

**UNIVERSITY OF EDUCATION, WINNEBA**

**FINANCIAL LITERACY AND PERSONAL FINANCIAL DECISIONS  
OF LOCAL GOVERNMENT STAFF AT PRESTEA HUNI-VALLEY  
MUNICIPAL ASSEMBLY IN THE WESTERN REGION**



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**MASTER OF BUSINESS ADMINISTRATION**

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**UNIVERSITY OF EDUCATION, WINNEBA**

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**A dissertation in the Department of Accounting,  
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**NOVEMBER, 2022**

## DECLARATION

### Candidate's Declaration

I, Maxwell Ahenkorah, hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

**Signature:**.....

**Date:**.....



### Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines of supervision of dissertation laid down by the University of Education, Winneba

**Name of Supervisor:** Mr. George Kankam

**Signature:**.....

**Date:**.....

## **DEDICATION**

To my parents, the Late Joseph Kwaben Amofa and the Late Joyce Asare



## ACKNOWLEDGEMENTS

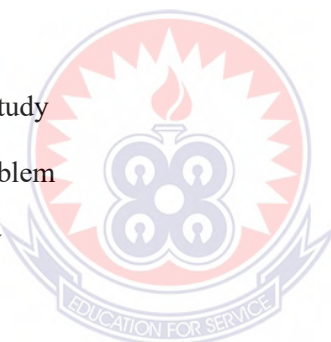
My foremost gratitude goes to Mr. George Kankam my supervisor for the in-depth understanding I gained from his constructive criticisms and suggestions, which helped enrich and shape this work. To Mr. Eric Abroh, I say you are part of the reason I have progressed this far. I am grateful.

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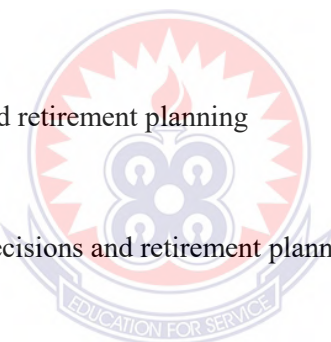
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## LIST OF ABBREVIATIONS

CGAP	Consultative Group to Assist the Poor
CLOGSAG	Civil and Local Government Staff Association, GhanaLGS Local Government Service
MCD	Municipal Co-ordinating Director
MMDAS	Metropolitan, Municipal and District Assemblies
OECD	Organization for Economic Co-operation and Development
OHLGS	Office of the Head of Local Government Service
PHMA	Prestea Huni-Valley Municipal Assembly



## ABSTRACT

The contemporary developments in financial markets has increasingly become essential for individuals to be more aware and competent in managing their finances. This calls for financial literacy study to examine how people respond to this financial market complexity and sophistication. This study was conducted to assess the level of financial literacy and personal financial decisions among Local Government Staff of the Prestea Huni-Valley Municipal in the Western Region. A sample of 277 staff using a stratified sampling technique was used. A self-administered questionnaire was used to collect the data, and the analysis was done using the Chi-Square Test of Independence. The results indicated that low understanding of the economic and financial variables used as the correct scores were below averages in the areas of percentages, compound interest, inflation and time value of money. The study thus, concluded that financial literacy among the respondents sampled was low. The study found no relationship between financial literacy and gender or sex as none of the variables were significant. However, there was an association between financial literacy and level of education. Again, while most employees plan on their retirement and expect adequate amounts for their retirement, their gratuities cannot be realized. It is recommended that the Office of the Head of Local Government Service organize financial literacy education for staff in savings and investments. Staff should also take their retirement planning seriously. This would advance financial literacy, increase staff involvement in the financial markets, and enhance their wellbeing and work productivity.



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Overview**

The social and economic environment in which people make financial decisions has metamorphosed, with financial products and services evolving with different dynamics. This necessitates that individuals be equipped with some level of financial literacy to make the day-to-day decisions of savings, investments and other long-term financial planning. However, studies have shown that the financial literacy levels among individuals are low not only in developing countries but also in developed countries (Lusardi & Mitchell, 2011; Xu & Zia, 2012).

These trends have made financial literacy a subject matter of many research among the youth (Navickas, Gudaitis, & Krajnakova, 2014), students (Shahrabani, 2013; OSeifuah & Gyekye, 2014; Shaari, Hassen, Mohammed, & Sabri, 2013), entrepreneurs (Nalini, 2011), workers (Robert, Natamba, Zulaika, Akankunda, & Esther, 2013) and the general population (Sophie, Mark, & Adrian, 2013). Similarly, in Ghana, financial literacy and personal financial decisions have also been explored. This research would thus add to the array of knowledge on the subject and help policymakers in their decisions.

#### **1.1 Background to the Study**

The continuous development of new financial products and services and technological advancement has an enormous influence on the financial world. The financial world has become highly integrated and multifaceted, and individuals and economies are confronted with making sophisticated irreversible financial decisions (Nayyar, 2016; Suwanaphan, 2013).

The financial decisions are not only in the short-term, like savings and borrowings but also include long-term decisions like retirement planning, family future home and children's education. The need for individuals to equip themselves with financial skills and knowledge. Hence financial literacy, therefore, becomes an inevitable tool in the contemporary world (Ibrahim & Alqaydi, 2013). Financial literacy, according to Sekar and Gowri (2015), is about financial decision-making, accumulation of wealth and better retirement planning. The individual can discern, monitor and successfully use financial assets to improve the wellbeing and economic safety of himself, his family and his business. It is about how the individual gains access to financial products and services (Nayyar, 2016). Thus financial literacy is consequently described by the Organization for Economic Co-operation and Development (OECD, 2012) as a core life skill for participating in the modern world and by Sekar and Gowri (2015) as a way of improving the quality of life of individuals and society at large.

However, evidence globally shows widespread deficiency in financial literacy levels in high income and middle, low and lower-income countries (Mbarire & Ali, 2014; Hung, Yoong, & Brown, 2012). Studies by Juliet (2014), for example, found a low level of financial literacy in Canada; Lusardi and Mitchell (2014) also found financial literacy levels among workers in America to be low and yet again Castro-Gonzalez (2014) also established low financial literacy among public sector workers in Puerto Rico.

These studies have used specific indicators, including the ability to compute and understand certain financial and economic concepts like division, simple

Interest, compound interest, inflation and time value of money. At the advance level understanding of risk diversification, the operations of mutual funds, the stock market, differentiation between debt and equity among others have also been used.

The FinScope survey, used primarily on the African Region and which can be used to measure some facets of financial literacy has likewise recorded low levels of financial literacy in most countries in Africa (Mbarire & Ali, 2014). In Kenya, the FinAccess survey confirms that there have been low levels of financial literacy despite the concerted efforts of Governments (Mwathi, Kubasu, & Akuno, 2017). Studies in Ghana through Consultative Group to Assist the Poor (CGAP) Technology in 2011 indicated that most Ghanaians have no access to financial services.

Low financial literacy levels have resulted in poor personal financial management, which create huge costs for the employees and to the organization at large. Employees distracted at work by their financial situations tend to undertake personal and financial tasks while on the job. Other employees are also inclined to take sick leaves; hence, job performance suffers and productivity at the workplace declines (Delafrooz, Paim, Sabri, & Masud, 2010; Onyango, 2013). Employees with a low levels of financial literacy also have difficulty meeting their monthly expenditures and have no money saved to meet emergencies. A low level of financial literacy further decline financial planning and make many people unprepared for their retirement as they have no retirement plans or have accumulated little or no savings to care for themselves after-work years (Hung *et. al*, 2012; Agunga, 2016; Nayyar, 2016). Many employees' especially

Local Government Staff, after retirement, found it difficult to live with a reduced income, and coupled with the rising economic situation, and many pensioners live miserable lives. Retirement is thus feared by many staff in the service as staff perceive retirement as a period of suffering. Thus persons with less knowledge of financial issues incline to embrace incorrect sentiments and make inappropriate decisions in the areas of general knowledge, putting the health of individuals and families at risk (Suwananaha, 2013; Nayya, 2016). This has led Hibbert and Beutler (2001) to conclude that financial matters are the rampant foundation of conflict in personal, marital, and family affiliations.

The Government of Ghana is the employer of the staff in the Local Government Service (LGS) per the Local Governance Act 936 of 2016 and has provided products and services for them. It is therefore important to help improve these staff's financial literacy level. Thus, consolidating the financial literacy of these employees can help remedy the financial skill and knowledge deficit and the behavioural and attitudinal concerns that will lead to staff becoming better savers and savvy spenders (Cakebread, 2014; Onyango, 2013). For it has been established that investing in the financial literacy of employees can reduce financial distress, and this would, in the long run, advance the effectiveness of the country's delivery system in the public service (Idris, Krishnan & Azmi 2013). Financial literate employees can also make better decisions, especially on allocating their financial resources.

In furtherance of this, many organizations and governments have implemented financial education programmes with the key objective of improving



financial knowledge that will enable individuals and families make financial choices that improve their wellbeing (Huston, 2010). Thus in 2003, the OECD financial education project was launched to resolve the trepidations of low financial literacy levels. This further precipitated the International Network on Financial Education (INFE) launch in 2008 by the G8 Finance Ministers (Yoong, Mihaly, Bauhoff, Rabinovich, & Hung, 2013). Similar strategies and campaigns have also been launched in Ghana by both government and stakeholders to advance financial literacy and create nationwide financial awareness (Ministry of Finance and Economic Planning, 2015).

Employers are also interested in developing the financial literacy skills of their employees. Some employers organize financial and retirement education programmes for their staff, while others provide financial products and services that will stimulate their staff's wellbeing. These products and services are all aimed at ensuring that employees are financially literate to enhance productivity and the staff's well-being. Financial literacy has been of concern to many scholars too, not only to governments, organizations and employers. Studies have thus been conducted in Ghana on financial literacy among students and market women (Mireku, 2015; Atakora, 2013) and in Thailand on academic support employees (Suwanaphan, 2013)

Though the most highly needed area for financial literacy is the staff or employees, the working class or public sector employees have not been widely researched when it comes to the matter of financial literacy (Cakebread, 2014). It is therefore of vital importance to explore financial literacy that will enhance the

Local Government staff skills and abilities enable them to make more informed economic choices about their financial decision. For employees who are less burdened by financial stress are more productive, positively inclined to the employer and more likely to be less absent and stressed from work. On the contrary, financial stressed employees spend more of their working hours trying to solve their financial problems (Delafrooz, 2013).

## **1.2 Statement of the Problem**

Every individual and by extension, employee is a manager of themselves in one way or the other. They are responsible for decision-making in acquisition, allocation and utilization of resources for their personal goals or to further the goals of the entity they preside. All these actions have some financial implications. Therefore, to function as a manager, a person needs to have some financial literacy knowledge. This is even more prevalent in the Local Government Service and the public sector where there are budget constraints.

However, the levels of financial literacy among employees worldwide is frightening. Most employees are not only unaware of the importance of financial literacy, and employers themselves do not place financial literacy as their top management objective. For instance, Aliant Credit Union conducted a study in 2011 and concluded that though 45% of employers see financial guidance and advice programs as effective in improving employee productivity, only 8% of them place it as a top benefits objective.

Where workers are likely to be employed in an organization that care for their employee's financial literacy, it is always limited to pensions or retirement planning (Alliant Credit Union, 2011). However, many employees are more interested in their personal financial management than the retirement planning that these employers provide. Thus the lack of financial literacy among American employees has been termed "the most glossed over and ignored worker issue today" (Alliant Credit Union, 2011).

In Ghana, lack of financial literacy has made many employees to fall prey to Ponzi schemes resulting in deaths, shocks and loss of livelihood. Some employees lack understanding of basic savings decisions and investment decisions, and sometimes put their resources in investment without understanding the proper implications which at the end do not lead to growth in their investments. Besides, employees are unaware of the financial implications of borrowings and this lead some of them to borrow at high interest rates just to satisfy their instant need without knowing the tall future encumbrance of these debts. Some of them have therefore become indebted to many financial institutions and cannot therefore meet their needs in a month without incurring further borrowing (Ofori, 2020).

The low levels of financial literacy in some cases have led to financial stress and thus affecting employee's performance at their work places. For an employee who is financially distressed is likely to blame everybody for the cause of his or her current predicament including his employer and therefore will not put up a good performance.

For instance, when employees are distracted by their financial situation at the work place, they are likely to engage in activities that will relieve them of the current predicament and inspire their personal benefits or financial freedom instead of their output at work. They are unable to sleep properly at night and therefore sleep at the office or work below their capacity due to tardiness. Some go on to retire solely dependent on the government providence and others fear to go on retirement because they have not adequately planned and resort to dubious acts including altering their ages to remain at work.

Figures from the Ghana Statistical Service (GSS) labor survey in 2015 showed that the employment to population ratio in the Western Region is 69.7%. It is therefore of vital importance that this key population that the remaining population depend on be educated on the basics of financial literacy. For persons with a high financial skills are able to make learned choices about their money and thus minimize the probabilities of financial mismanagement.

The low levels of financial literacy in the country especially among employees of Local Government makes this study very important. The big question is how can financial literacy help employees at the Local Government Service manage their personal finances that will stimulate to their own benefits and to improve productivity at the work place? Though financial literacy is not a panacea to the problem, it can in a way lead to better financial decisions and hence the purpose of the study.

### **1.3 Purpose of the Study**

The main purpose of this study is to examine financial literacy and personal financial decisions of Local Government Service staff in the Prestea Huni-Valley Municipal.

### **1.4 Research Objectives**

The objectives of the study include:

1. To ascertain the level of financial literacy of Local Government Staff in the Prestea Huni-Valley Municipal.
2. To assess the relationship between demographic characteristics (sex or gender and educational level) and financial literacy levels among Local Government staff in the Prestea Huni-Valley Municipal.
3. To ascertain the relationship between financial literacy and personal financial decisions of Local Government Staff in the Prestea Huni-Valley Municipal.
4. To ascertain the knowledge level of retirement planning among Local Government staff Prestea in the Huni-Valley Municipal.

### **1.5 Research Hypotheses**

1. H<sub>0</sub>: There is low level of financial literacy among staff of Prestea Huni-Valley Municipal.
2. H<sub>0</sub>: There is no relationship between demographic factors (sex or gender and educational level) and financial literacy among Local Government staff of the Prestea Huni-Valley Municipal.

3. H<sub>0</sub>: there is no relationship between financial literacy and personal financial decisions of Local Government Staff in the Prestea Huni-Valley Municipal.
4. H<sub>0</sub>: There is low knowledge levels of retirement planning among Local Government staff of the Prestea Huni-Valley Municipal.

### **1.5 Significance of the Study**

The findings of this study would be significant not only to the government which is the employer of staff of the Local Government Service but to all employers and employees in all sectors in the economy. The government and employers would find this useful as it would help them identify areas they consider important to improve the financial knowledge of their employees. Governments and development partners may also use the research findings to make policies and programs that are able to promote financial literacy.

The employees may also use the findings to guide them plan strategies for managing their personal finances especially in the area of retirement planning, investment, savings and expenditures.

The Office of the Head of Local Government Service (OHLGS) would find this useful for initiating strategies and developing capacity building programmes that would help improve the financial literacy levels of workers.

The findings would also be important to the scholars and researchers as it would complement the already existing knowledge in financial literacy. It would also assist these researchers and academicians identify gaps that needs further research.

## **1.6 Delimitations of the Study**

The work is limited to employees working in the Local Government Service in the Prestea Huni-Valley Municipal of the Western Region. There are currently fourteen (14) Metropolitan, Municipal and District Assemblies (MMDAs) in the Western Region. Per the Local Governance of 2016 (Act 936), staff of the decentralized departments in the MMDAs are part of Local Government Service. The study however was limited to only staff in the Departments of the assembly including the Central Administration, Social Welfare and Community Development, Works, Physical Planning and Human Resource Departments. Staff in these departments at the zonal councils were also included.

## **1.7 Limitations of the Study**

The study used a sample to represent the entire staff of the Municipal. There were seven (7) Zonal Councils, and eleven (11) departments in the Assembly at the time of the study. The use of the Assembly's staff excluding other decentralized departments with a lot of staff did not allow for generalization of the level of financial literacy in the municipality. To make a generalization, a larger sample would be needed to include the staff in the other decentralized department.

Respondents also did not understand issues of simple interest, compound interest, time value of money and inflation and therefore were unable to score correct answers above average.

## **1.8 Organization of the Study**

The study is organised into five (5) chapters. Chapter one encompasses the background to the study, the statement of the problem, the purpose of the study and the significance of the study. Chapter two examines applicable literature on the research theme and identifies research gaps together with a conceptual framework. Chapter three encompasses the research methods with a focus on the research design, the population, sample, data collection and data analysis techniques. Chapter four represents the findings of the study and interpretation of results. Finally, chapter five comprises the summary of the findings, conclusions and recommendations.





## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter reviews literature relating to financial literacy and personal financial decisions. The chapter examines theories that relate to financial literacy like the Life Cycle Model and personal financial decisions. It considers the conceptual framework linking the study variables.

#### **2.1 Theoretical Review**

Many theories have been expounded to explain how individuals manage their financials and plan for their future including retirement planning. Among the theories discussed in this research are the life cycle model, the propensity to plan and behavioral finance.

##### **2.1.1 The life cycle model**

The life cycle theory about consumption was postulated by Franco Modigliani, Albert Ando and Richard Brumberg about half a century ago. Deaton (2005) pronounced the life cycle model as a good piece of theory buttressed by many years of empirical work, both by supporters and critics. Deaton (2005) stated further that the model is so much a part of our regular normal toolkit that we pay Modigliani the great commendation of not citing him.

According to Modigliani the “point of departure of the life cycle model is the hypothesis that consumption and saving decisions of households at each point in time reflect a more or less conscious attempt at achieving the preferred

distribution of consumption over the life cycle subject to the constraints imposed by the resources accruing to the household over time.

Illuminating on this assertion, van Rooij, Lusardi and Alessie (2011) stated that the simplest version of the life cycle consumption model without bequest and uncertainty posits that households accumulate savings during their working careers up to their retirement and de-accumulate wealth thereafter. What this means is that a rational and well-informed individual will consume less than his income in times of high earnings (during employment) and will save to complement consumption when income falls.

It is also emphasized that an individual level of consumption hinge on not just his present income but and more significantly on his long term expected earnings (Lusardi, 2008). In other words, individuals are assumed to plan a lifetime pattern of consumer expenditure based on expected earnings over time. Deaton (2005) puts it placidly that the most important motives for putting aside money was the need to provide for retirement. Thus young people will save so that when they are old and cannot either work or wish to work, they will have enough money to spend.

The implication of the Model is that it accounts for the dependence of consumption and savings behavior of the individual position in the life cycle. Thus young employees entering the service or labour market would have relatively low income and low or possibly negative savings. As their income rises in the middle years, they turn to increase savings. However, when they retire, there is a fall in

income and their savings reduces or become negative as they now depend on accumulated savings (Clark, Hammond, Hanson, & Morrill, 2014).

The model thus put the management of consumption and savings in the hands of the individuals. Staff are therefore expected to consider their position in the life cycle and take proactive measures that commensurate with that position. Individuals must likewise use available information to formulate and execute optimal consumption/saving plans and then look ahead and plan for the future taking his/her lifetime resources into account (Jappelli & Padula, 2011).

Deducing from the literature examined above, the literature made unrealistic assumptions about expected future income, life expectancy, family size, among others. The model further assumes that an increase in the life time resources of an individual lead to proportionate increases in consumption in all periods of life. This means that saving rate rises with income. This may not necessarily be the case in the life time of some individuals.

Others also assume that it fails to recognize the presence of liquidity constraints and consumption may be much more responsive to changes in current income, whether temporary or not, than would be predicted on the basis of the life cycle hypothesis. Based on these criticisms and others the prospect theory and propensity to plan theory have been used to explain individual behavior in relation to their financial management.

### 2.1.2 Propensity to plan

Critics of the life cycle model like Clark et al (2014) asserted that it assumes that people are planners who evaluate how each period resource allocation influences future resource constraints. On the contrary, individuals are not planners in the context of the life cycle as there are differences among individuals in measures of planning based on their risk and time preferences. For instance, individuals who display impatience or a lack of financial literacy would limit their ability to assess the trade-off between the current and the impending consumption.

Due to this and other criticism of the Life Cycle Model, the propensity to plan model was developed by Ameriks, Capin and Leahy (2003). This is because planning is ubiquitous in consumer's everyday life and changes in individual planning affect consumer wellbeing in significant and diverse ways ((Lynch, et., al., 2010). For instance, differences in the propensity to plan across individuals are associated with observed variations in retirement wealth accumulations (Ameriks et al., 2003).

The propensity to plan model assumes that individuals with high propensity to plan tend to notice spending errors, make appropriate behavioral adjustments and consequently accumulate more wealth. On the other hand, those with low propensity to plan tend to overlook such errors and continue to overspend while working and thus accumulate less retirement wealth (van Rooij, *et.,al.*, 2011). This Ameriks *et., al.*, (2003) admonished that people who are risk averse should have greater utility for planning.

Conversely, those operating in volatile environments may see additional benefits from improvising rather than planning (Moorman & Miner 1998). It has been observed that those with high propensity to plan not only accumulate more wealth but also save more than those with a low propensity to plan (van Rooij, *et al.*, 2011).

Further to this is the fact that households with high propensity to plan set regular budgets and this help in reducing their spending. Differences in discount factors and bequest motives are also seen as obvious candidates accounting for different amount of wealth accumulation by households with similar economic and demographic characteristics (Lusardi & Mitchell, 2013). For instance, it is expected that patient households will accumulate more wealth than impatient households due to their lesser desire for current consumption.

Staff of the local government have at their disposal a flow of income monthly and other allowances, however their ability to utilize this for both current and future needs would depend on their propensity to plan. Those who defer current consumption and backed by a saving habit are likely to accumulate more than those who have no thought plan for their income. Thus Lusardi (2008) succinctly stated that households that give little thought to retirement had far lower wealth than those that had given the subject more thought.

The model like others have also been criticized. For instance, it is not every individual that plans alike and individual differences in planning influences consumer wellbeing in essential and wide-ranging ways. Planning is therefore relevant to inter-temporal option between smaller-sooner and larger –later rewards,

where the lesser rewards become more alluring as it draws closer (Lynch et al., 2010). Planning one finances is also a behavioral issue and hence the behavioral finance. This led to the development of other theories to explain consumer behavior, thus behavioral finance.

### **2.1.3 Behavioral finance**

Economic and finance theories are built on the concept of rationality. Neo-classical economics have often argued that people are rational in making decisions. Thus Riyazahmed and saravanaraj (2016) opined that rationality is the only factor that distinguishes homo economicus from homo sapiens. However, empirical evidences have proven that people are not always rational in considering all the available information of an opportunity before deciding on it (Riyazahmed & saravanaraj, 2016). This led to the development of the behavioral finance theories. The issue of behavioral finance appeared in the field of finance around the 1800s and the early 1990s with writers applying the field of psychology to the field of finance (Victor & Simon, 2000). Hence, behavioral finance is concerned with the psychology of financial decision making and the role of biases in decision making.

According to Linter (1998) behavioral finance is the study of how human interprets and acts on information to make informed investment decisions. Thus it can be concluded that behavioral finance explains why and how people make seemingly irrational or illogical decisions when they save, invest, spend and borrow. Behavioral finance is therefore very important because it impacts on people's choices and have implications for retirement, pension and education (Michael,

2017). Behavioral finance has been classified in different ways. However, Brabazon (2000) suggested classifying behavioral finance into two: heuristics decision processing and the prospect theory.

#### **2.1.4 Heuristics**

Behavioral finance is based on psychology which suggests that human decisions process is subject to several cognitive illusions and biases, often termed heuristics (Ahmed & Saravanaraj, 2016). Heuristics encompasses making decisions and judgements speedily using limited cognitive resources or short-cuts. It involves both innate and automatic processes and learned or consciously selected rules of the thumb (Hirshleifer, 2014).

They are seen as mental short-cuts that simplify the complex methods to making a judgement. Some of the heuristics are over-confidence, regret avoidance, mental accounting among others. Over-confidence bias is sometimes called the “better than others syndrome. Overconfidence tend to make people overestimate their abilities (Bodie, Kane & Marcus, 2014).

Similarly, individuals who make certain decisions that do not turn out correctly tend to blame themselves (have more regret) when it arises from an unconventional one than a conventional decision. Thus, they will attribute a bad outcome from a conventional decision as bad (Bodie et al., 2014).

Though proponents of heuristic often claim that the traditional economic models did not recognize the fact that people use short-cuts in their work, it suffers from some criticism. Heuristics are blamed for not leading to quality of information, for decisions made analytically may outweighs those made upon

individual feelings and intuitions or short-cut. Others contend that heuristics leads to self-discipline problems as people may not save for retirement because of affective short-circuiting. In this volatile environment there are unlimited remunerations to making decisions analytically rather relying solely upon feelings and intuitions.

### **2.1.5 The prospect theory**

The prospect theory postulated by Kahneman and Tversky (1979) as a practice alternative to conservative wisdom. The prospect theory hypothesizes how an individual or group of individuals behave on average in a world of ambiguity. Ahmed et., al (2016) asserted that the prospect theory assumes that it is not possible to have a decision maker with unlimited Random Access Memory (RAM) who would consider all relevant information and come up with a choice under all circumstances.

In other words, the prospect theory contends that it is not possible to have a person who can consider all the relevant information before deciding to make decisions. People therefore incline to rely on information that immediately come to mind and information that do not are completely neglected (Hirshleifer, 2014). This makes them over-confident that their instinctive way of thinking about a problem is accurate.

It further assumes that humans by nature abhor uncertainty and typically look for ways to circumvent unrewarded risk. Thus, individuals overweight outcomes that are considered sure or certain relative to outcomes that are merely likely or probable, a phenomenon labeled as certainty effect (Riyazahmed &



Saravanaraj 2016). Decision makers tend to stick with what they have rather than investigate other options. They put off undertaking new initiatives, even if deep down they know the effort could be worthwhile. All of these observations point to a tendency of individuals to seek comfort (Riyazahmed & Saravanaraj 2016).

Consequently, the prospect theory predicts that individuals tend to be risk averse in a domain of gains, or when things are going well and relatively risk seeking when things are not going well or in a domain of losses. Prospect theory further assumes that people decisions may be driven by behavioral preconceptions (Ahmed et., Al., 2016).

In applying this to individuals and the management of their finances, it could be asserted that individuals would be very sensitive to decreases in their wealth than to upsurges and this will sway their decisions to invest and plan their finances. Thus decision making under risk is seen as an option between prospect and gamble.

## **2.2 Concept of Financial Literacy**

Mason and Wilson (2000) asserted that researchers and financial specialists have long differed on how to describe the concept of financial literacy. Remund (2010) following a similar path opined that though consumer behavior, public policy, sociology and mass communication scholars are quick to identify the reasons why people struggle to manage money, they have not reached unanimity on how best to define the concept of financial literacy.

Consequently, Zait and Berteau (2014) succinctly averred that discussions on financial literacy appear within the literature in various forms and with diversity of

viewpoints and with countless scholars and authors proffering their individual interpretation and explanations of the concept. This makes financial literacy more a relative concept rather than an absolute one. Besides, the inability of scholars to define the concept makes comparison difficult and different whether or not these studies are carried out in the same language or in different countries.

The varied viewpoints and definitions are further heightened by the fact that researchers and authors do not operate with the same words or meaning (Zait & Berteau, 2014; Huston, 2010). Terms like financial literacy, financial knowledge, financial capability, financial competence, economic capability, economic literacy and financial education (Madhzan & Tabiani, 2013; Cakebread, 2014; Mbarire & Ali, 2014) are used interchangeably. Research works and papers have also been undertaken with these terms: financial knowledge (Huston, 2010; Remund, 2010), financial literacy knowledge (Hung, Parker and Young, 2009) and people's self-confidence towards their own financial actions (OECD, 2013).

Notwithstanding these variety, some writers have attempted to define the concept of financial literacy. Remund (2010) described financial literacy as the measure of the degree to which an individual understands fundamental financial concepts and has the necessary capability and confidence to manage personal finances through short-term decisions and long-term planning, taking into account the economic happenings and varying circumstances. Remund (2010) assertion focuses on knowledge and ability to apply this knowledge and the confidence.

The definition by Remund (2010) was supported by Suwanaphan (2013) in which the concept financial knowledge was used. Financial knowledge embodies basic form of financial literacy that is replicated in perceived financial knowledge and influences financial skills that is contingent on knowledge. Suwanaphan (2013)

concluded that actual financial behavior, in turn, depends on all three, actual knowledge, perceived knowledge and skills.

According to the US Financial Literacy and Education Commission (cited in Kotze & Smit, 2008), financial literacy is defined as the ability to make informed judgments and to take effective actions regarding the current and future use and management of money. Financial literacy should include the ability to understand financial choices, plan for the future, spend wisely and manage and be ready for life events such as job loss or saving for retirement.

Thus, many conceptual definitions of financial literacy fall into three categories; knowledge of financial concepts, aptitude and skill in managing personal finances and confidence and attitude in planning effectively for future financial needs (Mwathi et al., 2017).

For the purpose of this work, the definition given by OECD International Network on Financial Education (INFE) has been adopted. It described financial literacy as an amalgamation of awareness, knowledge, skill, attitude and behaviour required to make thorough financial decisions and eventually achieve personal financial security. They contended that though the terms could be used relatively interchangeably, the most common term should be financial literacy.

Despite the variety of terms and interpretations, many theories and concepts have been propounded relating to personal decisions, management and retirement planning. Among the theories are those discussed in the next section.

## **2.3 Empirical Review**

This section involves empirical review of work using the theoretical concepts outlined above.

### **2.3.1 The level of financial literacy**

A sound personal financial plan allows individuals to be mindful of ways in which they deal with financial matters (Boon, Yee, & Ting, 2011). Like the Life Cycle Model and the Propensity to Plan model discussed above, individuals are responsible for the management of their finances and hence the need for financial knowledge as they strategize what need to be done as well as the financial goals and objectives to be met (Lusardi & Mitchell, 2013).

Several concepts underpin the roots of financial planning decisions of individuals. According to Boon (2011) concepts like time value of money, compound interest, inflation rate and risk diversification are cornerstone to the various aspect of financial planning. Besides, knowledge of interest compounding and ability to perform simple calculations would matter most for effective financial planning.

Buttressing these assertions, Lusardi and Mitchell (2013) asserted that the three (3) major concepts; (i) numeracy and the ability to perform computations related to interest and compound interest, (ii) understanding of inflation and (iii) understanding of risk diversification buttress the measurement of financial literacy. Lusardi and Mitchell have therefore designed a set of questions which have been used in United States of America (USA) and other countries across the world (Lusardi and Mitchell, 2013).

They advanced arguments in favour of the use of these set of standardized questions. These included simplicity, brevity, relevance and capacity to differentiate

questions. Thus the questions measure the knowledge of the building blocks fundamental to decision making in an intertemporal setting as well as relate to concepts pertinent to people's day today decision over their lifecycle.

Measurement results from the use of these questions has concluded that the level of financial literacy is low in both developed and developing economies of the world (Lusardi & Mitchell, 2013). For instance, a research by Boon (2011) in Klang valley Malaysia found that people were financial literate at the basic level. Using a set of questions on numeracy, time value of money, compound interest and inflation, the correct scores were higher for the basic level than when advanced economic and financial variables like function of stock market, knowledge of mutual funds, relationship between interest rates and bond prices, risk diversifications, risk levels and long-term return.

Similarly, a study by Lusardi (2008) found widespread illiteracy among the US population. For instance, the study demonstrated that most individuals cannot perform simple economic calculations and lack knowledge on basic economic concepts such as interest compounding, the difference between real and nominal values and the basics of diversification. It was contended further that knowledge on more complex concepts such as the difference between bonds and stocks, the working of mutual funds and the basics of asset pricing is even scarcer.

A study by Komara et al on financial literacy and financial behavior among government employees using a sample of 324 employees from Bandug, West Java found that though on average financial literacy levels was good, that for career level 1 and Career level 11 was very low and fair respectively. Mahdzan and Tabiani (2013) examined the influence of financial literacy on individuals' savings in Klang Valley, Malaysia using a sample of 200 individuals. Using inflation, interest rate and

compound interest the basic financial literacy was higher than that of the more advance measurement including unit trusts, stocks and bonds. They however, attributed the high score to most of the respondents been MBA students.

The financial knowledge thus influences a person's ability to plan and take personal financial decisions.

### **2.3.2 Financial literacy and personal financial management**

Financial decision making is the thought process of selecting a logical financial choice from the available options (Mwathi, 2017). An individual ability to manage his personal finance has become an essential issue in today's world (Ibrahimi & Alqaydi, 2013). According to Oyango (2013) personal finance is the application of the doctrines of finance to the monetary decisions of an individual or family unit. It involves every day decisions of individuals like budgeting, saving and spending by individuals or family units.

Lusardi and Mitchell (2008) asserted that financial decisions are greatly influenced by a continuous conflict between the generation of goods and services in the market place and a person's limited resources to acquire such goods and services. Financial literacy further affect decision making and this can be linked to lack of retirement planning and poor borrowing behavior (Lusardi, 2008).

Mwathi, et.al. (2017) pronounced that due to the contemporary evolution in the financial markets, it has become increasingly indispensable for customers to be more knowledgeable and competent in managing their finances. Thus individuals must make day to day money management decisions to better planning and management of life events such as fund education, illness or housing purchase (Mwathi et al. 2017). Individual saving decisions means that they have to defer today's consumption. This

was the view postulated by the Modigliani in the life- cycle model that during high earnings individuals will save and use such during periods of low income.

A study by Sevim, Temizel & Sayilir (2017) on the effects of financial literacy of Turkish financial consumers on the borrowing behavior using a sample of 550 people in the city of Eskisehir found that there are no differences in behavior with different levels of financial literacy. Sevim et al. (2017) states further that the increasing cost of health care, education and housing are making individuals to spend more than they can earn and even spend on retirement income.

Thus individual financial decisions are not based on the life cycle model or the propensity to plan but tend to be under the influence of biases or heuristics. Individuals tend to overvalue present benefits and underestimate future cost when borrowing. Wrong borrowing decisions therefore leads to over indebtedness and may even ruin consumer credibility which will have an effect on the long term financial welfare of the individual (Sevim et al; 2017; Kotze & Smit, 2008).

A study by Lusardi and Mitchell (2016) found that more financially literate employees are better investors. They stated further that more financially literate knowledgeable employees are much more likely to participate in their retirement saving plan, contribute a higher percentage of their salaries and hold more equity in the defined contribution retirement accounts. On the other hand, workers who are financially illiterate find themselves in financial crisis as they have to spend their income on costly goods for the purpose of fitting into a society (Lorgat, 2003 cited in Kotze & Smit, 2008).

A study by Suwanapha (2013) on the personal financial literacy using a sample of 400 academic employee's found that most employees experience situations where their revenue cannot cover their expenses. They study further revealed that

though most had saving, it was for emergencies and for wealth. The study thus concluded that participants do not have sufficient knowledge and skills about managing their financial affairs. This shows that lack of financial knowledge militates against the propensity to plan and the life cycle models. Individuals therefore make their decisions on the advice of friends or relatives or their own past, present or future experiences.

A study by Castro-Gonzalez (2014) using public employees at Puerto Rico shows that most of them were unacquainted with even the most rudimentary economic concepts required to make savings and investment decisions. The results of the study also revealed that though employees prepare budgets for a month, they were not able to cover their budgets but have to cut expenses or use part of their savings. Those who save were also unlikely to use their savings for more than three months in the event that they lose their jobs. Thus they rely on heuristics in making financial decisions.

A study by Ibrahim and Alqaydi (2013) on financial literacy, personal attitude on individuals working in service organizations concluded that individuals with strong financial attitude tend to borrow less from credit cards. The study also revealed that UAE are more likely to borrow from banks than from colleagues, friends or family members. Thus lack of financial literacy may force employees to ignore planning and implementing a regular investment programme.

These conclusions have placed the management of personal finance and the accumulation of retirement plans on the life of employees or the individuals. Efforts at acquiring financial literacy is a prerequisite for the efficient management of their money. For without knowledge in financial literacy, individuals make their planning decisions without regard to the life cycle model or the propensity to plan model but on



behavioral finances. Employers and for that matter the Local Government Service should endeavor to inculcate financial literacy training for employees at all levels as issues of demographic also influences financial literacy.

### **2.3.3 Demographic characteristics and financial literacy**

Financial illiteracy is not only widespread among the general population but is particularly acute in some specific demographic groups (Lusardi, 2008). The demographic groups include age, level of education, sex/gender, marital status, race, ethnic groups, employment status among others. Many of these have therefore been discussed in a number of works.

A survey by Clark, et.al., (2016) found that Federal Republic employees performed well on financial literacy compared to the average Americans. Federal Republic employees were also saving a higher rate than the average Americans.

Jappeli (2012) investigated the financial literacy of university professors using a sample of 94 university professors and concluded that respondents lacked essential financial information for handling their daily financial issues. However, the results from a study carried out by Clark *et. el.*, (2016) did not discover a significant relationship between financial literacy and employment status.

A study by Sekar and Gowri (2010) found that while married employees were seen to be having higher financial literacy levels, unmarried employees were not significantly correlated to financial literacy. In the same vein, in Jappeli (2012) a relationship was also found between marital status and financial literacy. Thus married people were likely to be more financially literates than unmarried people.

The gender or sex of respondents have also been explored in relation to financial literacy. Sekar and Gowri (2010) conducted a study on financial literacy and

its determinants and concluded that gender impacts on the level of financial literacy. The financial knowledge among men were found to be marginally higher than women in Agarwalla et.al (2013).

This means males were more financially literate compared to their female counterparts, thus financial literacy differs between male and female (Van Rooij, *et. al.*, 2009 and Assefa & Rao, 2018). However, in Adam (2017) there was no significant difference between male and female students of the University of Cape Coast. Sekar and Gowri (2010) asserted that financial literacy levels do not depend on age as the mean score of financial literacy for differing age groups was not significant. However, Onyango (2013) found a strong positive correlation between personal financial management and age as older people were generally more conservative and risk adverse than younger people. This means age has a significant effect with older individuals being more likely to hold retirement savings than younger ones (Boisclair, Lusardi & Michaud, 2014).

Similar conclusion was reached in Ansong and Gyensare (2012) in their survey among students when they opined that age was positively related to financial literacy. These were contrasted in Clark *et. al.*, (2016) where there was no significant relationship between age and financial literacy levels.

The level of education has relationship with financial literacy. Thus Assefa and Rao (2018) found that education was positively correlated with levels of education. Several other studies have concluded that those with higher level of education were more likely to be financially literate than their counterparts with lower levels of education (Yong & Sellapan, 2010; Bhushan & Medury, 2013; Clark *et. al.*, (2016); Onyango, 2013; Ansong & Gyensare, 2012).

Other demographic factors have also been explored including mother's

education, source of information and income levels. For instance, Ansong and Gyensare (2012) conducted a survey among students and concluded that work location, access to media and source of education on money has no influence on financial literacy. They also found that mother's education was positively correlated with respondents (students) financial literacy and that of the father's education has no influence on the financial literacy of the respondent.

Other studies have found that the relationship between financial literacy levels and savings is moderated by income levels and that income levels have a positive association with saving behavior. Thus, higher income was associated with higher levels of financial planning and again attributed to a positive and generally large and significant effect on retirement planning (Boisclair, Lusardi & Michaud, 2014).

Thus, financial literacy has a greater impact on retirement planning for individuals and this is explored in the next section.

#### **2.3.4 Financial literacy and retirement planning**

Even though there is emerging literature on retirement planning and its effects on economic wellbeing in retirement, it is limited and has not yet focused directly on public employees (Clark, Hammond, Henson & Morrill, 2014). For instance, a study by Clark, Lusardi and Mitchell (2016) on employees' financial literacy and retirement plan behavior in the USA found that financially savvy employees are most likely to participate in their defined contribution (DC).

They asserted that the higher returns earned by the more financially savvy employees are important contributor to household wealth inequality. They also found that more financially knowledgeable employees are much more likely to contribute a higher percentage in their retirement saving plan, contribute a higher percentage of

their salaries and hold more equity in defined contribution retirement accounts (Clark, Lusardi & Mitchell, 2016).

A study by Mwathi, *et.al.*, (2017) on the effects of financial literacy on personal financial decisions among Egerton University Employees in Nakuru County, Kenya using a sample of 320 respondents had a similar results. With the help of SSPS they analyzed their data using descriptive, Pearson correlation and multi regression analysis. The results indicated that financially literate people have a greater capacity to save for retirement and actually do so. They contended that financially literate people were able to save for the future, for retirement and for unforeseen circumstances and emergencies.

A study by Moore (2003) sought to find out the level of working Australians financial knowledge and preparedness for retirement. Using a sample of 802 working Australians, the results indicated that there were low levels of financial literacy. For instance, only half of the respondents had given at best some thought to their retirement, but made very little, if any preparations for it. The study concluded that when financial literacy levels decline, anticipation of a lifestyle in retirement that is far less comfortable than the present increases.

This portrayed that staff become rather worried about their ability to retire, about the financial challenges they will face in retirement and the uncertainties ahead that they wish they stay forever at work. In some instances, it is possible for some retirees to still have relatives who depend on them and it becomes much difficult to maintain the standard of living in their declining productivity period.

Individuals therefore need to take retirement planning as a personal responsibility and this should be complemented by the employer or the Office of the Head of Local Government Service. Ameriks, *et.al.*, (2003) asserted that individuals

with high propensity to plan tend to notice spending errors and make inappropriate adjustments and thus accumulate wealth. On the contrary, those with low propensity to plan tend to overlook such errors while working and thus accumulate less retirement wealth.

The introduction of the Three Tier Pension Scheme by the National Pension Act of 2008 is thus seen as a welcome news to workers in the public sector. The scheme is contributory three-tier pension comprised two mandatory schemes and a voluntary scheme: (a) mandatory basic national social security scheme; (b) a mandatory fully funded and privately managed occupational pension scheme, and (c) a voluntary fully funded and privately managed provident fund and personal pension scheme.

The establishment of the Third Tier gives workers the option to choose the amount or percentage of salary they want to contribute into the scheme. There are also numerous financial and non-financial institutions that also offer services relating to retirement planning. Notwithstanding this many staff still find it difficult to put aside money or savings to meet their retirement.

Besides, the lack of financial knowledge means that staff are burdened with debt arising from loans, loss of investments due to poor or bad advice from relatives and friends who might not also be well versed in financial issues.

#### **2.4 Conceptual Framework Measurement of Financial Literacy**

There are two major approaches to measuring financial literacy; self-assessments and objective measures like test scores (Mwathi). Self-assessment is where the respondents are asked to appraise their literacy skills as well as to provide information about their attitudes toward financial decisions, knowledge and

information. The objective measure relies on the objective test which assesses the respondents' knowledge of financial terms, understanding of various financial concepts and ability to apply numerical skills in particular situations related to finance.

This study adopted the objective test approach in measuring employees' levels of financial literacy. This is because the objective test has been found to better assess the respondents' financial knowledge than self-assessment (OECD, 2005).

#### **2.4.1 Demographic characteristics**

A number of demographic variables like gender or sex, age, level of education, marital status, mother's education, race among others have effect on an individual's level of financial literacy. Some of these factors including sex or gender and level of education have been considered in this work.

#### **2.4.2 Personal financial decisions**

Financial literacy is the ability, knowledge and competency in making financial decisions (Mwathi). Thus a financial literate is one that has the intellectual framework for understanding, finding, evaluating and using information relating to finances, financial products, risks and any other information related to his financial wellbeing to make sound financial decision with limited risks. Amidst current evolutions in financial markets with the availability of a wider selection of financial products and services, making financial decisions has become multifaceted and more complicated.

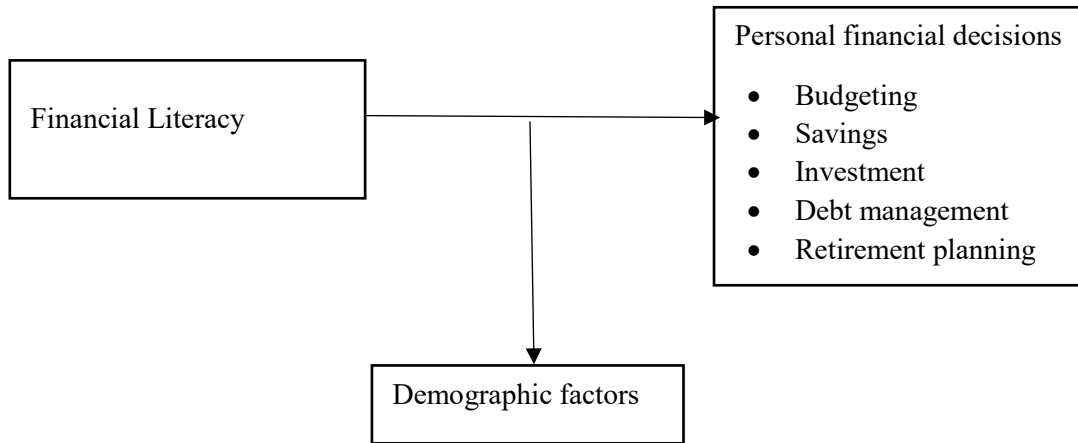
Individuals therefore must make day to day money management decisions to enable better planning and management of life events such as food, education, illness, housing purchase or retirement. The knowledge and skills related to money

management include the ability to prepare a budget and compare prices of different products (Fonseca, Mullen, Zamarro & Zissimopoulos, 2010).

Saving decisions among others is the ability to defer consumption of income earned today. The life-cycle saving theory posits that individuals will follow a hump-shaped saving pattern over their lifetime. During high earning periods of employment, individuals will save increasing amounts and smooth out expenditure. During low income levels for example later on in their retirement year's people will use up their savings to fund their lifetime spending needs (Moore, 2003).

Investment is putting money into an asset with the expectation of capital appreciation, dividends, and/or interest earnings. Most or all forms of investment involve some form of risk, such as investment in equities, property, and even fixed interest securities which are subject, among other things, to inflation risk.

Individuals may require borrowing money in order to meet their needs from time to time. Debt management decisions are made to help consumers avoid over indebtedness. To be able to perform calculations, individuals require a minimum understanding of compound interest and the time value of money. Decisions about how much to accumulate and how much to borrow to be able to smooth consumption over the life-cycle also require an understanding of the working of interest rates. All these variables have been explored in the conceptual framework in figure 1.



**Figure 1: Conceptual framework**

**Source:** Author's construct (2020)

## 2.5 Chapter Summary

This chapter explored several conventional and behavioral finance that relates to individual ability to manage his or her personal financial decisions. Empirical review was also done on financial literacy and demographic characteristics, financial literacy and retirement planning and financially literacy and personal financial management. The Conceptual framework that guided the study was also explained. The research method of this work is explored in chapterthree.



## **CHAPTER THREE**

### **RESEARCH METHODS**

#### **3.0 Introduction**

This chapter summarizes the research methodology that was followed in completing the study. It considers the research design, target population, data collection instruments, data analysis and the ethical issues faced and how they were resolved.

#### **3.1 Research Design**

The research design is the blueprint for the collection, measurement and analysis of data. It is normally regarded as the framework of research methods and techniques chosen by the researcher. Research design thus provides the appropriate framework for the study. It enables the researcher to ensure that the evidence obtained effectively address the research problem as unambiguously as possible.

This research thus employed a mixed of research design; employing both descriptive and experimental designs. The descriptive design portrays an accurate profile of person, events or situations. Thus Ngechu (2004) asserted that descriptive studies serve as a variety of research objective such as descriptions of phenomenon or characteristics associated with a subject population, estimates of proportions of a population that have these characteristics and discovery of associations among different variables.

The experimental design was used to enable the researcher establish relationship between the cause and effect of the situation. In this situation to establish the relationship between financial literacy and demographic factors such as gender or sex and levels of education.

### 3.2 Population

A population is an entire group of individuals, events or objects having common observable characteristics. This represents the entire set of units of analysis or the total collection of elements on which inference is to be made (Cooper & Schindler, 2001). The population for this study comprised staff working in the Prestea Huni-Valley Municipal Assembly main block and the seven (7) zonal councils. The zonal councils are the substructures under the Municipal Assemblies. The research centered on staff that have been fully integrated in the LGS. Therefore, staff from the Central Administration (Registry, Planning, Human Resource, Budgeting, Internal Audit Unit among others) and the other Departments of Assembly constituted the population. Information obtained from the Seven Zonal Councils and the Central Block give a total of 900 in these Departments/Units. This is shown in the table below:

**Table 1: Target population**

S/N	Department	Number
1	Main block	673
2	Zonal council	227
<b>Total</b>		<b>900</b>

Source: Field survey (2020)

### 3.3 Sampling Procedure and Sampling Technique

The sampling procedure looks at the process involved in selecting the actual respondents who were engaged in the study. It is thus very essential to consider the kind of sampling technique to be used as well as the characteristics of the population when one is selecting a sample to be studied.

In this study stratified random sampling technique was employed to collect data. This is a probability sampling procedure in which the target population is divided into a number of strata, and the sample population drawn from each division (Sarandakos, 2005). Thus the staff were grouped according to their departments and units. The strength of this technique lies in its ability to allow all population groups to be represented in the final sample (Sarandakos, 2005), thus, reducing variability.

A sample size refers to a subset of the population (Collis & Hussey, 2009). This gives the entire number of population elements from which data is to be actually collected. The desired level of confidence for this study is 95%, with the scientifically acceptable margin of error of 5%. Thus using Taro Yamane sample size determination formula, a sample size of 277 from the total population of 668 staff was determined. This is shown below:

$$Sample\ size\ (S) = \frac{N}{1 + N(e)^2}$$

Where:

S =sample size

N = target population

e =maximum acceptable margin of error (5%)

$$\text{Sample size } (S) = \frac{900}{1+900(0.05)^2}$$

$$S = 276.9 \approx 277$$

The distribution of these among the departments are as follows:

**Table 2: Distribution of respondents**

S/N	Department	Number	Sample size
1	Central administration	673	207
2	Zonal council	227	70
<b>Total</b>		<b>900</b>	<b>277</b>

Source: Field survey (2020)

### 3.4 Data Collection Procedure

After receiving permission from the Municipal Coordinating Director (MCD), a further permission was obtained from the departmental heads before administering the questionnaires. Two hundred and seventy-seven (277) questionnaires were hand delivered to the departments' heads depending on the staff strength of the department and the chosen sample.

The questionnaires were returned in a sealed envelope to the Heads of Departments (HODs) after they were completed by respondents and then forwarded to the researcher through the departmental heads. This was to avoid the issue of bias and achieve a maximum representation. The sample therefore included employees from different departments, different ages, gender and different educational background.

### **3.5 Data Processing and Analysis**

At the end of the data collection process questionnaires were checked thoroughly for completeness. Only duly filled instruments by the respondents have been used. The Statistical Packages for Social Sciences (SPSS) version 23.0 was used to analyse the data. The quantitative data was analyzed through descriptive statistics. The Chi-Square test of independence was used to identify the associations between variables and to compare financial literacy items and some demographic characteristics of the respondents. Presentations were made in tables and charts.

### **3.6 Ethical Consideration**

The main ethical issue faced was confidentiality of information. Only few of the assembly's information is on the website and majority are retained in the individual departments as they are regarded private. However, the researcher minimized these by ensuring respondents that any information collected was purely confidential and for academic purposes only.

The questionnaire was also designed in such a way that respondents were anonymous as there were no specific answers to trace the respondent.

### **3.7 Chapter Summary**

This chapter provided a framework for the whole research. Chapter four provide information on the information collected from the field.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.0 Introduction

This chapter presents the results and discussion of the findings based on the data collected from the field. The presentation of the findings is done based on sub headings as they relate to the study objectives. These objectives relate to level of financial literacy among staff, the relationship between financial literacy and demographic factors and financial literacy and personal financial decisions including retirement planning. A survey questions were used.

A total of 277 questionnaires were sent to the target population and out of which 252 were completely filled and returned. This gives a response rate of 91%. Despite this, the target population was fairly represented. The results are shown in Table 3.

**Table 3: Respondents responses of questionnaire**

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Completed questionnaires	252	91.0
Incomplete questionnaires	25	9.0
<b>Total</b>	<b>277</b>	<b>100.0</b>

**Source:** Field survey (2020)

#### 4.1 Demographic Characteristics of Respondents

**Table 4: Demographic data of respondents**

<b>Variable</b>	<b>Category</b>	<b>Frequency (n=252)</b>	<b>Percent (%)</b>
Sex	Male	178	71.0
	Female	74	29.0
Age	<25	5	2.0
	25-35	33	13.0
	36-45	137	54.0
	46+	77	31.0
Education level	Basic level	28	11.0
	Senior High School	16	6.0
	<b>Tertiary</b>	<b>208</b>	<b>83.0</b>

**Source:** Field survey (2020)

The study assessed the demographic characteristics of the respondents as shown in Table 4. The variables examined included age of respondents in years, sex and educational status. With reference to sex or gender, 178 of the respondents representing 71% were males and 74 respondents representing 29% were females. Thus more males than females participated in the work.

The results also showed that 137 respondents representing 54% were aged between 36 and 55 years. It was seen that 208 of the respondents representing 83% indicated that they had tertiary qualifications like diploma, degree and masters. On the other hand, 16 respondents representing 6% had Senior High School or equivalent qualification.

## 4.2 Level of Financial Literacy among Respondents

**Table 5: Level of financial literacy among respondents**

Variable	Category	Frequency (n=252)	Percent (%)
Simple interest	10	86	34.0
	100	124	49.0
	Do not know	42	17.0
Division	GH¢400,000	187	75.0
	GH¢40,000	41	16.0
	GH¢2000,000	11	4.0
	Do not know	13	5.0
Time value money	Both are rich	113	45.0
	My friend	124	49.0
	His siblings	119	47.0
	Do not know	42	17.0
Compound Interest	GH¢ 220	99	39.0
	GH¢ 242	70	27.0
	GH¢ 240	57	23.0
	Do not know	26	10.0
Inflation	Less than	65	26.0
	More than	50	20.0
	Exactly the same	58	19.0
	<b>Do not know</b>	<b>90</b>	<b>36.0</b>

**Source:** Field survey (2020)

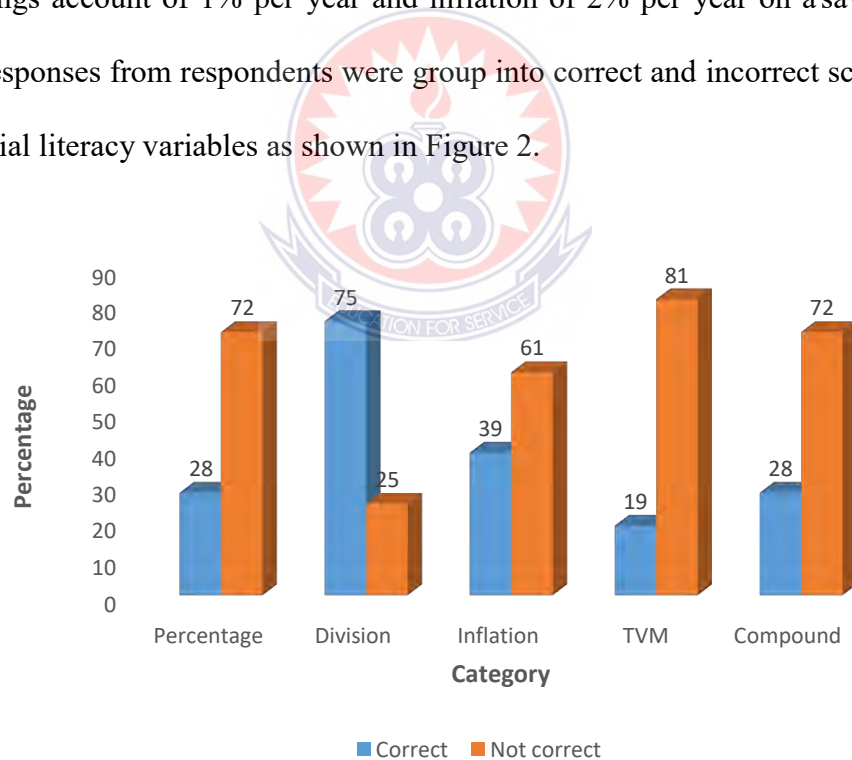
The first objective of the study was to assess the level of financial literacy among Local Government Staff in Prestea Huni-Valley Municipal. A survey questions was used to measure the level of financial literacy of respondents presented in this section. The questions involved fundamental financial and economic concepts such as division, simple interest, compound interest, inflation and time value of money. The



results in Table 5 showed that, most of the respondents (49%) indicated that, 10% out of GH¢1,000 will be GH¢100 whilst on the part of division, majority of the respondents revealed that, GH¢2 million divided among 5 people, each will get GH¢400,000.

The results also showed that, most of the respondents (49%) revealed that a friend who inherits GH¢10,000.00 today and his sibling GH¢10,000.00, in three (3) years from now the friend will be richer than the siblings.

Most of the respondents (39%) revealed that GH¢200.00 in a savings account will yield 10% compound interest per year of GH¢ 220.00. On the part of inflation, majority of the respondents (36%) revealed that, they do not know the interest rate on a savings account of 1% per year and inflation of 2% per year on a saving account. The responses from respondents were group into correct and incorrect scores per each financial literacy variables as shown in Figure 2.



**Figure 2: Assessment of financial literacy**

**Source:** Field survey (2020)

From the results obtained, majority of the respondents did not score correct

answers on the variables used to assess financial literacy. For instance, 39% had correct answers to the question on inflation, 28% for percentages and compound interest, 19% for the time value of money and 75% for division. Of the five (5) variables (percentages, compound interest, division, time value of money and inflation) studied, correct scores were far below average with the exception of the question on division which had correct answers over 75%. The levels of financial literacy were thus found to be very low among the Local Government Service (LGS) Staff in the Prestea Huni-Valley Municipal. Financial literacy surveys have used similar set of questions in many countries around the world.

For instance, similar set of questions were used in Germany, Netherlands, Italy, Sweden, Russia, Japan and New Zealand (Lusardi & Mitchell, 2011). Some of these questions have also been fielded in Australia (Agnew, et.,al., 2012; Bateman et al., 2013) and in France (Arrondel, Debbich & Savignac, 2012). All these have shown low levels of financial literacy around the world. The finding in this study is thus similar to findings of other studies on financial literacy levels worldwide (Al-Tamimi & Kalli, 2009; Assefa & Rao. 2018). Similarly, studies by Atkinson and Messy (2012) also find substantial financial illiteracy in 14 countries at different stages of development in four continents.

These have some implications for staff participation in the financial markets especially in the stock markets. Thus studies by Van Rooij, Lusardi and Alessie (2011) postulated that people do not participate in the financial markets because of low level of financial literacy about the stock market. Similarly, Christelis et.al., (2007) revealed that financial literacy was a good predictor of financial market participation. The lack of financial literacy knowledge will prevent people from

participating in the financial markets as they are unaware of the investment vehicles available.

It has also been established that people lacking financial literacy are likely to save less and borrow more loans. This is due to the fact that an understanding of basic financial literacy concepts including interest rate, compound interest, risk and inflation are needed for one to make an informed decision. It was also established that people with low financial literacy would decline to plan for their retirement and thus partake in few investment issues (Agarwal et al., (2009).

### **4.3 Relationship between Financial Literacy and Demographic**

#### **Characteristics**

Whereas financial literacy has been measured low in many countries, it has been observed to be related to some demographic factors. Demographic factors like age, sex, income level, education level among others have been explored by several researchers. However, sex or gender and educational level were considered in this research.

H<sub>0</sub>: There is no association between gender or sex and financial literacy. H<sub>1</sub>: There is an association between gender or sex and financial literacy.

The first hypothesis was whether or not gender or sex has an association with financial literacy levels of respondents. To be able to either accept or fail to accept this hypothesis, I used Chi-Square Test of Independence in relation to the correct scores for the variables given as shown in Table 6.

**Table 6: Sex and financial literacy**

Characteristics	Sex		Total	X <sup>2</sup>	p-value	Phi
	Male	Female				
Percentages						
Correct	74(41.6)	33(44.6)	107(42.5)	.282	0.659	0.028
Incorrect	104(58.4)	33(44.6)	148(57.5)			
Interest						
Correct	48(27.0)	22(29.7)	70(27.8)	.199	.656	.028
Incorrect	130(73.0)	52(70.3)	182(72.2)			
Division						
Correct	135(75.8)	55(74.3)	190(75.4)	0.065	.799	-.016
Incorrect	43(24.2)	19(25.7)	62(24.6)			
Inflation						
Correct	66(37.1)	32(43.1)	98(38.9)	0.836	.361	-0.058
Incorrect	112(62.9)	42(56.8)	154(61.1)			
Time value of money						
Correct	30(16.9)	19(28.7)	49(19.4)	2.597	.107	0.102
Incorrect	148(83.1)	55(74.3)	203(80.6)			

**Source:** Field survey (2020)

The first hypothesis was whether or not gender and financial literacy are not independent. This was explored as stated using a chi-square test of independence. From the results in Table 6, about 45% of women had the correct answer for percentages compared to about 42% for their male counterparts. This difference was however not significant ( $X(1) = 0.282, P=0.659$ ). The relationship as shown by the phi was very negligible, 0.028.

In terms of interest rate calculations, there was a slight difference in literacy levels between male and females in nominal terms but this was not statistically significant (29.7% for men as against 29.7% for women). This difference was not significant, ( $X^2(1) = .199, p = .656$ ). The correct scores for division for both men and

women were higher but there was some difference. This difference was however not significant. On inflation, there was still no significant difference between male and female in terms of financial literacy levels.

On the issue of the time value of money, in nominal terms, there was a slight difference between men and women on the issue of financial literacy of the time value of money. This, however, was not significant ( $X^2(1) = 2.597, p = 0.107, \phi = 0.102; X^2(1) = 138.9, p < .001$ ).

In all the analysis using the Chi square test of independence, there were differences between men and women for percentages, division, compound interest, time value of money and inflation but all of these were not found to be significant. I therefore fail to reject the null hypothesis that financial literacy is independent of gender or sex.

In other words, the financial literacy level of a person and hence the ability of the person to perform calculations in percentages, his or her understanding of inflation and other economic variables is not based on the sex of the person. The differences could result from the level of education or programme of study of employees.

This result is consistent with work of Adam (2017) who conducted a study on students at the University of Cape Coast and concluded that though males were slightly literate than females in all the composition none was statistically significant.

However, it is inconsistent with the findings of Van Rooij, Lusardi and Alessie (2009) that vast differences exist in knowledge levels among women and men. Men display a higher level of financial knowledge compared to women.

Assefa and Rao (2018), asserted that women were generally less financially literate than their males' counterparts.

#### 4.4 Relationship between Financial Literacy and Education

**Table 7: Education and financial literacy**

Characteristics	Sex		Total	X <sup>2</sup>	p-value	Phi
	Educated	Uneducated				
Percentages						
Correct	104(46.4)	3(10.7)	107(42.5)	12.994	0.000	0.227
Incorrect	120(53.6)	25(89.3)	145(57.5)			
Interest						
Correct	69(30.8)	1(3.6)	70(27.8)	9.200	.002	.191
Incorrect	155(69.2)	27(96.4)	182(72.2)			

**Source:** Field survey (2020)

**H<sub>0</sub>: Educational level and financial literacy are not independent**  
**H<sub>1</sub>: Educational level and financial literacy are independent**

The second demographic factor explored the relationship between education and financial literacy, this was done using interest and percentages computation. From the results in Table 7, with reference to percentages, within the uneducated category, more than 89.3% of respondents answered the question on percentages wrongly compared to 53.6% for those who were educated. This difference was significant ( $\chi^2 = 12.994$ ,  $df=1$ ,  $p \leq 0.05$ ) and therefore the null hypothesis that financial literacy is not dependent on educational level was rejected. Similarly, at 5% significant level, there were significant differences for interest rates ( $\chi^2 = 9.200$ ,  $df=1$ ,  $p=0.002$ ).

The finding in Table 7 concludes that there was an association and therefore I accept the alternative hypothesis and rejected the null hypothesis that educational level is independent of financial literacy. Financial literacy was found to be highly

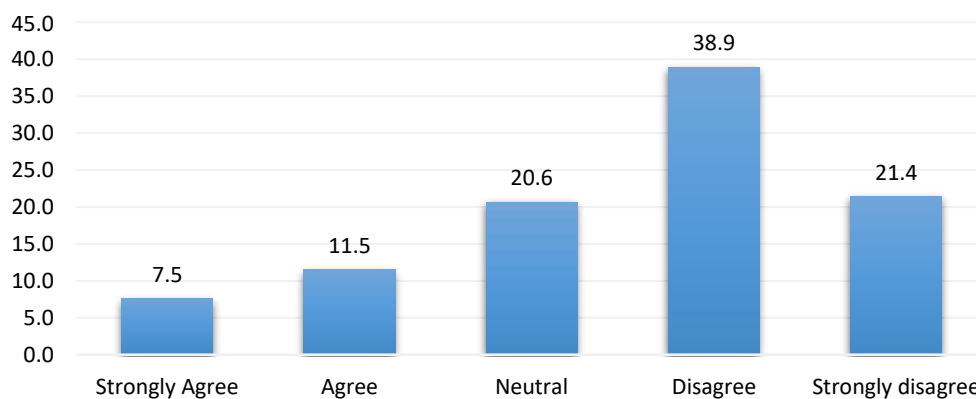
correlated with educational level. This is consistent with findings of Assefa and Rao (2018) who concluded that financial literacy was found to be extremely correlated with education and has an impact on financial product awareness (Yong & Sellappan, 2010; Bhushan & Medury, 2013)

#### 4.5 Financial Literacy and Personal Financial decisions

The third objective was to assess financial literacy and personal financial decisions individuals make like budgeting, savings and investments normally incorporating some attitude and behaviors.

#### 4.6 Budgeting and Expenditure Management

One best way to track one expenditure is to have a budget, either monthly or weekly or even yearly. Budgeting is seen as a quantitative plan of action prepared in advance of the period to which it relates and normally expressed in financial terms. One personal financial decision of staff explored was whether or not they prepare budget at the beginning of a month and stick to it.



**Figure 3: Budget setting among staff**

Source: Field survey (2020)

From Figure 3, for budgeting, 7.5% strongly agree that they have a budget and spend according to it, 20.6% said they were neutral and 38.9% do not have a budget.

With regards to the management of expenditure, respondents were asked if they pay their bills or money borrowed in time. From Table 8, majority of them (52%) stated that they disagree with the statement that they pay money owed or borrowed or their bills in time. Only 4.4% stated that they strongly agree that they paid their bills or money borrowed in time.

**Table 8: Pay money borrowed or bills on time**

Characteristics	Frequency	Percent
Strongly Agree	11	4.3
Agree	39	15.5
Neutral	33	13.1
Disagree	131	52.0
Strongly Disagree	38	15.1
<b>Total</b>	<b>252</b>	<b>100.0</b>

Source: Field survey (2020)

#### 4.7 Saving and Investment

If one is able to control expenditure, he or she would be able to save. Saving benefits not only the individual but also the whole nation as it provides the basis for long term investment. For saving as shown in table 9, about 11.9% strongly agree that they have a saving plan and save at least 10% of every income every month, while, 28.6% also agree that they save at least 10% of their income and stick with it whilst 38.9% respondents disagree.



To make savings and investment behavior, one requires knowledge in the investment vehicles including risks. Investment vehicles used in this research were to assess staff knowledge in stocks, bonds, mutual funds and other vehicles and if they have invested in term.

In terms of investment, respondent was asked if they know about stocks, bonds, mutual fund and other investments vehicles, about 28.6% respondents agree that they know about these investments and have invested, while 26.6% strongly disagree.

**Table 9: Saving and Investment.**

Characteristics	Frequency	Percent
Save at least 10% of every income		
Strongly Agree	19	7.5
Agree	29	11.5
Neutral	52	20.6
Disagree	98	38.9
Strongly Disagree	54	21.4
Investments		
Strongly Agree	30	11.9
Agree	72	28.6
Neutral	56	22.2
Disagree	67	26.6
Strongly Disagree	27	10.7

**Source:** Field survey (2020)

#### **4.8 Investments and Risk**

Risk is a key concept when it comes to financial decision making especially when it comes to taking decisions in investments and this affects staff investment behavior. Thus respondents make a lot of personal investment decisions in their daily lives especially regarding where or how to save or invest funds either for future returns or to meet some future emergency.

The first question sought respondents' understanding of whether or not an investment that promises very high return with little risk is a scam or not. Out of the 252 respondents, 119 constituting 47.2% believe that an investment that promises a high return with little risk is a scam. Another 92 respondents representing 36.5% said it was not a scam. Also 11.9% claimed that they do not know and 4.4% responded that they do not understand.

Certain investments are made to a few or select individuals. From the results, the responses showed that, 120 representing 47.6% asserted that it is a scam, while 98 respondents representing 38.9% responded that it is not a scam. Risk is a major concept when it comes to financial decision making especially when it comes to taking decisions in investments and this affects staff investment behavior.

Thus respondents make a lot of personal investment decisions in their daily lives especially regarding where or how to save or invest funds either for future returns or to meet some future emergency. The study sought to ascertain how risks influence the investing behavior of respondents by posing a number of questions which guide investment and respondents were to identify whether or not they were scam (Table 10).

From Table 10, the first question sought respondents understanding of whether or not an investment that promise of very high return with little risk is a scam or not. Out of the 252 respondents, 119 constituting 47.2% believe that an investment that promises a high return with little risk is a scam. Another 92 respondents representing 36.5% said it was not a scam. Also 11.9% claimed that they do not know and 4.4% responded that they do not understand.

**Table 10: Risk and Investment**

Characteristics	Percentage			
	1	2	3	4
Promise of very high returns with little risk	47.2	36.5	11.9	4.4
Being told the offer is only being made to a select few people	47.6	38.5	9.5	4.4
Being offered by a well-known reputable financial organization	15.1	69.8	11.5	3.6
The minimum amount they say you have to invest keeps reducing	50.8	27.8	19.0	2.4

**Source:** Field survey (2020)

From the results in Table 11, it was revealed that, majority of the respondents, 150 representing 59.6% revealed that financial planning was not only about investment whilst 183 representing 72.6% indicated that financial plans should take into account possible changes in your life.

#### **4.9 Financial Literacy and Retirement Planning**

The fourth objective was to explore the relationship between financial literacy and retirement planning.

**Table 11: Financial literacy and retirement planning**

<b>Characteristics</b>	<b>True</b>	<b>False</b>	<b>Don't Know</b>	<b>Don't Understand</b>
Financial plans are set up once and you use that same plan throughout your life	104(41.3)	105(41.7)	38(15,1)	5(2.0)
Financial plans should take into account possible changes in your life	183(72.6)	44(17.5)	22(8.7)	3(1.2)
Financial planning is about investment only	52(20.6)	150(59.6)	42(16.7)	8 (3.1)

**Source:** Field survey (2020)

From the table 12, it was observed that, majority of the respondents representing 83% indicated they had ever heard of Three Tier Pension Scheme, however, only 17% was able to identify them correctly. Similarly, 23% of the respondents revealed that they think about their retirement a lot while 33% do not think about their retirements. It was also observed that only 17% stated that they can meet their retirement set amount when they retire.

**Table 12: Retirement planning**

<b>Variable</b>	<b>Category</b>	<b>Frequency (n=252)</b>	<b>Percent (%)</b>
Retirement	Little	83	33.0
	A lot	59	23.0
	Fair amount	66	26.0
	Not at all	28	11.0
	Do not know	16	6.0
Three Tier Pension	Yes	208	83.0
	No	44	17.0
Category of Tier Pension	Correctly	70	28.0
	Not correctly	182	72.0
Amounts for retirement	<GH¢100,000	20	8.0
	GH¢100,000- GH¢200,000	50	20.0
	>GH¢300,000	182	72.0
	Met amount	Yes	40
	<b>No</b>	<b>212</b>	<b>83.0</b>

**Source:** Field survey (2020)

The personal financial decisions and retirement planning among respondents were assessed at the study setting. From Table 13, the results showed that, majority of the respondents representing 78% indicated that they make personal financial goals whilst most representing 42% revealed that they set financial plans once.

**Table 13: Personal financial decisions and retirement planning**

Variable	Category	Frequency (n=252)	Percent (%)
Personal financial goal	Yes	196	78.0
	No	56	22.0
Financial plans set once	True	105	42.0
	False	104	41.0
	Neutral	43	17.0

**Source:** Field survey (2020)

The results portrayed an association between financial literacy levels with that of individual investment decisions in their daily and future lives. Those with high financial literacy are less likely to invest in risky assets compared to their counterparts who invest mainly based on their emotions or feelings or perceptions (Grinblatt et., al.,2010). They are likely to pursue information from networks and family members or rely on the rewards in identifying whether or not an investment is risky or scam.

This therefore shows that people lacking financial literacy have the probability to save less and borrow extra loans and those with low financial literacy would not strategize for their retirement and thus participate less in investment activities (Agarwal, Driscoll, Gabaix, & Laibson, 2009).

Financial illiterate staff also tend to be short sighted when making financial decisions and thus ill-prepared for retirement. The lack of knowledge about the Three Tier Pension Scheme which is compulsory for LGS staff, portrays a lack of interest in pension issues about staff. Most staff do not know how much they have contributed and how much would be paid when they retired. It was thus seen that many if the

respondents mentioned amounts greater than GH¢300,000 as amounts required when they retired but these were not something attainable per their salary levels.

It has been observed the mere fact that an individual think about retirement will propel the individual to be better prepared in terms of financial buffers. This is due to the fact that the propensity to plan contribute to differences in wealth holdings for otherwise similar households or individuals (Lusardi 2003; Lusardi & Mitchell 2007; Ameriks, Caplin & Leahy, 2003) owing to the strong association between financial knowledge and retirement planning. In other words, planners are more likely to accumulate more money for their retirement than those who do not plan.

This finding is similar to Lusardi and Mitchell (2006) and Van Rooij, Lusardi and Mitchell (2008) who used inflation and compound interest found a correlation with retirement planning. They then concluded that the mere fact that an individual is trying to calculate how much is needed to be safe for retirement and devising a plan is shown to correlate with greater savings close to retirement. Similarly, Van Rooij, Kool and Prast (2007) observed that employees in the Netherlands lack knowledge in their pension plan and Rooij, Lusardi and Alessie (2009) that many employees in the US who are in the verge of retirement do not have enough savings.

There is however a strong need for local government staff to plan for their retirement. This will help them in their accumulation for retirement. It will also help in bridging the gap between the amount needed when one retires and the amount to be received from the retirement.

It must be noted that the measurement of any level of financial literacy will suffer from limitations, thus financial literacy measures serve as proxies for what intertemporal models of financial decision making will posit (Lusardi and Mitchell, 2013). The measurement of financial literacy is consequently likely to be affected by the issue of measurement mistake and this might not measure true financial literacy levels.

#### **4.10 Chapter Summary**

This chapter assessed the financial literacy of respondents and its relationship to personal financial management including retirement planning. It was observed that the financial literacy levels of respondents were very low. Respondents had difficulty calculating certain financial concepts like compound interest and time value of money.

It was also observed that financial literacy levels were not dependent on gender or sex. On the other hand, educational level was seen to be highly correlated with financial literacy. Those who were educated were more literate than those who were not. Retirement planning was also seen to be highly correlated with financial literacy. Those who understand financial literacy were more prepared to plan for their finances and retirement planning.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

The main purpose of the study was to assess the financial literacy level of Local Government Staff in the Prestea Huni-Valley in the Western Region and its impact on their personal financial decisions. A structured questionnaire based on a set of questions which have been used by many writers in assessing the level of financial literacy of people worldwide was used. The data was collected and analyzed using SPSS (Chi Square Test of Independence) and Microsoft Excel 2016. The hypothesis which guided the research work were to determine whether financial literacy levels were independent of demographic characteristics (sex and education). These hypotheses were tested in chapter four and this chapter will thus present a summary of the results, the conclusion drawn and the recommendations.

#### 5.1 Summary of Findings

- The first objective was to assess the level of financial literacy of respondents.

The study showed that there is a low level of financial literacy among the staff in the Prestea Huni-Valley Municipal.

- The second objective was to assess the association between financial literacy and demographic characteristics (sex and education). On the relationship between financial literacy and gender or sex, the study rejected the H<sub>0</sub>: that there is an association between gender and financial literacy. Thus the ability of a person to

perform simple financial calculations and also understand them is not based on the sex of the person.

- However, the study rejected the null hypothesis that there is no association between education and financial literacy. This means that those who are educated are more likely to perform better financially than those who have not got any education.
- The third objective was to assess the level of personal financial decisions of staff, it was revealed that most respondents do not have a budget and those who have do not stick to them. This makes them prone to spend money obtained on impulse.
- The final objective considered retirement planning. The study indicated that most of the respondents think about their retirements. However, the study revealed that though majority had an expectation of a certain amount to be obtained during retirement, they realized that it could not be attained from their pension contributions.
- Similarly, though respondents know about the Three Tier Pension Scheme, they could not identify them. Something which was very alarming.

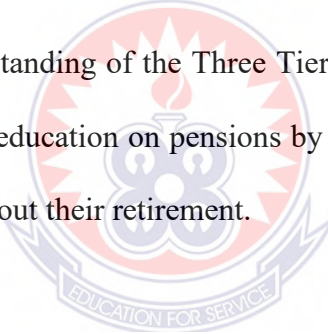
## **5.2 Conclusion**

There is a low level of financial literacy among local government staff in the Assembly because the assembly and for that matter the Service places much emphasis on work related development of staff than their financial development. There was no association between financial literacy and sex or gender because both males and females working on at the Local Government Service or

the Metropolitan, Municipal and District Assemblies (MMDAs) are employed based on competence. It could also be that the service is employing many graduates into the various departments. The more knowledgeable a staff is the more he or she is likely to take control his/her finances and thus plan to meet his/her future. On the issue of education, there was an association between financial literacy and educational level because those who have not been to at least Junior High School might have difficulty understanding the financial concepts.

Staff were not preparing budgets and this made it difficult for them to put money aside for saving or to pay other debts or bills. Most of them therefore had little money set aside for either investment or to meet emergencies. Those who were able to invest rely on the advice of friends or relatives.

The lack of understanding of the Three Tier Pension Scheme could be due to the fact that there is little education on pensions by the MMDAs. It could also be that staff do not think much about their retirement.



### **5.3 Recommendations**

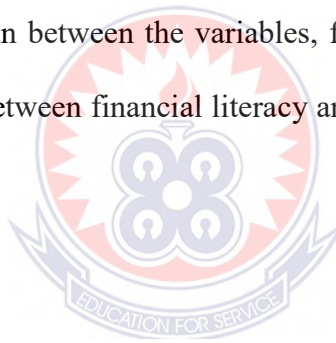
1. Staff should take the issue of financial literacy and personal financial management issues serious by not only going back to school but taking advantage of the expert advises from prominent financial institutions.
2. The results show low levels of financial literacy among the Local Government Staff, it is therefore recommended that the Office of the Head of Local Government Service (OHLGS) organize financial literacy especially on Pensions and retirement planning as well as investment

programmes for staff in the MMDAs as part of the capacity building process.

3. It is again recommended that MMDAs contact experts to take their staff through the Three Tier Pension scheme for them to know how they can contribute to enhancing their retirement amounts as most of the respondents all claim that the money they expect during retirement cannot be realized from their benefits.

#### **5.4 Suggestions for Future Research**

It is recommended that future researchers examine the impact of financial literacy on workplace productivity. Similarly, the study was restricted by the fact that the choice of statistical technique, the Chi Square Test of independence did not explain the strength of the relation between the variables, further research could explore the strength of relationship between financial literacy and personal financial management using another technique.



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## APPENDIX

### Questionnaire Personal Information

1. Department.....
2. Sex a)  
Male.....b)Female.....
3. Age.....a) Less than 25.....b) 25 to 35 c) 36 to 45  
d) 46 to 55 e) Above 55
4. Educational background a) BECE b) SSSCE/WASSCE c)  
Tertiary  
c) None

#### 5. Basic Level of Financial Literacy

S/n	Nature	Question
a.	Numeracy- percentage	If the chance of getting a disease is 10%, how many people out of 1,000 would be expected to get the disease? (i) 100 (ii) 10 (iii) 11 (iv) Do not know
b.	Numeracy division	If 5 people all have the winning number in the lottery and the prize is GH¢2million, how much will each of them get? (i) GH¢ 400,000 (ii) GH¢ 40,000 (iii) GH¢ 2,000,000 (iv) Do not know
c.	Compound interest	Let's say you have GH¢200 in a savings account. The account earns 10% interest per year. How much would you have in the account at the end of two years? Assuming you did not take out the money and interest after first year. (i) GH¢ 220 (ii) GH¢ 242 (iii) GH¢ 240 (iv) Do not know
d.	Time value of money	Suppose you have a friend inherits GH¢10,000 today and his siblings inherits GH¢10,000 3 years from now. Who is richer because of the inheritance? (i) My friend (ii) His sibling (iii) They're equally rich (iv) Do not know
e.	<b>Inflation</b>	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? (i) More (ii) Less (iii) Exactly the same (iv) Do not know

#### 6. Retirement Planning

7. To what extent have you thought about your financial planning for your retirement? a) A lot b) A fair amount c) A little d) Not at all e) Don't know

8. How much would you need to have in your account when you retire(GH¢... )?  
 9a. Can this amount be realized from your retirement payment? Yes/No  
 9b. If no, how will the deficit be realized?.....  
 .....
11. Do you know about the three tier pension scheme? Yes/No  
 12. If yes what are they (i).....  
 (ii).....(iii).....

**Investing**

13. The following statements are about an investment. Determine whether the investment might be 1) A Scam 2) Not A Scam 3) Don't Know 4) Don't Understand. Please tick (√)

S/N	Nature	1	2	3	4
1	Promise of very high returns with little risk				
2	Being told the offer is only made to few people				
3	Being offered by a well-known reputable financial organization				
4	The minimum amount they say you have to invest keeps changing				
5	My friends/relatives have invested in it				

14. The following statements are about financial plan. Determine whether or not you think the statement is 1) true 2) false 3) don't know 4) Don't understand

S/N	Nature	1	2	3	4
1	Financial plans are set up once and you use that same plan throughout your life				
2	Financial plans should take into account possible changes in your life				
3	Financial planning is about investment only				

15. The following statements are about attitude and behavior. Please use a scale of 1 to 5, where 1) Strongly Agree 2) Agree 3) Neutral 4) Disagree 5) Strongly Disagree



S/N	Nature	1	2	3	4	5
1	I tend to live for today and let tomorrow take care of itself					
2	I find it more satisfying to spend money than to save it for the long term					
3	I pay my bills on time					
4	I am prepared to risk some of my own money when saving or making an investment					
5	I keep a close personal watch on my financial affairs					
6	I set long term financial goals and strive to achieve them					
7	Money comes for spending					

Thank you.

