on financial literacy among university students, Sarpong-Danquah *et al.* (2018) found a negative impact of technology on understanding and use of financial services.

There are risks associated with technology and by extension digital financial services. Individuals need to be apprised of the potential and imminent threat to their exposure and use of digital platforms for information and for financial transactions. Associated financial risk is one of the dimensions of digital financial literacy (Morgan, Huang and Trinh, 2019).

2.1.4 Financial Literacy and Inclusion

Research has demonstrated the significant influence of financial literacy on attaining worldwide financial inclusion and inclusive growth. People who are financially literate have a better chance of accessing, using and formal financial services. Examining financial resilience via financial and digital literacy in South Asia and Sub-Saharan Africa, Kass-Hanna, Lyons and Liu (2022) Identified a coherent connection between financial and digital literacy in fostering inclusive growth. Researchers observed higher levels of financial and digital literacy among savers and borrowers compared to those who didn't save.

Financial literacy is systematically connected to financial inclusion, according to research by (Grohmann, Klühs and Menkhoff, 2018). They establish this stylized fact at the national level.

They offer evidence from cross-country data that demonstrates that financial inclusion depends on both the supply and demand for financial services. Again, Baidoo, Boateng and Amponsah,

(2018) postulate that financial literacy has a pivotal role in enhancing savings rates in Ghana. They promote the idea that having a strong understanding of finances increases one's likelihood of saving since they will know when and how to do so. Klapper, Lusardi and Van Oudheusden (2015) further argue that using financial services will enhance consumers' financial abilities, hence enhancing financial inclusion. They further confirm that adults who use formal financial services have greater levels of financial knowledge.

2.2 Theoretical Review

The theoretical review of the study is presented here. There are two theories which have been examined here. These theories are self-efficacy theory and goal setting theory of motivation. These theories provide an approach to evaluate and improve our knowledge on financial literacy.

2.2.1 Self-efficacy Theory

Self-efficacy theory provides the theoretical underpinnings for understanding the cognitive dispositions and behavioral choices of individuals. According to Bandura, Freeman and Lightsey (1999), self-efficacy is the social, emotional, and cognitive capacities of an individual. Application of knowledge of financial services and goods is another definition of financial literacy. Physiological and emotional states, oral persuasion, vicarious experience or modelling, mastery experience, and all of these have an impact on self-efficacy, according to study (Bandura, Freeman and Lightsey, 1999). In terms of financial literacy, success with financial management as a result of high financial literacy is linked to mastering experience, modelling, verbal persuasion, physiological conditions, and emotional conditions. When using financial products and services, one's strength and confidence will increase as they gain self-efficacy experience. Additionally, it recognizes the crucial role that physiological and emotional conditions, such as stress, play in boosting self-efficacy, which has significant implications for decision-making. High self-efficacy people have faith in their capacity to successfully plan and manage their financial lives.

In Bandura (1997) framework, there are four distinct sources contributing to self-efficacy: Physiological and Emotional State: This pertains to an individual's condition at a specific juncture. The emotional state in particular influences the assessment of one's self-efficacy. For instance, negative emotions like stress and depression can erode trust in oneself, while positive emotions can bolster it. These emotions are influenced by both an individual's financial and physical well-being. From a financial standpoint, when people can fulfil their essential financial needs through formal channels, they become more enthusiastic about comprehending the basics of their usage, thus fostering financial literacy. Conversely, apprehension about financial products can deter interest in further understanding financial services. The theory of selfefficacy, linked to the impetus to manage finances and engage with financial products, can illuminate the impact of financial literacy on other decision-making processes. Modeling: Modelling entails learning through observing others' behaviours. When individuals witness those resembling them prosper, it instils a belief in observers that they too can proficiently employ resources to excel in similar endeavours. In the financial domain, when someone effectively demonstrates financial management, it might inspire others to exhibit their capability to succeed in handling their finances. Verbal and Social Beliefs: This refers to the feedback received upon accomplishing an activity. Input from peers and influential figures reinforces others' confidence in their ability to thrive. Within the context of financial literacy, constructive feedback stemming from observing sound financial behaviour encourages individuals to delve deeper into financial products or concepts and make more extensive use of related services. Positive verbal affirmations augment the confidence necessary to put the acquired knowledge into practical application. Mastery: Mastery signifies a comprehensive grasp of a subject that leads to achievement. Attaining success propels a desire to persist and attain further accomplishments. In the realm of financial literacy, possessing a solid understanding and knowledge of financial products/services motivates their utilization. Once an individual succeeds in effectively utilizing their financial resources, they develop the assurance to once again make use of financial products/services

2.2.2 Goal Setting Theory of Motivation

A goal can be defined as a deliberate endeavour pursued by an individual. The emotional dimension in which value judgments are perceived plays a role in this process according to (Latham and Locke, 1991). The energy, direction, and persistence with which a person pursues a goal are referred to as their (Mitchel, 1997). Hogarth and Anguelov (2003) argued that motivation gives a person the impetus to take action and they link motivation with financial literacy. They found a connection between low savings rates and disadvantaged households, which they explain to a lack of drive to succeed. Additionally, motivating factors significantly improve financial literacy skills, according to (Mandell and Klein, 2007). They then go on to explore how incentives may affect people's money management habits and so enhance financial
literacy.

The importance of the connection between the goals that are set and the outcomes that follow is emphasized by goal setting theory, a subset of motivation theory. Goal commitment, goal specificity, and goal acceptance are all aspects of goal setting. Also, Heck (1984) The financial conduct of individuals encompasses the establishment of financial objectives, precise evaluation of income and expenditures, strategizing and allocating funds. It also entails evaluating choices during financial choices, adjusting to unexpected fiscal requirements, punctually fulfilling financial commitments, attaining financial milestones, and effectively executing expenditure strategies. The ability to use one's financial literacy skills of planning and controlling is significantly impacted by the goals one sets. Setting goals makes it easier to plan, which helps people manage their money better.

2.3 Empirical Review

This section of the study highlights previous studies on the objectives of this work. Numerous scholars have investigated financial literacy across diverse demographics and the factors influencing it. The level of financial literacy globally, in Africa and Ghana is reviewed in this part of the work as well. Also, we focused on previous studies done on the level of financial literacy among SHS teachers, the effects of age, gender and other socio-economic factors affecting the financial literacy among the SHS teachers.

2.3.1 The Levels of Financial Literacy Globally

Since the onset of the financial crisis, financial literacy become the subject of many research works. Furthermore, there are concerns that insufficient levels of financial literacy have evolved into a worldwide concern (Yew *et al.*, 2017). Xu and Zia (2012) discovered that inadequate financial literacy is prevalent across all segments of society, whether in lower-middle, upper-middle, or high-income economies. According to a study by Mandell (2004) in the United States, financial literacy was lower among women, Hispanics, and African Americans, as well as individuals with lower educational backgrounds. In the United States again, environmental factors like family and parent communication styles, school climate, coworkers, life events, books, and the internet have been linked to young people's financial literacy. Cude *et al.* (2006) for instance, utilized both quantitative and qualitative data from a multi-state research initiative to analyze the overall financial management behaviors of college students in the United States. The study examined the way these students' approach and manage money as well as the traits that make some of them more financially vulnerable than others. According to the study, guardians have a significant impact on how their children manage their money. Elsewhere in the UAE, A study was conducted to look at the relationship between various types of personal debt and Levels of financial literacy within a subset of individuals residing in the United Arab Emirates (Ibrahim and Alqaydi, 2013). Descriptive statistics, reliability analysis, and a t-test were employed to ascertain outcomes based on a sample of 412 participants. Their investigation revealed that the average financial literacy level in the UAE (0.433) was notably and statistically lower than the generally reported literature value (approximately 0.50). Furthermore, their findings indicated that gender did not contribute to significant variations in financial literacy between men and women.

Several other studies have explored the correlation between financial literacy and financial conduct. The results reinforce the notion that insufficient financial literacy contributes to suboptimal financial behavior across various domains, including behaviors related to retirement planning (Lusardi and Mitchell, 2011b, 2011a; Van Rooij, Lusardi and Alessie, 2012; Agnew,

Bateman and Thorp, 2013); Behavior related to saving for retirement (Bateman *et al.*, 2010); Involvement in the equity market (Bhabha *et al.*, 2014). Another study looks at financial decisions made regarding saving (Murendo and Mutsonziwa, 2017), saving behavior (Jamal *et al.*, 2015; Widyastuti, Suhud and Sumiati, 2016), and shopping behavior (Varcoe *et al.*, 2005). Oppong-Boakye and Kansanba (2013) found a link between formal education and financial literacy in a Ghanaian study. They looked at undergraduate students' financial literacy at the

Kwame Nkrumah University of Science and Technology (KSB) School of Business in Ghana. Utilizing a questionnaire as the instrument for data collection and a stratified random sample procedure, they selected 203 undergraduate students. According to the findings, undergraduates learn financial literacy from their parents, peers, the media, and formal education first. In addition, the findings demonstrated that students in their final year are the most financially literate, followed by third-year, first-year, and second-year students. This seems to imply that your financial literacy improves as you progress through higher education. It was unclear why students at level 100 scored higher than students at level 200 on the financial literacy scale.

That could have been caused by other things. In accordance with the study's findings, accounting students demonstrated the highest level of financial literacy, the next was banking and finance students, followed by marketing students, and ultimately, human resource management students.

Another study according to Ansong and Gyensare (2012), Observed that age and work experience exert an influence on financial literacy. To examine the factors influencing financial literacy in working undergraduate and graduate students, researchers used correlational design. They found that the use of media, father's education, work location, and sample size of 250 people had no effect on financial literacy. Sarpong-Danquah *et al.* (2018) studied 480 Ghanaian students from public, technical, and teacher-training schools revealed that, on average, students lack financial literacy, especially when it comes to insurance. Students do, however, demonstrate knowledge of borrowing and saving. Sarpong-Danquah *et al.* (2018)

recommended incorporating financial literacy into the curriculum for non-business students. In their study titled "Financial Literacy among Undergraduate Students:," Oseifuah, Gyekye and Formadi (2018) experimental Proof from Ghana" investigated the monetary education of college understudies in Ghana's northern district. Financial literacy was compared to gender, age, study program, years, parent income level, and student income position. Using the INFE, (2015) framework for measuring financial literacy, data was collected from a cohort of 342 undergraduate students located across the University for Development Studies (UDS) campuses in Nyankpala and Tamale, Ghana. Because money management experience necessitates knowledge of financial management issues such as budgeting, investing, and interest rates, among others, they discovered that students' financial literacy improved as a result of managing their work-related earnings. They additionally found that male understudies are almost certain than female understudies to be instructed about private cash hardships.

Three groups' financial literacy was investigated by Xiao et al. (2020): graduates, current students, and college dropouts. The study demonstrated how students' poor financial literacy leads to unfavourable financial behaviour. In every category, study graduates performed better than enrolled students and dropouts. Still, there is reason for caution over the graduating group's outcomes. Graduates averaged 2.62 on a five-point rating system for desired financial behaviour.

Letkiewicz (2019) investigated if college students who receive excessive support become ignorant about debt. The degree to which parents influenced and made decisions for their children was referred to as help. According to this poll, 71% of students indicated they get financial guidance from their parents. According to this study's analysis of data from the 2014 National Student Financial Wellness Study, some parent socialisation techniques are linked to higher levels of debt ignorance. According to the findings of a logistic regression, students who relied substantially on family support, had someone else pay their credit card bills, and relied on parental support were more likely to be unaware of the total amount of loans they had taken out (Letkiewicz et al., 2019). Children's financial behaviour is greatly influenced by their parents. Nonetheless, one of the reasons why today's college students lack financial literacy is overparenting.

2.3.2 Financial Literacy Among Teachers

Imelda *et al.* (2017) explored the financial literacy of both professional and pre-service teachers in the Philippines, focusing on evaluating their grasp of essential financial principles, including compound interest, inflation, time value of money, money illusion, and stock market operations. The study employed a descriptive survey design approach.

This study had 1,924 respondents nationwide. There were 1,000 one (1,001) professional teachers and pre-administration instructors (923) haphazardly chose from the primary island clusters of the nation, namely Luzon, Visayas, and Mindanao. According to their findings, professional and pre-service educators lack fundamental and advanced financial literacy abilities. They came to the conclusion that financial education ought to be incorporated into the curriculum of both primary and secondary schools to be able to raise students' levels of financial knowledge, behaviour, and attitude.

More so, Zulaihati, Susanti and Widyastuti (2020) delved into how teachers' financial literacy influenced students' financial conduct. In this investigation, the financial behaviour of secondary school educators was studied in relation to their financial literacy. The study focused on aspects like short-term and long-term planning, along with saving and spending habits. Data was collected from 142 conveniently selected participants in Greater Jakarta, Indonesia. The gathered data underwent analysis employing a reflective measurement model using partial least squares structural equation modelling. The research revealed that financial literacy significantly impacts various forms of financial behaviour, encompassing saving, spending, and both shortterm and long-term planning.

Financial planning and financial literacy among higher education teachers were the subjects of study by Surendar and Sarma (2018) that looked at some key variables. A respectable degree of financial literacy was observed among instructors in higher education, according to the survey.

The survey additionally indicated that the majority of higher education educators possessing a substantial level of financial literacy are well-versed in numerous aspects of personal financial management. They demonstrate the ability to construct their own financial plans, irrespective of the subject they are instructing.

(Huzdik, 2022) studied teachers' financial literacy. The objective of the study was to investigate the financial knowledge, attitudes, confidence, behavior, and motivations of teachers (N=752) across various subjects. Contrary to assumptions, the results showed a higher level of financial literacy among teachers, surpassing that of students in higher education. Notably, 86% of the surveyed teachers reported having savings beyond basic bank deposits, including government bonds and other more intricate forms of savings, underscoring a heightened level of financial awareness and inclusion. The study's findings suggest that tailoring curricula and requirements based on teachers' financial awareness and motivation is a valuable pursuit.

(Gutti and Byju, 2023) studied financial literacy levels among teachers in higher learning institutions in Hyderabad. This study aims to assess the levels of financial literacy among teachers in higher learning institutions in Hyderabad, recognizing their significant role in any society. Data for the study were obtained through a structured questionnaire with two sections: one covering social and demographic profiles, and the other focusing on financial literacy aspects such as financial learning, numeracy, knowledge, attitude, and behavior. Desk research data were also incorporated. Descriptive analysis was conducted to evaluate the collected data, revealing that 21% of teachers in higher learning institutions in Hyderabad possess a high level of financial literacy, while the majority, accounting for 58.5%, exhibit a moderate level.

(Saranza et al., 2022) wrote on the basic Education Teachers' Financial Literacy for Sustainable Development. The objective of this study is to evaluate the financial literacy of public school teachers in elementary and secondary education within the Surigao del Norte Division, Philippines. The research employs a quantitative research design, incorporating regression analysis and descriptive statistics, including mean, standard deviation, correlation, and percentages. The findings reveal a deficiency in financial literacy among the surveyed teachers.

2.4 Socio Economic Factors and Financial Literacy

Noor, Batool and Arshad (2020) investigated the role of individuals' financial literacy and financial self-efficacy in elucidating their motivation for maintaining financial accounts. Furthermore, the study identifies socio-demographic factors, including gender, marital status, education, occupation, and income level, as key influencers of account ownership behaviours in Pakistan. The study's findings underline the importance of financial literacy for promoting comprehensive financial inclusion in the economy.

Also, Alshebami and Aldhyani (2022) explored the Relationship Between Social Influence, Financial Literacy, and Saving Behaviour Among Saudi Youth, along with the Mediating Role of Self-Control. The study aimed to delve into the impact of social factors, including parental and peer influence, on the financial literacy of young Saudi adults (students). Furthermore, it assessed the influence of financial literacy on participants' propensity to cultivate saving habits and examined how self-control acted as a moderating factor in the association between financial literacy and saving behaviours.

Vera (2022) also, explored the Influence of Socioeconomic and Demographic Variables on Financial Literacy and its Components. The primary objective was to investigate the intricate links between socioeconomic and demographic factors and various dimensions of financial literacy. The study employed a multivariable analysis to scrutinize financial literacy. To effectively assess the impact of demographic and socioeconomic factors on the relationships within financial literacy variables, a discrete moderator test was employed, involving a combination of multigroup analysis (MGA) and partial least squares structural equation modeling (PLS-SEM). The study was conducted with a sample of 255 academics from Java Island, Indonesia. The findings revealed that the associations between financial skills, knowledge, capability, awareness, experience, goals, and financial decisions were influenced differently by demographic factors such as gender, age, and field of specialization.

Bajaj and Kaur (2022) examined the Validation of a Multidimensional Financial Literacy Model through Confirmatory Factor Analysis. The study's objective was to confirm the measurement model of financial literacy, wherein financial literacy constitutes a higher-order construct while financial knowledge, attitude, and behaviour constitute lower-order constructs.

Kadoya and Khan (2020) wrote on what determines financial literacy in Japan? We analyze multiple demographics, socio-economic, and psychological variables sourced from the theories of social learning, consumer socialization, and psychological learning. We utilized data from Osaka University's Preference Parameter Study. The findings reveal that gender, age, and education as demographic factors; income and occupation as socio-economic factors; and perceptions of the future as a psychological factor significantly influence the level of financial literacy.

Ndou (2023) The moderator effect of socioeconomic status on the relationship between parental financial teaching and financial literacy. The main objective of this study was to explore the potential moderating impact of parental Socioeconomic status (SES) on the link between parental financial education and the financial literacy of young black African individuals. A quantitative methodology was employed, utilizing moderated regression analysis to analyze the data. The findings revealed that parental income acted as a moderator in the relationship between parental financial instruction and financial knowledge, financial behavior, and financial attitude.

Malombe (2018) wrote on the influence of socio-economic and demographic variables on financial literacy among adults in dar es salaam. The objective of this study was to examine how socio-economic and demographic variables, including educational level, gender, income, and age, impact the financial literacy of adults. Primary data was gathered through a questionnaire from 399 respondents. The results indicated that age and education significantly affect the level of financial literacy. Additionally, the study found that gender and income do not have a significant influence on financial literacy levels.

Radianto *et al.* (2020) Young Entrepreneur, Parental Socioeconomic Status, and Financial Literacy: Does Supply Chain Mediate Entrepreneurship Education? The aim of this research was to investigate variations in the financial literacy of young entrepreneurs, considering factors such as parental income, parental education level, and parental profession. The study revealed distinctions between young entrepreneurs with high or medium parental income and those with low parental income.

2.5 Conceptual Framework

The diagram below explains the idea of financial literacy. The figure consists of three independent variables (i.e., financial knowledge, financial behavior, and financial attitude) and one dependent variable (i.e., financial literacy). When examining the variables that affect financial literacy, other variables like age, gender, and monthly income, have been taken into account. The components of the concept of financial literacy are explained by the conceptual framework. Following a careful review of the literature, it was discovered that these factors have an impact on financial literacy.

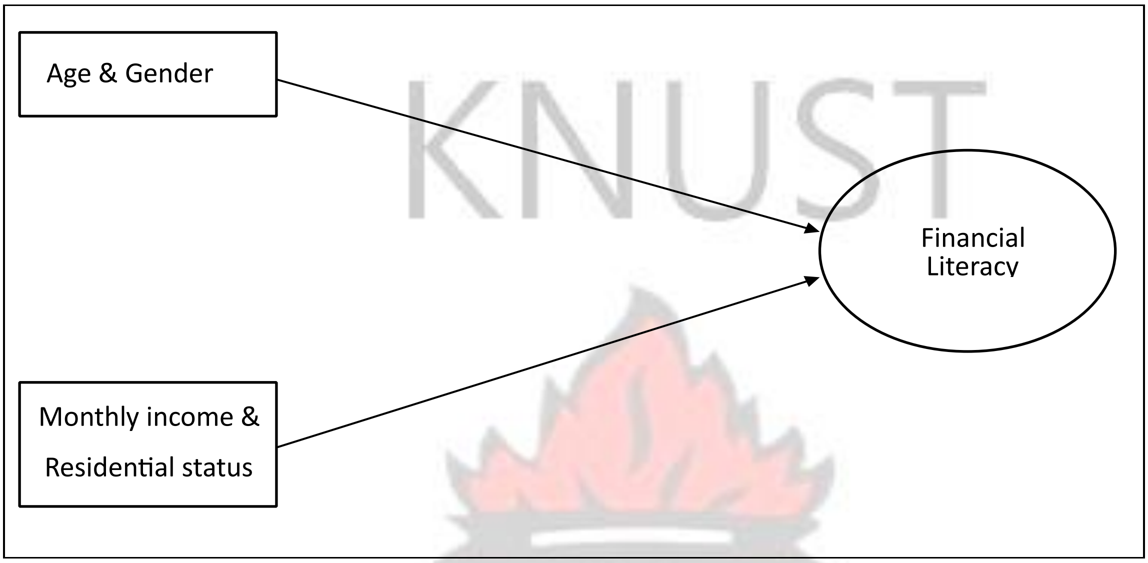

Figure 2.1: Conceptual Framework
Source: Tan and Wheel (2011)

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter contains details of the research methodology for the study. The following are the study sections which includes research strategy, research design, population, sample and sampling method, data collection intruments, and analysis of data.

3.1 Research Strategy

There are three research strategies to consider when conducting any research. These methods are divided into three, namely qualitative, quantitative and mixed methods (Creswell, 2003; Creswell and Clark, 2007; Teddlie and Tashakkori, 2009). In the research methodology literature, qualitative research facilitates the researcher to understand observed behaviour by looking at or interacting with participants (Denzin and Lincoln (2008). Therefore, qualitative research is concerned with describing phenomena as they occur in their natural environment. It is also concerned with delving into phenomena and explaining them in detail in a qualitative way. Creswell (2003) on quantitative research explains it as a strategy that allows the researcher to use experiment and surveys to collect data using standardized tools that provide statistical data. Aliaga and Gunderson (2000) also define it as a research method that delves into the problem by obtaining numerical data and using statistical tools to analyse and present them. Some researchers weigh the advantages and disadvantages of qualitative and quantitative methods and opt for the mixed method. The mixed method combines the techniques of qualitative and quantitative methods to conduct their research. In the mixed method, a combination of qualitative and quantitative data is gathered and examined within a single study (Creswell et al., 2002).

Considering both the present study and the available literature, opting for a quantitative approach is suitable. This decision aligns with the study's aim to statistically elucidate the extent of financial literacy among SHS teachers and explore the connections between financial literacy levels and variables like participants' age, gender, and income level. This strategy has some reliability because it produces data that are reliable for generalization to a larger population (Marshall, 1996).

3.2 Research Design

Research design is a research blueprint(plan), structure, and methodology developed to find solutions to a research topic (Kerlinger, 1986). In addition, Seltitz, Deutsch, and Cook (1962) defined research design as the establishment of parameters for gathering and interpreting data in order to balance the economy of procedure with the appropriateness of the purpose of the study. According to Robson (2002), the main types of research design are: descriptive, exploratory and explanatory. Blumberg, Cooper and Schindler (2005) argue that descriptive research provides insight into a situation, person or phenomenon and can show how different elements relate to each other and occur in the natural world. In addition, descriptive studies do not seek to explain the causes of events that have occurred, they only report them. As a consequence, they are more suitable for new or understudied topics (Punch, 2005).

Saunders, Lewis, and Thornhill (2007) argue that "this type of research is conducted when a phenomenon is not well understood. In other words, it aims to establish a framework and provide some answers to the problem". According to Singh (2007), descriptive research determines the first research strategy, sampling technique and data collection procedure in complex situations and lays the foundation for a more focused study. Gray (2014) explains explanatory research as a design that seeks to explain and identify the true causes of certain phenomena, especially when there is a large amount of descriptive data. Thus, they seek to find explanations for the 'why' and 'how' questions. It is usually conducted to identify and document certain relationships between different elements of an event relevant to the study (Boru, 2018).

In this study, financial literacy among SHS teachers in Tamale will be evaluated along with the association between many factors, including age, gender, monthly income, and financial literacy. It uses an explanatory research design to do this, attempting to address the how and why questions posed by the primary study purpose. The explanatory design is most suited for this project since it will aid in elucidating disparities in the degree of financial literacy across the various groups of respondents in terms of their demographic and socioeconomic characteristics.

3.3 Population

The study population is teachers in Senior High schools in the Tamale metropolis. The metropolis has about seven public senior high schools with an average staff strength of 45. The study will sample the teachers from these senior high schools and administer questionnaires.

The table below shows the various schools in the tamale metropolis and number of teachers.

TAMALE METRO SCHOOL	NUMBER OF SCHOOLS
Business Senior High School, BISCO	128
Ambariyya Senior High School	124
Ghana Senior High School, Tamale, GHANASCO	120
Vittin Senior High School	112
Tamale Girls Senior High School, PAGNAA	102
Presbitarian Senior High School,Tamale, PRESEC	76
ST. Charles Senior High School, Tamale	83
TOTAL	**745**

3.4 Sample and Sampling Technique

Basic random selection methodology was used to pick the participants. Using a straightforward random sample approach, the respondents were picked at random and without bias. Additionally, it suggests that each instructor had a known and equal probability of getting chosen. Because it is simple to apply and most likely provides a decent representative of the population under investigation, the simple random procedure was chosen. Google Forms was used to create the online questionnaire, which was then delivered to the teachers in the various SHS in tamale metropolis.

The methodology described in De Vaus's "Surveys in Social Research" (2002) was employed to ascertain the appropriate sample size. The following presumptions were taken into account:

a

95% confidence level, a 5% margin of error, and an estimated population heterogeneity of 20%.

Thus,

The formula for determining the minimum required sample size is given as:

$n = p\% * q\% * (z/e\%)^2$

In this formula:

n represents the minimum sample size needed p% stands for the proportion of

the population falling under the specific category q% signifies the proportion of

the population not falling under the specific category z corresponds to the value

related to the chosen confidence level

e% represents the margin of

error n =

$0.20*0.80(1.96/0.05)^2$ n = 45

We ascertain the appropriate research sample size by utilizing the formula n' = ADJUSTED sample size, where n represents the minimum sample size, n' represents the adjusted sample size, and N denotes the total population.

n’ = 245/ [1+245/745] = 184

24.7% of the population is represented by the 184 instructors in the adjusted sample size. 366 respondents were surveyed online for the study, allowing for the collection of additional information from them. Therefore, the study's sample size was 366, which was employed in the analysis.

3.5 Data Collection Tools

A standardized questionnaire was applied to gathering data from the respondents. Almost all aspects of financial literacy were addressed in the study. One of the topics studied was the relationship between risk and return. Other topics included general financial knowledge, financial skills (behavior), financial attitudes, returns, price stability, and time value of money. One method for assessing young people's financial knowledge is the Youth Financial Literacy Short Scale (Potrich, Vieira, and Paraboni, 2020). Three categories (financial knowledge, attitude, and behavior) are represented by the 12 questions that make up the survey. The questionnaire was chosen since it has every element required to evaluate financial literacy. Because it includes financial knowledge, skills, and attitudes that all obviously fit within generally accepted definitions of financial literacy OECD (2014), the questionnaire's structure also seems appropriate for examining financial literacy, or assessing a person's capacity to make better financial decisions. SPSS is the software that was used to analyse the data.

3.6 Data Analysis

SPSS program was used to examine the data collected. Descriptive statistics of the study such as frequency distributions of age, gender and monthly income of the respondents were calculated using this program. Cross tabulation was used to investigate the potential effect of age, gender and monthly income on the level of financial literacy. In accordance with requirements for assessing financial literacy, the Youth Financial Literacy Short Scale was developed (Potrich, Vieira, and Paraboni, 2020). They developed a set of criteria to categorize financial literacy into high and low levels.

3.7 Empirical Model

A robust estimation technique is employed to fulfill the study's objectives. A multiple regression is specified below

Model 1

$$\mathbf{Fin\_knw}_i = \beta_0 + \beta_1\mathbf{income}_i + \beta_2\mathbf{gender}_i + \beta_3\mathbf{Age}_i + \varepsilon_i$$

Model 2

$$\mathbf{Fin\_atti}_i = \beta_0 + \beta_1\mathbf{income}_i + \beta_2\mathbf{gender}_i + \beta_3\mathbf{Age}_i + \varepsilon_i$$

Model 3

$$\mathbf{Fin\_beh}_i = \boldsymbol{\beta}_0 + \boldsymbol{\beta}_1\mathbf{income}_i + \boldsymbol{\beta}_2\mathbf{gender}_i + \boldsymbol{\beta}_3\mathbf{Age}_i + \boldsymbol{\varepsilon}_i$$

Where, Fin_knw_i is the dependent variable that represents the financial knowledge 'i', Fin_att_i represent financial attitude, Fin_beh_i represent respondents financial attitude, Fin_beh represent financial behaviour, $income_i$ measure the income of respondents, $gender_i$ is a binary variable assigned the value '1' if participant is female and '0' if male, age_i measure the age of respondents, β_1 to β_3 are vectors of parameters of explanatory variables; β_0 is the intercept term and ε_i is the standard vector that denotes the error term.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This section of the study presents and discusses issues concerning the estimation of financial literacy variables specified in chapter three above. Descriptive analysis of the dependent and independent variables used in the research is presented. Results of the financial literacy level among teachers the relationship between the demographic and socioeconomic status of teachers and their financial literacy is also presented.

This section reports on the socio-demographic characteristics of the respondents. The table below contains the analysis.

4.1 Descriptive Statistics

Table 4.1: Demographic and Socio-Economic Characteristics

		Frequency	Percentage
Gender	Male	324	90.3
	Female	35	9.7
Age	20-29 years	77	21.4
	30-39 years	235	65.5
	40-49 years	47	13.1
Income	Ghc 1000.00 - Ghc 1999.00	82	22.8
	Ghc 2000.00 - Ghc 2999.00	268	74.7
	Ghc 3000.00 - Ghc 3999.00	8	2.2
	Ghc 4000.00 - Ghc 4999.00	1	0.3

4.1.1 Demographic and Socio-economic Characteristics of Teachers

Majority of respondents under examination are male teachers making up of 90.3% of all respondents and 9.7% being female teachers. The results are a reflection of the general low level of female teachers in the region and the gender gap in financial matters. 65% of the respondents were between the ages of 30-39years, 21% between the ages of 20-29years and 13% falling in the 40-49years range. This shows that majority of teachers are within the youthful age and still have substantial years of service.

Respondents' income was measured based on the salary received from their work. Majority of the respondents, 74.7% had a salary range of GHC2000-2999 which reflects the average salary of public sector workers. 22.8% of the respondents fell between the GHC1000-1999, this represents the entry level salary in the public sector. Only 2.5% of respondents fell within the salary range of GHC 3000-4999.

4.2 Financial Literacy among Teachers

To assess the financial literacy level among teachers, we follow the criteria proposed by Potrick et al. (2020). The authors measure financial literacy from low to high financial literacy. Measures of financial literacy is built on the level of financial knowledge, financial behavior and financial attitude. Financial Knowledge was measured with a binary outcome: a value of 1 is assigned for a right answer and 0 for wrong answer. A 5-point Likert scale is utilized to gauge financial attitude and financial behavior. The specifics of the criteria are presented as follows:

Financial knowledge: Financial knowledge comprised of questions 1 to 5, this category was evaluated using a binary outcome approach, with a value of 1 assigned for correct answers and 0 for incorrect ones.

Financial behavior: this part was made up of questions 6 to 10 and were measured on a Likert scale:

Never was assigned a value of 1

Almost never was assigned a value of 2

Sometimes was assigned a value of 3

Almost always was assigned a value of 4

Always was assigned a value of 5

Financial attitude: Questions 11 and 12 were assessed using a Likert scale:

A value of 1 was designated for "Strongly agree"

"Agree" was associated with a value of 2

"Indifferent" was marked as a value of 3

"Disagree" was indicated by a value of 4

"Strongly disagree" was represented by a value of 5

Step 2 – Construction of standardized measures for each dimension:

Financial knowledge: KNOW = [question 1 + question 2 + question 3 + question 4 + question5]

Financial behavior: BEH = [0.237* question 6 + 0.236* question 7 + 0.180* question 8 + 0.149* question 9 + 0.198* question 10]

Financial attitude: ATTI = [0.686* question 10 + 0.314* question 11]

Step 3 – Insert the results in the following equations:

$D0 = (4.108 - KNOW)^2 + (2.628 - BEH)^2 + (3.267 - ATTI)^2$

$D1 = (4.695 - KNOW)^2 + (4.480 - BEH)^2 + (4.038 - ATTI)^2$

Step 4 – Assess the degree of financial literacy through analysis and decision criteria:

If $D0$ is greater than $D1$, the individual is classified as having a **HIGH LEVEL OF FINANCIAL** LITERACY.

If $D0$ is less than $D1$, the individual is categorized as having a **LOW LEVEL OF FINANCIAL LITERACY.**

Table 4.2: Tabulation of Financial Literacy Level among SHS Teachers

	Frequency	Percent	Cum.
High Financial Literacy	120	33.4	33.4
Low Financial Literacy	239	66.6	100
Total	359	100	

The level of financial literacy among teachers shows that 66.6% had low financial literacy with 33.4% having high financial literacy. The finding is at variance with the study of (surrender and sarma,2017) who found high levels of financial literacy among technical and nontechnical teachers of higher education. Our results however depict the general financial literacy level in the country and are corroborated (Matey, Duut and Kombian, no date) in a study that found low level of financial literacy among teachers in Ghana.

Table 4.3: Cross Tabulation of financial literacy of respondents characteristics

High Financial (66.57%)		Low Financial Literacy		Literacy (33.43%)	
		Frequency	%	Frequency	%
Gender	Male	115	95.83	209	87.45
	Female	5	4.17	30	12.55
		120	100	239	100
Age	20-29 years	15	12.5	62	25.94
	30-39 years	83	69.17	152	63.6
	40-49 years	22	18.33	25	10.46
		120	100	239	100
Monthly Income	GHS 1000-GHS 1999	15	12.5	67	28.03
	GHS 2000-GHS 2999	102	85	166	69.46
	GHS 3000-GHS 3999	3	2.5	5	2.09
	GHS 4000-GHS 4999	0	-	1	0.42
		120	100	239	100

Source: Field work (2022)

4.3 Cross Tabulation of Gender and Financial literacy levels

The results in Table 4.2 show that out of the 359 teachers who participated in the research 120 teachers (representing 33.43%) had high financial literacy whiles 239 of them (representing 66.57%) had low financial literacy. This suggests that teachers generally had a low level of financial literacy, with most of them not exhibiting a high level of financial literacy.

In terms of gender, the results show that out of those who had high financial literacy, 95.83% were males whiles 4.17% were female. This implies that males demonstrated high financial literacy than their female counterparts. Among those that had low level of financial literacy the results also show that 87.45% were males whiles 12.55% were females. It could be observed that whiles the percentage of males showing low level of financial literacy was still high, it reduced significantly when it comes to low financial literacy compared with the percentage of female that demonstrated low of financial literacy. The results mean that males had high financial literacy than females. This is supported by the findings of (Lusardi and Mitchell, 2011b; Atkinson and Messy, 2012), that females tend to display lesser financial literacy compared to males. Women have challenge of mastering the primary financial concept which hinder their financial knowledge to make good financial choices (Sekita, 2011).

The age distribution of respondents also produced some interesting results when it comes to financial literacy among teachers. Among those who had high financial literacy, 12.5% of them were between the ages of 20 and 29 years old, 69.17% were between 30 and 39 years old, and

18.33% were between the age range 40 – 49 years old. It is clear that a high percentage of high financially literate teachers were within the age bracket 30 – 39 years. Within the group that demonstrated low financial literacy, 25.94% of them were 20 to 29 years old, 63.6% were between 30 and 39 years old, and 10.46% were between 40 and 49 years old. The percentage of those who were not highly literate was high among the age group 30 – 39 years old similar to those what had high financial literacy. The results clearly show that most of the teachers interviewed were in this age group. Although the percentage was still high when it comes to low level of financial literacy, it declined compared to the percentage that had high financial literacy. This disagree with the findings of Lusardi and Mitchell (2011b) that, both the younger and older individuals tend to possess lower financial literacy compared to those in middle age. The results in Table 4.2 also shows that people's level of financial literacy varies across different income levels. As can be seen in the Table 4.3, 12.5% of those who had high financial literacy earned income in the rage GHS1,000 – GHS1,999, 85% were income earners of between GHS2,000 and GHS2,999, and 2.5% were those who earned income of GHS3,000 – GHS3,999. None of the teachers who earned income of GHS4,000 – GHS4,999 had high financial literacy. When it comes to those who had low financial literacy, 28.03% were earning income of GHS1,000 – GHS1,999, 69.46% earned income of GHS2,000 – GHS2,999, and 2.09% were those who earned income of GHS3,000 – GHS3,999. Only one teacher earned income of GHS4,000 – GHS4,999 and this teacher had low level of financial literacy. The findings is different from Van Nguyen *et al.* (2022) that people with better income are able to better handle their savings and the entire finances.

4.3.1 Relationship between demographic variables and Financial Literacy

Table 4.4: Regression analysis on relationship between socio-economic features of respondents' and financial literacy

	MODEL 1	MODEL 2	MODEL 3
	FINANCIAL KNOWLEDGE.	FINANCIAL BEHAVIOR	FINANCIAL ATTITUDE
GENDER	0.400^{**} (0.165)	0.028 (0.134)	0.365^{*} (0.201)
AGE BRACKET	0.058 (0.086)	-0.071 (0.070)	0.308^{***} (0.105)
MONTHLY INCOME	-0.004 (0.107)	0.192^{**} (0.087)	0.311^{**} (0.130)
CONSTANT	2.853 (0.243)	3.032 (0.197)	2.083 (0.296)
F ratio	2.363	1.781	8.933
p-value f	0.071	1.50	0.000
Adjusted R^2	0.011	0.007	0.062

Note*: ***, **, * indicate significance at 1%, 5% and 10% respectively*.

4.2.2 Gender on Financial Literacy

The outcome of the variables is illustrated in the regression findings in Table 4.5 suggest that, respondent's gender was positive on financial knowledge and significant at the 5% level indicating that being male is associated with higher financial knowledge. Financial knowledge change by 0.4 if the gender changes. This would lead to an increase in financial knowledge, assuming other variables are held constant. This finding implies that gender of teachers predicts their financial knowledge status. Financial behavior is estimated in model 2 of Table 4.5. The results showed that the coefficient of gender (0.028) is positive but not statistically significant, suggesting no significant effect of gender on financial behavior. This implies that changes in gender of teachers in SHS are unlikely to have a meaningful impact on financial behavior. In model 3, the impact of gender on financial attitude was positive and significant at the 10% level of significance. This finding predicts that financial attitude of SHS teachers is affected by gender. This suggests that being male is associated with more positive financial attitudes.

Changing gender from female to male would imply a shift towards more positive financial attitudes. Since gender is positively related with all the determinants of financial literacy, it implies that gender has an impact on financial literacy. The result differs from the findings of Shyamala and Mahesh, (2022) that gender has no relationship with financial literacy. This means that gender difference does not determine financial literacy. The cross tabulation in table

4.2 also shows that being a female is associated with low financial literacy than male.

4.3.3 Age on Financial literacy

Age of respondents had a positive (0.058) impact on financial knowledge but statistically insignificant which means the relationship may not be reliable. Changes in age are expected to have a limited impact on financial knowledge based on this model. This shows that older people have higher financial knowledge than younger respondents. This confirms the findings of (Garg and Singh, 2018). The effect of age on financial behavior was however negative, which suggests that as age increases, financial behavior tends to decrease. However, this coefficient is not statistically significant. Therefore, changes in age may not have a substantial effect on financial behavior. According to model 3, the coefficient of age is positive (0.308) and statistically significant at the 5% level. This suggests that older individuals tend to have more positive financial attitudes. Increasing age would imply a shift towards more positive financial attitudes based on this model. Since age of the respondents is positively related with two out of three determinants of financial literacy, it implies that the age of the respondents influences financial literacy in a non-significant way. The finding is not the same as Shyamala and Mahesh (2022) that concluded that financial literacy is not influence by age of the respondent.

4.3.4 Income Level on Financial Literacy

From the regression analysis in Table 4.5, the negative coefficient (-0.004) is not statistically significant, indicating no significant effect of income on financial knowledge. Changes in income of respondents is not expected to have a meaningful impact on financial knowledge based on this model. Also, in model 2, monthly income of teachers showed a positive and significant impact. This suggests that higher income is associated with more favourable financial behaviour. An increase in income would imply a shift towards more positive financial behaviour, assuming other variables are held constant. A unit increase in income of SHS teachers increases their financial behaviour by 0.19. This implies that financial behaviour of respondents' changes with income. Finally, income had a significant positive impact on financial attitude of respondents. An increment of one unit in income raises the financial attitude by 0.31, indicating that as income rises, so does the level of financial attitude. This aligns with the observation made by shayamala and Mahesh (2022) that a teacher's monthly income is depends on their financial literacy levels.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

within this chapter, we present an overview of the findings and conclusions of the research, as well as some policy recommendations and limitations based on the findings of the study. We also make suggestions for further study.

5.1 Summary of Findings

This study set out assess the levels of financial literacy among teachers in the Senior High Schools in the northern region of Ghana. To achieve the objectives of the study, the study employed regression analysis and Potrich analysis model. The study sampled teachers from SHS in the Tamale metropolis across different socio-economic groups. Analysis was done using SPSS and findings showed that majority of respondents were male with a very few proportions being female. It demonstrates that females have little or no interest in financial matters. The study showed that 66.57% of respondents predicted a low level of financial literacy and 33.43% showed high financial literacy. This was generally spread among the demographics of age, gender, and income.

Assessing the impact of Age and Gender on the financial literacy of the teacher the study employed regression analysis of three models i.e. Age and financial knowledge, financial behavior and financial attitude, and gender and financial knowledge, financial behavior, and financial attitude. The findings revealed that gender exerts a positive influence on the financial literacy level of SHS teachers. Also, the result showed that the impact of Age on the financial literacy level of the teacher is a positive in a non-significant way. This means that as a teacher grows older, age will have a limited positive impact on financial literacy level.

Gender of the respondents clearly showed that out of the male respondents of 324, 209 representing 65% scored low on financial literacy and 35% scored high on financial literacy.

Females recorded 86% of low financial literacy and 14% of high financial literacy. It is clear that in both gender financial literacy was significantly low and thus gender did not influence the financial literacy levels of the teacher. This finding is in contrast with Lusardi and Mitchel (2010) who found gender to significantly influence financial literacy levels.

The income of teachers significantly influenced their financial literacy levels. Higher income earners have higher levels of financial knowledge, attitude and behavior. The outcome showed a low level of financial literacy among all income groups overall. In terms of the monthly income of the teacher, 12.5% of teachers Earned between GHS1000-GHS1999, 85% of the teachers earned GHS2000-GHS2999, 2.5% of the teachers earned GHS3000-GHS3999 and none earned income of 4000-GHS3999. The study found many of the teachers earned within the income of 2000-2999. Financial literacy increases with income level.

5.2 Conclusions

The goal for this research was to examine the state of financial literacy among teachers in SHS in Tamale. Methodology in De Vaus "survey in social research" (2002) was employed to arrive at an appropriate sample size. Simple random sampling was used to pick respondents since its easy to use. The data for the analysis came from the Youth Financial Literacy Short Scale Questionnaire. The findings show that teachers in SHS in Tamale metropolis and from various socioeconomic backgrounds had worse financial literacy. Gender, and income do appear to have any meaningful impact on financial literacy but Age influence financial literacy in a limited way. Since teachers are role models with low financial literacy, this could be transferred on to the student. The low financial literacy among female teachers may be due to female's unwillingness to part take in formal education due to some outdated cultural practices. Higher income earners have low financial literacy as a result of limited financial programs being taught at institutions where teachers are taught

5.3 Recommendations and Policy Implications

The findings of low level of financial literacy shows that, it requires the efforts of stakeholders to enhance the financial literacy levels of teachers. We recommend that the governments should institute training programs on financial literacy for teachers to help them manage their financial literacy. Teachers are imparters of knowledge and they will be in a better position to pass on the knowledge to their students.

The finding that females generally has low financial literacy, requires more formal education from appropriate government and non-governmental agencies to help change the outdated cultural practices that hinders females from acquiring formal educations. Targeted initiatives and programs should also be developed for female to empower them with financial knowledge and skills to be able to make an informed financial decision. These programs could be workshops, awareness campaign and the provision of directed educational resources.

Low income earner was found to have low financial literacy. This therefore requires that a comprehensive financial education program should be organize for low-income earners to effectively improve their level of financial literacy. By enhancing the low-income earners with valuable financial education and skills, they can become better handler of their finances and this ultimately improve the financial choices they make and improving their financial well-being.

5.4 Suggestions for further research

Further research should focus on teachers in Ghana and include other variables like subjects taught. This will give insight on whether the subject taught have an influence on financial literacy.

REFERENCES

Agnew, J.R., Bateman, H. and Thorp, S. (2013) 'Financial literacy and retirement preparation in Austria', *Numeracy*, 6(Issue2).

Allgood, S. and Walstad, W.B. (2016) 'The effects of perceived and actual financial literacy on financial behaviors', *Economic inquiry*, 54(1), pp. 675–697.

Alshebami, A.S. and Aldhyani, T.H.H. (2022) 'The interplay of social influence, financial literacy, and saving behaviour among Saudi youth and the moderating effect of self-control', *Sustainability*, 14(14), p. 8780.

Amponsah-Mensah, A.A. (2021) 'Ponzi Schemes in Ghana: The Menzgold Saga', *African Journal of International and Comparative Law*, 29(3), pp. 463–476.

Anderson, C. *et al.* (2000) 'Personal finance and the rush to competence: Financial literacy education in the US', *Journal of family and consumer sciences*, 107(2), pp. 1–18.

Ansong, A. and Gyensare, M.A. (2012) 'Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana', *International Journal of business and Management*, 7(9), p. 126.

Atkinson, A. and Messy, F.-A. (2012) 'Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study'.

Bahsin, T.M. (no date) 'Thenmozhi.(2014). Scale to Measure "Attitude towards financial inclusion"', *International Journal of Business and Administration Research Review*, 1(6), pp. 17–22.

Baidoo, S.T., Boateng, E. and Amponsah, M. (2018) 'Understanding the determinants of saving in Ghana: Does financial literacy matter?', *Journal of international development*, 30(5), pp.

886–903.

Bajaj, I. and Kaur, M. (2022) ‘Validating multi-dimensional model of financial literacy using confirmatory factor analysis’, *Managerial Finance* [Preprint], (ahead-of-print).

Bandura, A. (1997) ‘Self-Efficacy: The Exercise of Control. NY: WH Freeman and Company, Stanford University’.

Bandura, A., Freeman, W.H. and Lightsey, R. (1999) ‘Self-efficacy: The exercise of control’. Springer.

Baron-Donovan, C. *et al.* (2005) ‘Financial literacy teacher training: A multiple-measure evaluation’, *Journal of Financial Counseling and Planning*, 16(2).

Bateman, H. *et al.* (2010) ‘Investment decisions for retirement savings’, *Journal of Consumer Affairs*, 44(3), pp. 463–482.

Besri, A.A.O. (2018) ‘Pengaruh Financial Attitude, Financial Knowledge Dan Locus Of Control Terhadap Financial Management Behavior Mahasiswa S-1 Fakultas Ekonomi Universitas Islam Indonesia Yogyakarta’.

Bhabha, J.I. *et al.* (2014) ‘Impact of financial literacy on saving-investment behavior of working women in the developing countries’, *Research Journal of Finance and Accounting*, 13(5), pp. 118–122.

Bucher-Koenen, T. *et al.* (2017) ‘Fearless girl! Women, confidence, and financial literacy’.

De Clercq, B. and Venter, J.M.P. (2009) ‘Factors influencing a prospective chartered accountant’s level of financial literacy: an exploratory study’, *Meditari: Research Journal of the School of Accounting Sciences*, 17(2), pp. 47–60.

Commission, A.S.I. (2003) ‘Financial literacy in schools’. Australian Securities and Investments Commission, Sydney, New South Wales.

Coşkuner, S. (2016) ‘Understanding factors affecting financial satisfaction: The influence of financial behavior, financial knowledge and demographics’, *Imperial Journal of Interdisciplinary Research*, 2(5), pp. 377–385.

Council, M.F.P. (2016) ‘A survey of financial behaviour and financial habits of young working Malaysians’, *Money Manag*, pp. 25–27.

Cude, B. *et al.* (2006) ‘College students and financial literacy: What they know and what we need to learn’, *Proceedings of the Eastern Family Economics and Resource Management Association*, 102(9), pp. 106–109.

Deuflhard, F., Georgarakos, D. and Inderst, R. (2019) ‘Financial literacy and savings account returns’, *Journal of the European Economic Association*, 17(1), pp. 131–164.

Dew, J. and Xiao, J.J. (2011) ‘The financial management behavior scale: Development and validation’, *Journal of Financial Counseling and Planning*, 22(1), p. 43.

Falahati, L., Sabri, M.F. and Paim, L.H.J. (2012) ‘Assessment a model of financial satisfaction predictors: Examining the mediate effect of financial behaviour and financial strain’, *World Applied Sciences Journal*, 20(2), pp. 190–197.

G, S. and Mahesh, R. (2022) ‘A Study on Financial Literacy and it’s Determinants among Millennials in Mysore City’, *International Journal of Scientific and Research Publications*, 12(9), pp. 289–295. doi:10.29322/ijsrp.12.09.2022.p12938.

Garg, N. and Singh, S. (2018) ‘Financial literacy among youth’, *International journaL of sociaL economics* [Preprint].

Gerardi, K.S., Rosen, H.S. and Willen, P.S. (2010) ‘The impact of deregulation and financial innovation on consumers: The case of the mortgage market’, *The Journal of Finance*, 65(1), pp.
333–360.

Gitman, L. and Zutter, C.J. (2004) ‘Principle of finance’, *New Jersey: Prectice Hall* [Preprint].

Godsted, D. and McCormick, M.H. (2007) ‘National K-12 financial literacy research overview’, *Networks Financial Institute Report* [Preprint].

Grohmann, A., Klühs, T. and Menkhoff, L. (2018) ‘Does financial literacy improve financial inclusion? Cross country evidence’, *World Development*, 111, pp. 84–96.

Heck, Z.K.R. (1984) ‘The determinants of financial management behaviors among college students: Implications for consumer education’, *The Journal of Consumer Education*, 2, pp. 12–17.

Herdjiono, M.V.I. and Damanik, L.A. (2016) ‘Pengaruh financial attitude, financial knowledge, parental income terhadap financial management behavior’, *Jurnal Manajemen Teori dan Terapan*, 9(3), pp. 226–241.

Hilgert, M.A., Hogarth, J.M. and Beverly, S.G. (2003) ‘Household financial management: The connection between knowledge and behavior’, *Fed. Res. Bull.*, 89, p. 309.

Hogarth, J.M. and Anguelov, C.E. (2003) ‘Can the poor save?’, *Journal of Financial Counseling and Planning*, 14(1), pp. 1–18. doi:10.4324/9781315081816.

Humaira, I. and Sagoro, E.M. (2018) ‘The influence of financial knowledge, financial attitude, and personality towards financial management behavior on small medium enterprises at batik craft of bantul regency’, *Jurnal Nominal*, 7(1), pp. 96–110.

Hung, A., Parker, A.M. and Yoong, J. (2009) ‘Defining and measuring financial literacy’.

Huston, S.J. (2010) ‘Measuring financial literacy’, *Journal of consumer affairs*, 44(2), pp. 296– 316.

Ibrahim, M.E. and Alqaydi, F.R. (2013) ‘Financial literacy, personal financial attitude, and forms of personal debt among residents of the UAE’, *International Journal of Economics and Finance*, 5(7), pp. 126–138.

Ida, I.D.A. and Dwinta, C.Y. (2010) ‘Pengaruh Locus Of Control, financial knowledge, income terhadap financial management behavior’, *Jurnal Bisnis dan Akuntansi*, 12(3), pp. 131–144.

Imelda, C.M. *et al.* (2017) ‘Financial literacy of professional and pre-service teachers in the Philippines’, *Journal of Global Economics*, 5(3), p. 267.

INFE, O. (2015) ‘Toolkit for Measuring Financial Literacy and Financial Inclusion’, *Pariz: OECD* [Preprint].

Isomidinova, G., Singh, J.S.K. and Singh, K. (2017) ‘Determinants of financial literacy: a quantitative study among young students in Tashkent, Uzbekistan’, *Electronic Journal of Business & Management*, 2(1), pp. 61–75.

Jamal, A.A.A. *et al.* (2015) ‘The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah’, *International Journal of Business and Social Science*, 6(11), pp. 110–119.

Jiang, J. *et al.* (2020) ‘Financial literacy and retail investors’ financial welfare: Evidence from mutual fund investment outcomes in China’, *Pacific-Basin Finance Journal*, 59, p. 101242.

Johan, I., Rowlingson, K. and Appleyard, L. (2021) ‘The effect of personal finance education on the financial knowledge, attitudes and behaviour of university students in Indonesia’, *Journal of Family and Economic Issues*, 42, pp. 351–367.

Joo, S. and Grable, J.E. (2004) ‘An exploratory framework of the determinants of financial satisfaction’, *Journal of family and economic Issues*, 25, pp. 25–50.

Kadoya, Y. and Khan, M.S.R. (2020) ‘What determines financial literacy in Japan’, *Journal of Pension Economics and Finance*, 19(3), pp. 353–371. Available at: https://doi.org/10.1017/S1474747218000379.

Kass-Hanna, J., Lyons, A.C. and Liu, F. (2022) ‘Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa’, *Emerging Markets Review*, 51, p. 100846.

Kerlinger, F.N. (2002) ‘Asas-asas Penelitian Behavioral (Edisi terjemahan oleh R Simatupang)’, *Bandung: Gajah Mada University Pres* [Preprint].

Keuangan, P.M. (2010) ‘Kencana Prenada Media Group’, *Jakarta, Kasmir* [Preprint].

Al Kholilah, N. and Iramani, R. (2013) ‘Studi financial management behavior pada masyarakat surabaya’, *Journal of Business & Banking*, 3(1), pp. 69–80.

Kimiyaghalam, F. and Safari, M. (2015) ‘Review papers on definition of financial literacy and its measurement’, *SEGi Review*, 8, pp. 81–94.

Klapper, L., Lusardi, A. and Van Oudheusden, P. (2015) ‘Financial literacy around the world’, *World Bank. Washington DC: World Bank*, 2, pp. 218–237.

Latham, G.P. and Locke, E.A. (1991) 'Self-regulation through goal setting', *Organizational behavior and human decision processes*, 50(2), pp. 212–247.

Lusardi, A. and Mitchell, O.S. (2011a) *Financial literacy and planning: Implications for retirement wellbeing*. National Bureau of Economic Research.

Lusardi, A. and Mitchell, O.S. (2011b) 'Financial literacy around the world: an overview', *Journal of pension economics & finance*, 10(4), pp. 497–508.

Lusardi, A., Mitchell, O.S. and Curto, V. (2010) 'Financial literacy among the young', *Journal of consumer affairs*, 44(2), pp. 358–380.

Malombe, H.H. (2018) 'The influence of socio-economic and demographic variables on financial Literacy among adults in Dar es Salaam', *Journal of Co-operative and Business Studies (JCBS)*, 3(2), p. 56.

Mandell, L. (2004) *Financial Literacy: Are We Improving?: Results of the 2004 National Jump $ tart Coalition Survey*. Jump $ tart Coalition for Personal Financial Literacy.

Mandell, L. and Klein, L.S. (2007) 'Motivation and financial literacy', *Financial services review*, 16(2), p. 105.

Marsh, B.A. (2006) 'Examining the personal finance attitudes, behaviors, and knowledge levels of first-year and senior students at Baptist universities in the state of Texas'. Bowling Green State University.

Matey, J., Duut, J.Y. and Kombian, M.F. (no date) 'Financial Literacy Education: Implication on the Teacher's Economic and Social Life in Ghana'.

Mireku, K. (2015) 'Financial literacy among University students: evidence from Ghana'.

Mitchel, T. (1997) 'Matching motivational strategies with organizational context', *Research in Organizational, Behavior*, 19, pp. 60–62.

Morgan, P.J., Huang, B. and Trinh, L.Q. (2019) ‘The need to promote digital financial literacy for the digital age’, *IN THE DIGITAL AGE* [Preprint].

Morgan, R. (2003) ‘ANZ Survey of Adult Financial Literacy in Australia-Final Report’, *Melbourne: Ray Morgan Research* [Preprint].

Mundial, B. (2014) ‘Financial Education Programs and Strategies: Approaches and Available Resources’, *Washington: World Bank Group* [Preprint].

Murendo, C. and Mutsonziwa, K. (2017) ‘Financial literacy and savings decisions by adult financial consumers in Zimbabwe’, *International journal of consumer studies*, 41(1), pp. 95– 103.

Ndou, A. (2023) ‘The moderator effect of socioeconomic status on the relationship between parental financial teaching and financial literacy’, *International Journal of Applied Economics, Finance and Accounting*, 17(2), pp. 219–227. Available at: https://doi.org/10.33094/ijaefa.v17i2.1110.

Nector, M., Stoney, S. and Stradling, R. (1992) ‘Financial literacy: A Discussion of concepts and competencies Financial Literacy and opportunities for its Introduction into young people Learning’. Report Prepared for the National Westminster Bank, National Foundation for ….

Van Nguyen, H. *et al.* (2022) ‘Understanding financial literacy and associated factors among adult population in a low-middle income country’, *Heliyon*, 8(6). doi:10.1016/j.heliyon.2022.e09638.

Noor, N., Batool, I. and Arshad, H.M. (2020) ‘Financial literacy, financial self-efficacy and financial account ownership behavior in Pakistan’, *Cogent Economics & Finance*, 8(1), p. 1806479.

Oppong-Boakye, P.K. and Kansanba, R. (2013) ‘An assessment of financial literacy levels among undergraduate business students in Ghana’, *Research Journal of Finance and Accounting*, 4(8), pp. 36–49.

Oseifuah, E., Gyekye, A. and Formadi, P. (2018) ‘Financial literacy among undergraduate students: Empirical evidence from Ghana’, *Academy of Accounting and Financial Studies Journal*, 22(6), pp. 1–17.

Pankow, D. (2003) ‘Financial values, attitudes and goals’.

Pankow, D. (2012) ‘Financial Values, Attitudes and Goals, 591 (August), 4’.

Parotta, J.L.M. (1996) ‘The impact of financial attitudes and knowledge on financial management and satisfaction’. University of British Columbia.

Potrich, A.C.G. *et al.* (2015) ‘Financial literacy in Southern Brazil: Modeling and invariance between genders’, *Journal of Behavioral and Experimental Finance*, 6, pp. 1–12.

Potrich, A.C.G., Vieira, K.M. and Kirch, G. (2015a) ‘Determinants of financial literacy: Analysis of the influence of socioeconomic and demographic variables’, *Revista Contabilidade e Financas*, 26(69), pp. 362–377. doi:10.1590/1808-057x201501040.

Potrich, A.C.G., Vieira, K.M. and Kirch, G. (2015b) ‘Determinants of financial literacy: Analysis of the influence of socioeconomic and demographic variables’, *Revista Contabilidade & Finanças*, 26, pp. 362–377.

Potrich, A.C.G., Vieira, K.M. and Paraboni, A.L. (2020) ‘YOUTH FINANCIAL LITERACY SHORT SCALE: PROPOSITION AND VALIDATION OF A MEASURE’.

Radianto, W.E.D. *et al.* (no date) ‘Young Entrepreneur , Parental Socioeconomic Status , and Financial Literacy : Does Supply Chain Mediate Entrepreneurship Education ?’

Refera, M.K., Dhaliwal, N.K. and Kaur, J. (2016) 'Financial literacy for developing countries in Africa: A review of concept, significance and research opportunities', *Journal of African Studies and development*, 8(1), pp. 1–12.

Remund, D.L. (2010) 'Financial literacy explicated: The case for a clearer definition in an increasingly complex economy', *Journal of consumer affairs*, 44(2), pp. 276–295.

Van Rooij, M.C.J., Lusardi, A. and Alessie, R.J.M. (2012) 'Financial literacy, retirement planning and household wealth', *The Economic Journal*, 122(560), pp. 449–478.

Sarpong-Danquah, B. *et al.* (2018) 'Financial literacy assessment on tertiary students in SubSaharan Africa: A Ghanaian perspective', *International Journal of Accounting and Financial Reporting*, 8(2), pp. 76–91.

Sekita, S. (2011) 'Financial literacy and retirement planning in Japan', *Journal of Pension Economics & Finance*, 10(4), pp. 637–656.

Servon, L.J. and Kaestner, R. (2008) 'Consumer financial literacy and the impact of online banking on the financial behavior of lower-income bank customers', *Journal of consumer affairs*, 42(2), pp. 271–305.

Siegel, J.G. and Shim, J.K. (1991) *Finance*. Barron's Educational Series.

Surendar, G. and Sarma, S. (2018) 'Financial literacy and financial planning among teachers of higher education-a study of critical factors of select variables', *International Journal of Pure and Applied Mathematics*, 118(18), pp. 1627–1649.

Surendar, G. and Sarma, V.V.S. (2017) ‘Financial literacy and financial planning among teachers of higher education–a comparative study on select variables’, *Amity Journal of Finance*, 2(1), pp. 31–46.

Tezel, Z. (2015) ‘Financial education for children and youth’, in *Handbook of research on behavioral finance and investment strategies: Decision making in the financial industry*. IGI Global, pp. 69–92.

Varcoe, K. *et al.* (2005) ‘Using a financial education curriculum for teens’, *Journal of Financial Counseling and Planning*, 16(1).

De Vaus, D.A. (2002) ‘Surveys in social science’, *Crows Nest, NSW, Australia: Allen &* [Preprint].

Walstad, W.B., Rebeck, K. and MacDonald, R.A. (2010) ‘The effects of financial education on the financial knowledge of high school students’, *Journal of consumer Affairs*, 44(2), pp. 336– 357.

Widyastuti, U., Suhud, U. and Sumiati, A. (2016) ‘The Impact of Financial Literacy on Student

Teachers’ Saving Intention and Saving Behaviour’, *Mediterranean Journal of Social Sciences*, 7(6), pp. 41–48. doi:10.5901/mjss.2016.v7n6p41.

Xiao, J.J., Tang, C. and Shim, S. (2009) ‘Acting for happiness: Financial behavior and life satisfaction of college students’, *Social indicators research*, 92, pp. 53–68.

Xu, L. and Zia, B. (2012) ‘Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward’, *World Bank Policy Research Working Paper* [Preprint], (6107).

Yew, S.-Y. *et al.* (2017) 'Does financial education matter? education literacy among undergraduates in Malaysia', *Institutions and Economies*, pp. 43–60.

Zulaihati, S., Susanti, S. and Widyastuti, U. (2020) 'Teachers' financial literacy: Does it impact on financial behaviour?', *Management Science Letters*, 10(3), pp. 653–658.

APPENDICES

"This questionnaire is designed to assess the level of financial literacy among Senior High School Teachers in the Tamale Metropolis. This study will provide policy makers, academics and the Ghana Education Service with relevant information about the level of financial literacy among the SHS teachers.

Note: Responses to this questionnaire will be treated with the highest level of confidentiality.

DEMOGRAPHIC AND SOCIOECONOMICS

Gender

A. male

B. female

Which of these age bracket do you fall?

A. 20-29 years

B. 30-39 years

C. 40-49 years

Monthly Income

A. Ghc 1000- Ghc1999

B. Ghc 2000- Ghc 2999

C. Ghc 3000- Ghc 3999

D. Ghc 4000- Ghc 4999

FINANCIAL KNOWLEDGE

Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? You do not make any other deposits or withdraw any money from this account.

A. More than $120*

B. Exactly $120

C. Less than $120

D. Do not know

Do you think that the following statement is true or false? Buying a single company stock usually provides a safer return than a stock mutual fund.

A. True*

B. False

C. Do not know

Suppose you saw the same TV in two different stores for the starting price of $1,000.00. Store A offers a discount of $150.00, while store B offers a discount of 10%. What is the best alternative?

A. Buy at store A ($150.00 discount) *

B. Buy at store B (10% discount)

C. Do not know

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

A. More than today

B. Exactly the same as today

C. less than today*

D. Do not know

Suppose you borrowed $100.00 from a friend and after a week paid $100.00. How much interest are you paying?

A. 0%*

b. 1%

c 2%

Do not know

FINANCIAL BEHAVIOR

I reserve the money I receive monthly for future needs.

A. Never

B. Almost never

C. Sometimes

D. Almost always

E. Always

I keep part of my income every month.

A. Never
B. Almost never
C. Sometimes
D. Almost always
E. Always

I save money regularly to achieve long-term financial goals, such as educating my children, purchasing a home, retiring.

A. Never

B. Almost never

C. Sometimes

D. Almost always

E. Always

I save more when I receive a salary (chop money) increase.

A. Never

B. Almost never

C. Sometimes

D. Almost always

E. Always

In the past 12 months, I have been able to save money.

A. Never

B. Almost never

C. Sometimes

D. Almost always E. Always

FINANCIAL ATTITUDE

I find it more rewarding to spend money than to save for the future.

A. Strongly agree
B. Agree
C. Indifferent
D. Disagree
E. Strongly Disagree

Money is made to be spent

A. Strongly agree

B. Agree

C. Indifferent

D. Disagree

E. Strongly Disagree"