

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

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Determinants of Micro-insurance Subscription amongst Households in the Tamale
Metropolis

By

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DECLARATION

I hereby declare that this submission is my work and that to the best of my knowledge, it contains no materials previously published by another person or material which has been accepted for the award of any other degree of the university, except where due acknowledgment has been made in the text.

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DEDICATION

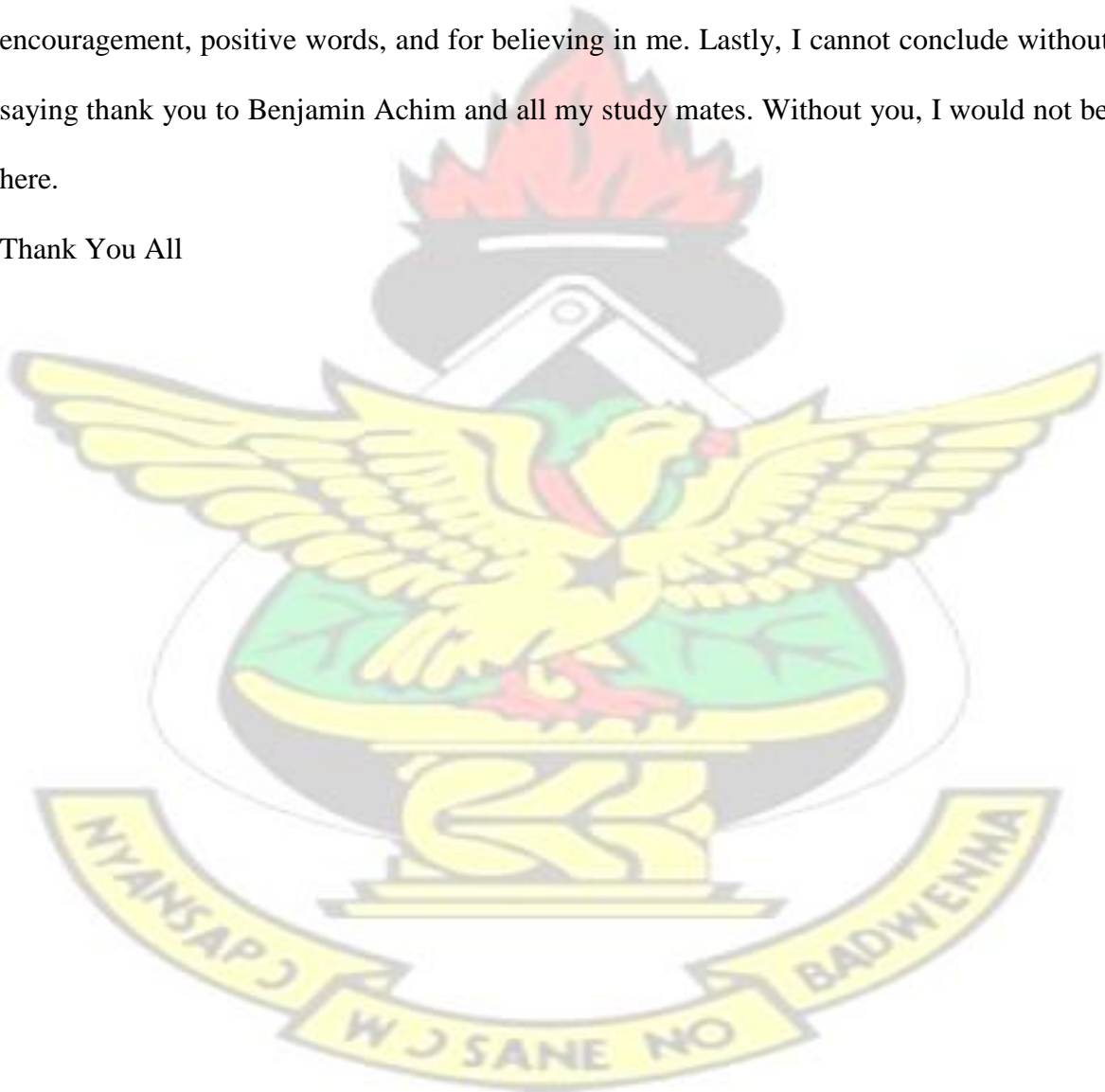
This study is dedicated to Jesus Christ the living and eternal one full of love, grace, mercy, truth, light, righteousness and life, and my Lord and Salvation. Further, I dedicate this work to the Holy and perfect Spirit of Christ who has is my leader, helper, strengthener, and advocate.



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Thank You All



ABSTRACT

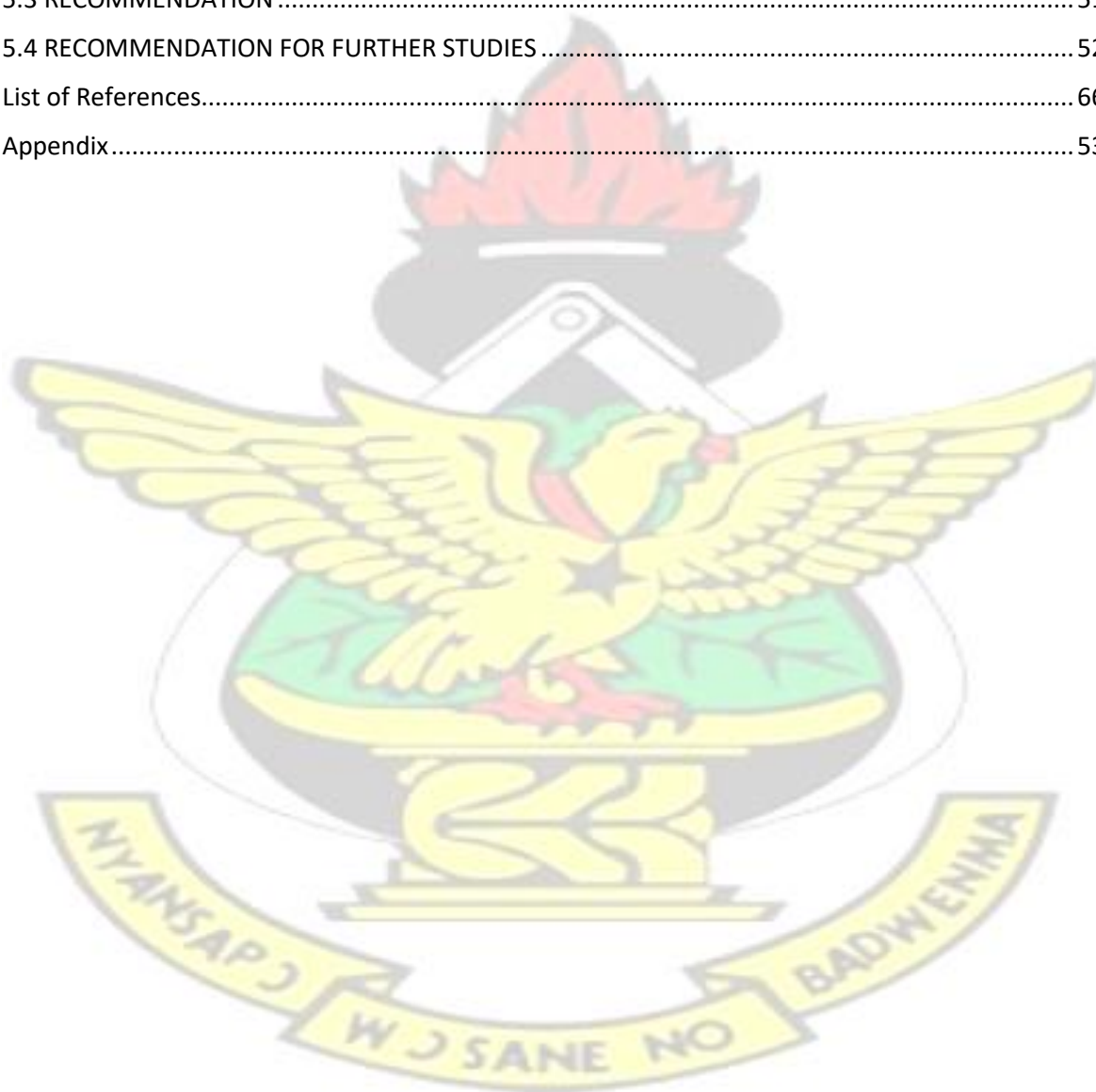
In Ghana, the level of demand for microinsurance is low with about 1.6% patronage as against about 5% in Ivory Coast, 8% in Namibia, and 16% in South Africa (National Insurance Commission, 2008). The study generally examines the determinants of the household's subscription for microinsurance products in the Tamale metropolis. Specifically, the study investigates the level of awareness of microinsurance to households and the factors influencing household's subscription to microinsurance. The study adopts a survey research design with a multistage sampling procedure to collect data on 399 households in the Tamale metropolis. The collected data were analyzed using Excel and descriptive statistics. The result showed that most households were aware of microinsurance and its products. It found out that households received information about microinsurance and its schemes mostly through microinsurance agents and family and friends respectively. The study also revealed, investment, savings mobilization, and risk aversion predominantly influence microinsurance scheme subscriptions positively. However, knowledge, trust, the process of claiming benefits were found to negatively affect household subscriptions to microinsurance schemes. Also, the study revealed that product accessibility and the narrowness of service coverage did not influence microinsurance demand. Therefore, the study recommends that microinsurance companies should increase and prioritize microinsurance education radio/TV and internet advertisement. Also, training staffs most especially the company's agents in marketing and/or communication.

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CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

The role of the financial system in the economic development of a nation cannot be overemphasized. Evidence from Sutton and Jenkins (2007) as well as Honohan (2007) shows that countries that have well-established, efficient, and properly utilized financial systems have less poverty rates. Several studies have concluded that the deepening of the financial sector contributes to the reduction in poverty levels (Beck et al -2007; Jalilian and +- Kirkpatrick-2005; Quartey -2005).

In the late 1980s, most African economies restructured their economies to fight against poverty and to improve their economic growth. The Ghanaian financial system saw its great transformation since the implementation of a joint IMF-World Bank Financial Sector Assessment Program (FSAP) in 2000 (Bawumia et al., 2008). Such reforms targeted at combating poverty, which have led to the wide popularity of microinsurance.

Micro-insurance is a financial discipline that embodies the concept of microfinance insurance potentially, is one of the basic institutions which can provide a defense mechanism against social and financial exclusion for people whose existing coping strategies are failing (Asmare & Worku, 2018). Besides, it is an instrument for increasing economic growth and development by providing small-scale, low premium insurance policies to members of the poorest strata of society in the developing world (Siegel et al., 2010).

According to the International Association of Insurance Supervisors (2007), micro insurance is seen as Insurance that is designed to serve the needs of the low-income population,

delivered by a variety of diverse bodies but work in tune with generally accepted insurance practices. The risk insured under a micro-insurance policy is managed with insurance principles and funded by premiums. People's livelihoods are effectively protected, encourage investments amongst lower-income groups, and raise overall investment and growth rates (Churchill, 2006). Although Ghana became a middle-income country in 2010, Ghanaians are still wallowing in abject poverty according to Cooke, Hague, and Mckay (2016). Besides, the 2017 poverty survey report indicated that there was a monumental incidence of poverty in the country using non-monetary measurements than income poverty measurements. From the report, the Greater Accra region was the least poor region in the country (Ghana Statistical Service, 2017).

Development economics researchers showed that microinsurance as a development instrument has steadily gained popularity over the last decade in low- and middle-income countries (Dror & Preker, 2002; Churchill, 2006). This concept recently arose out of the micro-finance family, where micro-credit and micro-savings have long held the position in terms of most implemented, most developed, and most researched. A common trait of all three concepts is that they generally serve low- to- middle-income people who are not considered under formal financing markets, mechanisms, and products.

Despite the boom of microinsurance in Ghana and the pivotal function it performs in the socio-economic improvement of Ghana, there are still issues negatively influencing the realization of its full potentials. The degree of focus of microinsurance in Ghana is relatively low (subscribed in most cases via the Erudite). In most cases, people dwelling in Africa have to carry the economic burden of catastrophes themselves, barring access to insurance or

government assistance. In Ghana, access to insurance policies as of the year 2010 was low: 4.1% (excluding public health insurance).

In the 1980s, most insurance firms into the sale of susu-type of micro-insurance products, unfortunately, failed due to problems with a premium collection as well as the high lapse rate of policies (National Insurance Commission, 2008). Again, preceding research suggested a lack of knowledge about insurance products, and to an extent misunderstanding of the concept of insurance debts for the low subscription of insurance amongst the low-income population in Ghana. Ackah and Owusu (2012) also revealed low insurance policy uptake is a result of the popular lack of insurance knowledge amongst the populace, low earnings tiers, and the reliance on God's protection to forestall calamities.

1.1 PROBLEM STATEMENT

Since the first mention of the term "microinsurance" by (Dror and Jacquier, 1999) to be a voluntary, group-based, self-help insurance, Subsequent microinsurance has grown into a global industry with a market coverage of about 4 billion low-income persons with a high chance of generating US\$40 billion (Swiss Re, 2010). In 2007 only 1.95% of the forecasted market of 4 billion people were covered (Roth et al., 2007). This has however increased tremendously to 4.35% of the 4 billion people in India, 1.11% in Africa, and 1.125% in Latin America (McCord et al., 2012; ILO, 2013). The microinsurance market in Africa has seen steady progress and persistence in lives covered by nearly 30% and premiums rise by 63%. The market reveals dynamism with at least 37 new market entrants and nearly 100 new products whilst at the same time seeing 46 products taken off the market and eight providers choosing to stop their microinsurance programmes. Most of these new products were introduced in Ghana, Kenya, Zambia, and Nigeria. (Landscape and Map, 2015)

In Ghana, the private microinsurance market covers about 1.26 million policyholders and generates a premium income of about GHS11.70 million (US\$6.09 million) (Buabeng & Gruijters, 2012). The government health insurance scheme also covers about 10.3 million low-income households living and working in the informal sector (Nsiah-Boateng and Aikins, 2018).

Despite the impressive growth in the market size, Ghana has seen less insurance penetration with about 1.6 percent patronage as against about 5 percent in Ivory Coast, 8 percent in Namibia, and 16 percent in South Africa (National Insurance Commission, 2008). This shows that there is indeed either low patronage or provision of microinsurance in Ghana.

Currently, the case of Tamale has seen few microinsurance products been sold in the metropolis. An example is Star Microinsurance Services Ltd which is the only insurance company in Tamale providing most microinsurance products but has very few policyholders. Therefore, the need to find methods of getting many low-income earners to subscribe to microinsurance policies in the metropolis is very crucial given that the Northern region is the poorest in Ghana representing 50.4% [GSS, 2018] with a population of 1,905,628 (GSS 2019).

Identifying the potential demand for microinsurance products particularly by the low-income group should be of interest in all economies because the first of the millennium development goals is to reduce by half the percentage of people suffering from abject poverty and starvation (Loewe, 2006). The aim of this paper, therefore, is to identify the factors influencing the subscription for microinsurance products in Tamale particularly by the low-income group alongside assessing the level of awareness of microinsurance.

1.2 OBJECTIVES OF THE STUDY

The general objective of the study is to identify the determinants of household subscriptions for microinsurance products in the Tamale metropolis.

The specific objectives however are:

1. To determine the level of awareness of microinsurance to households.
2. To identify the factors influencing household subscription to microinsurance.

1.3 RESEARCH QUESTIONS

1. What is the level of awareness of microinsurance products among households?
2. What are the factors that influence a household's subscription to microinsurance products?

1.4 SIGNIFICANCE OF THE STUDY

This research hoped that the result of this study (determinants of microinsurance subscription of households within the Tamale metropolis) would make a contribution to contemporary knowledge on micro-insurance cognizance amongst low-income earners and its effect on poverty reduction. This will complement, to a massive extent, the efforts of the National Insurance Commission (NIC) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in promoting micro-insurance in Ghana.

Again, the discovery unearthed will be beneficial not only to insurance service vendors inside the city but additionally to all insurance service providers in the country. This would also help stakeholders in insurance commercial enterprise to formulate and enforce policies that will help them to efficiently increase the level of awareness and design products to suit

low-income earners. Lastly, the findings of this study will serve as a piece of information for future research work in the area of microinsurance and its components.

1.5 BRIEF METHODOLOGY

The study adopts a survey research design with a multistage sampling procedure to collect data on 399 households in the Tamale metropolis. Data was gathered by administering a questionnaire and analyzed using Excel and descriptive statistics.

1.6 SCOPE OF THE STUDY

The study relied on primary data. The study administered a questionnaire. The study covered all households in the Tamale metropolis of the Northern region of Ghana. 399 households were sampled due to financial challenges and time constraints. To achieve the designated objectives of the study, the study further categorized the sampled communities into income groups. Again, four communities out of each income group were randomly selected.

1.7 LIMITATION OF THE STUDY

The researcher faced some challenges in carrying out the study, these include;

Data collection was delayed and made difficult because of the physical distancing restrictions and the closure of the insurance company due to covid-19. This was a very disturbing situation. Also, constraint emanates from the insufficiency of secondary information.

The sample size for the respondents in this study used was small as microinsurance is comparatively a very new concept in Tamale. The sample size was time and convenience-based due to the covid-19 pandemic. Although the main findings of the research are steady

with the analytical framework of Microinsurance, the above-mentioned barriers of the research need to be taken into consideration by readers.

1.8 ORGANIZATION OF THE STUDY

The research was organized into five chapters; Chapter one gives an introductory overview of the full study comprising the statement of the problem, goals of the study, research questions, methodology, and relevance of the study. Limitations of the study, operational definition of terms, and how the thesis was organized are additionally captured in this chapter. Chapter two follows with an analysis of relevant literature on factors influencing the subscription of microinsurance. Chapter three gives the exact methodology used for the study and offers an overview of the population sampling technique, the research design, research instrument, the data collection procedures, and data analysis procedures. It also provided an analytical framework and the relevant variables that were part of the model to be used in the study. Chapter four concentrates on the findings and analysis of the data gathered from the respondents. Chapter five summarizes, concludes, and gives recommendations for future research studies.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter review literature on microinsurance. The chapter focuses on the concept of microinsurance with an emphasis on the determinants of microinsurance subscription of households in tamale. The chapter also includes a theoretical review together with empirical literature in line with the research objectives. The review of the previous investigations which are in line with the present investigation is crucial to put on an improved outlook of the study. A conceptual framework for the study, based on the facts and concepts gathered from the past review work would make it possible to set up the study in an inclusive manner. It will also help to know the previous research work carried out in a particular area and acts as a guide for the researcher to model innovations or progress to modifications as the case may be.

The empirical review is necessary to show whether the evidence already available solves the problem adequately, to avoid the risk of duplication, and to provide an idea, explanations, or to suggest methods of research appropriate to the problem.

2.1 CONCEPTUAL REVIEW

This section reviews and explain concepts, keys words, and areas in microinsurance. Areas looked at are the concept of micro-insurance, meaning of micro-insurance, rationale of micro-insurance, and micro-insurance delivery models.

2.1.1 The concept of microinsurance

The concept of microinsurance is a more complex concept than micro-credit as opined by De Bock and Gelade (2012) and cited in Antoinette, Elijah, and Daniel (2020). According to Churchill (2006), micro-insurance embodies safeguarding the low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk envisaged. The fundamental underlying principle “pooling of risks” operates based on the fact that financial contributions are collected from members of an insurance scheme, and the loss of one individual is spread among all members in case of risk occurrence.

The distinctive line between micro-insurance and regular insurance is that the former is specifically targeted at low-income people, who have limited financial resources and often-irregular income flows. Thus, the product design is tailored to meet the needs of these people and their financial capabilities. With microinsurance, low-income people can hedge risk. Hedging entails minimizing or controlling risk and it is done by taking a position in the futures market that is opposite to the one in the physical market to limit risks associated with price changes (Chakrabarty, 2007).

Microinsurance programs have expanded rapidly in many developing countries over the past 20 years and are now widely regarded as an integral part of the social protection system (Sirojudin & Midgley, 2012). The significant role of the microinsurance industry in scaling up poverty reduction of any nation is pivotal. This is because economic development focuses attention upon the development and use of resources to increase supply and improve the distribution of economic goods as argued by Hilliard (1967) and cited in Shuaibu (2013).

New evidence shows that the finance trinity (i.e. savings, credit, and insurance) can be used not only to assist capital accumulation but also to help smooth consumption and improve

risk-bearing among the productive poor (Rutherford, 2000). The insurance business has witnessed substantial growth in the recent past; the industry now occupies a unique position in the socio-economic development of the country. Apart from the social role it plays by relieving the government of some burden of meeting the financial security needs, insurance can assist economic development generally and the development of the capital market in particular.

Endowment policy seeks to pay the face value of the policy must the insured die within a stipulated period Health Insurance- this kind of microinsurance offers safety towards unexpected illness and accidents. This type of microinsurance plan is no longer generally presented through MFIs and insurance plan companies in Ghana. This is mostly due to the Government of Ghana's implementation of the National Health Insurance Scheme to care for the poor Non-life policy- this kind of policy, particularly property insurance plan affords insurance plan cover against losses and harm of insured's property. What makes this kind tough is the measurement of the extent of harm or loss when a peril occurs. Other insurance policies consist of incapacity insurance (an issue of lifestyles insurance) which presents that insured and his/her family towards damage resulting in bodily injuries and crop insurance which also provides cover in opposition to a natural catastrophe that causes injury to crops. This was once extensively practiced in Ghana in the 70s and 80s. Other gorgeous ones encompass disaster insurance, unemployment insurance, and reinsurance.

2.1.2 Rationale for Micro-insurance

The microfinance industry in offering savings or economic assistance to the terrible for the previous years has learned full-size lessons. Notable amongst them is the truth that the poor does no longer only want savings to improve their livelihood. It is out of this training that

micro-insurance has become the most up-to-date self-discipline within the microfinance enterprise which pursues at protecting in opposition to risks faced by using the terrible (Kloppenburger 2006, Leftley and Mapfumo 2006). Today, microinsurance merchandising has taken the front runner function in poverty alleviation programmes to help enhance the development of the financial, health, and social security systems. This is due to the fact improvement specialists across the world have come to the agreement that micro-insurance is a robust device for complementing micro-credit score in the fight in opposition to poverty by using enabling bad households to pool risks, thereby, stopping them from falling deeper into the poverty lure at the occurrence of unforeseeable shocks (Wiedmaier-Pfister, Jowett, Portula, Llanto, 2007). The occurrence of peril can wear away hard-earned but small profits of the poor. This is especially the case when the households have no formal insurance plan to cowl over them. The role of micro-insurance like any high-quality hazard management instrument, according to Leftley and Mafumo (2006), is, therefore, to stabilize income level and provide a protection internet for the negative as they go away from the poverty trap. Micro-insurance in summary can assist enhance the balance of the poor.

2.1.3 The Need for Microinsurance

The intention of countless poverty eradication projects or programmes embarked on with the aid of the Government of Ghana is to make certain sustainable equitable growth, speed up poverty reduction and guard the susceptible (GSS, 2000). Although there are some projects aimed at accelerating poverty eradication and sustaining an equitable boom in Ghana for the poor, there looks to be little or no interest in creating applications or tasks targeting the protection of the poor or the vulnerable. The 2000 population and housing census indicated that 80% of the working populace in Ghana is determined in the private informal sector.

Lately, it has additionally been seen that the informal sector does not only lack get right of credit entry but additionally lack other vital merchandise like an insurance plan that can protect the terrible and their positive aspects from identified life cycle chance or emergencies by making sure that the agenda for poverty eradication by the Government is continued. The negative in growing international locations like Ghana enjoy few safeguards in opposition to the numerous perils of lifestyles – illness, injury, herbal disasters, or loss of property. This is so due to the fact most governments in developing international locations are frequently unable to supply sufficient social protection for their poorer citizens. At the same time, formal insurers in many markets do no longer see low-income people as manageable purchasers considering they consider the informal market as notably volatile and expensive. The absence of ample social protection for the terrible in Ghana can undermine the achievement of the country's poverty eradication method programmes. There is, therefore, the want to promote the idea of micro-insurance through governments as well as different non-public entities to make certain that the positive aspects of the poor who are primarily in the informal personal quarter of the economy are provided with enough social internet to shield them and their positive factors from existence vulnerabilities. In connection to the significance of micro-insurance, there has been recent development whereby some typical insurance plan organizations have added some simple products, such as life insurance and deposit life for the poor or the low-income earners (Latortue, Montesquiou and Ward 2008). This development is often a result of Non- Governmental Organizations providing financial help to certain insurance organizations to reflect on consideration on developing merchandise for the low give upmarket. A most important vulnerability and exclusion study was undertaken in Ghana by way of Snyc Consult in 2006 suggest that five major risks create

vulnerability to poverty in Ghana and these are Macroeconomic shocks, Health shocks, Life cycle shocks, Natural surroundings, and mess-ups and Exclusion tendencies.

The work also indicated that although negative people in the informal region are exposed to multiple risks, they lack nice danger management instruments to militate in opposition to the identified vulnerability. According to Vigano et al. (2007), in the absence of institutional opportunities to insure or cover in opposition to risks, households and humans in creating countries may also use exclusive strategies to deal with them. For example, the common coping strategy of many terrible households consists of the promoting of assets: land, livestock, borrowing at high-interest rates, etc. These coping techniques cease to go away debt burdens for the affected Individuals. In most instances, it was seen that this typical technique of coping or managing risk as a substitute undermines the low profits person's functionality to live on future shocks. In other cases, the individual's ability to grow to be financially unbiased once more after a chance or an emergency takes alternatively a longer time than expected after such incidence of vulnerability. Microinsurance is a rising enterprise and MFIs, as well as comparable institutions that serve the negative, have come to understand that their consumers do no longer only want loans but a range of financial services which includes insurance (Llanto et al,2007) Poor customers over time have articulated their want for danger protection. In response to these needs, many have shaped organized organizations and these agencies have attempted to manipulate their own in-residence mutual benefit associations which have not been very successful. For example in Ghana, humans be a part of social corporations which may additionally be based totally on religious, cultural, or household affiliations or relationships.

Most of these agencies have welfare scheme structures that employ all participants to make contributions a minimum quantity of money which is deposited in a central pool and managed through the leaders of the agencies to be used to aid paid-up individuals in the event of a threat like dying or sickness or any emergencies as agreed upon with the aid of all the participants belonging to the group. The challenge of these indigenous welfare schemes, however, lies in the fact that the Mutual Benefit Associations (MBA) lack the technical information required in the management of risks. In most cases, it has been observed that the schemes only afford only token assistance to the affected member which entails the buy of a volume of provision (milk, sugar, etc) to be presented to a hospitalized member. Another key project encountered through the MBA is that in some instances the pool of money mobilized receives depleted before the prevalence of an emergency and individuals are, therefore, made to make contributions an additional quantity aside their regular contributions to enable them to guide their troubled member. For instance, in Ghana, most negative households assist the cost of funerals utilizing borrowing from traditional money lenders and or from relatives. The loans are paid from the revenues generated from the donations and contributions acquired at some point of the burial ceremonies which in most instances can't be assured as a supply of repayment for the loan. Most low profits earners or the poor, therefore, turn out to be indebted after performing the funeral rites of their loved ones, thereby, threatening their ability to improve on their livelihood. This has led to cases where teenagers of college-going a while are made to drop out of school to take up employment to assist their mother and father or family members in paying money owed added about as a result of the fee incurred in organizing a funeral.

2.1.4 History of Micro-insurance in Ghana

The microinsurance industry's business formally started in 2004 when CARE supported GLICO to design the first formal micro funeral insurance coverage in Ghana. By the stop of 2006, the micro funeral coverage designed through GLICO and distributed thru 6 MFIs was once the solely recognized microinsurance product handy for the low-income earners. In 2007 Micro Insurance Agency (Micro Ensure) used to be registered and incorporated as an insurance plan agent to promote the design, sale, and distribution of microinsurance merchandise via imparting strategic linkages between the normal insurance plan companies, MFIs, NGOs, and the centered clients.

2.1.5 Micro-insurance Delivery Models

The effectiveness of the microinsurance plan no longer only lies in the products however how the merchandise is delivered to customers-low profits earners. The mechanism for microinsurance delivery is organization-specific. Generally, mechanisms even though microinsurance services are delivered are a partner-agent model, full-provider model, the company pushed mannequin, and community-based or mutual model. These modes are mentioned below:

Partner agent model: A partnership is shaped between the micro-insurance scheme and an agent (insurance company, microfinance institution, donor, etc.), and in some cases a third-party healthcare provider. The microinsurance scheme is accountable for the shipping and advertising of products to the clients, while the agent retains all duties for diagram and development. In this model, microinsurance schemes advantage from restricted risk, but are also disadvantaged in their limited control.

Full carrier model: The microinsurance scheme is in charge of everything; both the graph and delivery of products to the clients, working with external healthcare vendors to furnish

the services. This model has the gain of imparting micro-insurance schemes full control, yet the downside of greater risks.

Provider-driven model: The healthcare issuer is the micro-insurance scheme, and similar to the full-service model, is accountable for all operations, delivery, design, and service. There is an advantage as soon as more in the quantity of management retained, yet disadvantage in the limitations on merchandise and services.

Community-based/mutual model: The policyholders or clients are in charge, managing and owning the operations, and working with external healthcare carriers to offer services. This model is wonderful for its potential to format and market merchandise extra effortlessly and effectively, but is disadvantaged through its small size and scope of operations.

2.2 THEORETICAL REVIEW

The choices of households can be explained using several theories but this study however is put together on the Expected Utility (EU) Theory due to its suitability in explaining the demand of households for microinsurance products. The Expected Utility (EU) Theory assumes that individuals are risk-averse and make selections between taking a risk that has different implications on wealth and hence its preference over other related theories like the State-Dependent Theory, the Consumer Theory, and the Endowment Effect Theory.

2.2.1 Expected Utility (EU) Model

Considering the expected utility model, microinsurance demand is a choice between an indeterminate risk that happens with likelihood when unsubscribed, and a defined loss like paying a price (Manning & Marquis, 1996). The model perceives that households are not risk lovers and so pick among carrying a risk that has a varying effect on income. Given the period of microinsurance selection, purchasers are unclear whether about their health status

and the associated monetary effects. Microinsurance decreases this undefined risk. Further expatiating this, Hsiao et al. (2006) reported that "the rural residents desire to subscribe or not subscribe to community-based health insurance scheme (CBHI) is a discrete choice procedure in line with the explanatory choice theory" and that the household's decision of purchasing a CBHI in rural China was reliant on the evaluation of the expected utility of purchasing health microinsurance against not purchasing. Notwithstanding these disparagements, expected utility is usually employed in theories of decision-making concerning safeguarding against risk (Marquis & Holmer, 1996).

2.3 EMPIRICAL REVIEW

Akotey et al (2011) in an empirical investigation of determinants of microinsurance demand in Ghana using the probit model found that premium flexibility, income level, and nodal agency are significant determinants of micro-insurance demand. Insurance knowledge, expectation (trust), and marital status were also found to have a positive and significant impact on the demand for microinsurance. Furthermore, the empirical analysis showed that formal education is not a significant determinant; rather one's level of insurance knowledge has a positive and significant impact on micro-insurance demand.

Gustina & Irwani Abdullah (2012) in a study to investigate the major factors that affect the demand for household takaful revealed that four factors including GDP per capita, education, saving, and religion significantly influence the demand for household takaful. Furthermore, three factors such as GDP per capita, saving, and religion affected the demand for life insurance. This study also found that two variables including customer price index and

saving negatively affected the demand for family takaful. Meanwhile, age, saving, and religion are the three major variables found to negatively affect life insurance demand.

Huber (2012) in his study of the determinants of Micro Life Scheme demand in Indonesia employed both descriptive tools and the Binary Probit Model. The result showed the positive influence of education and household wealth on life insurance uptake. Further, positive influence is found for the respondent's financial literacy and product understanding as well as client trust attitude and brand recognition. A strong negative life-cycle effect is revealed when taking into account the economic self-sufficiency of dependents.

The level of trust between the microinsurance provider and a potential purchaser has been revealed to be a strong logical component in microinsurance buying attitude by various studies too (De Allegri et al. 2005; Cole et al. 2013; Giné et al. 2008; Morsink and Geurts, 2011). For instance, in the instance of an administration-sponsored sow micro insurance, Cai et al. (2009) demonstrate that Chinese agriculturists stay away from the product when they have little trust in the neighborhood government because of continuous encounters of approach conveyance disappointments. Comparative proof on the part of trust in administrative establishments is found on account of a group-based medical coverage in Rwanda (Schneider, 2004). Research on yield microinsurance has demonstrated that involvement with the foundation is essential for agriculturists to believe in a protection supplier (Giné et al. 2008; Patt et al. 2009).

Saqware (2012) analyzed data from a primary survey and focus group discussion derived from informal sector household members of the VIBINDO society in three locales of Ilala, Kinondoni, and Temeke in Dares Salaam. The investigation includes three stages; to begin with, the family's significant risk exposures were examined, also hazard adapting methods

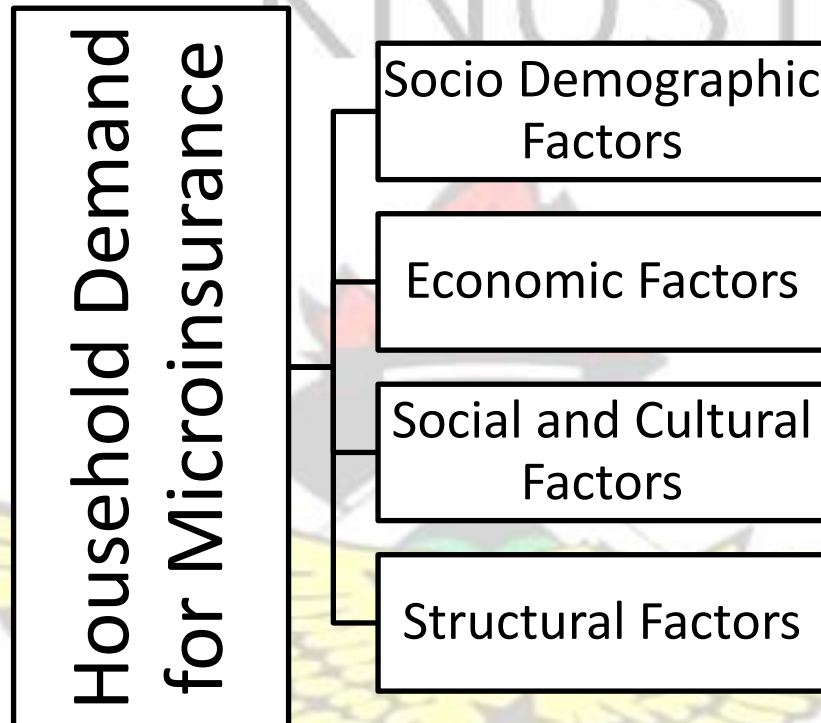
which were set up were analyzed, and thirdly, a probit regression examination was run to build up the relationship between families' characteristics and the demand for informal microinsurance product. The aftermath of the study initially showed that employment, marital status, utilization of the services of MFIs, education, exposure to risk, and knowledge about microinsurance are crucial determinants of microinsurance products. Knowledge about microinsurance and the trust of providers of microinsurance products were found to have a positive and noteworthy effect on the demand for microinsurance products. As opposed to expectations, the empirical investigation shows that income is a noteworthy determinant with a negative effect on the demand for the microinsurance scheme. The outcome of the study further showed that previous casual sharing systems influence interest in microinsurance products. The low demand for microinsurance schemes can be clarified by accessible information plans that are portrayed by nearly weave informal organizations (social networks) and groups that give security in return for loyalty to the group. Likewise, vulnerability evasion society is low inside of the families in Tanzania; consequently, family units appear to more endure diverse circumstances.

2.4 CONCEPTUAL FRAMEWORK

The study is based on the expected utility theory which states that a household unit will purchase a microinsurance product when the expected utility for insurance is greater than the utility of the uninsured. Households are assumed to take up microinsurance based on the objective of utility maximization (Adesina & Seidi, 1995; Adesina, 1996). A household therefore would subscribe or demand a given micro product if the utility obtained from the product exceeds that of not subscribing or demanding the products. The factors considered by this study to determine the collection of the expected utility of the households making the

subscription or the demanding choice include socio-demographic factors, economic factors, Social and Cultural factors, and structural or institutional factors. The developed conceptual framework is graphically shown in Figure 2.1.

Figure 2. 1 Conceptual Framework



Source: Marquis and Holmer (1996:23)

Factors influencing Household's Demand for Micro-insurance

Based on this, the majority of the reviewed literature is in the context of middle-income or developed countries. Based on the conceptual framework of the current study, the volume of literature on the demand for microinsurance policies has been reviewed under four major categorical factors including socio-demographic factors, economic factors, socio-cultural factors, and structural/institutional factors. The included factors were reliant on the results of the research of Eling, Pradhan, and Schmit (2013) that reviewed studies on the factors affecting the demand for microinsurance picked out twelve critical elements influencing

micro insurance purchase-including gender, age, risk exposure, quality of service, informal risk sharing, financial literacy, religion, trust and peer effects, non-performance risk, risk aversion, wealth and price.

2.4.1 Socio-Demographic Factors

The household's key socio-demographic factors reviewed in terms of their influence on micro-insurance products included age, education, religion, gender, occupation or employment, dependency ratio/Household size, and financial literacy.

2.4.1.1 Age

The findings of the micro-insurance studies reviewed to present concerning age have been vague (Eling et al., 2013). Certain research reveals a positive relationship between age and micro-insurance purchase (Cao and Zhang, 2011; Chen et al., 2013); some also reveal a negative relationship (Gine et al., 2008) or provide an insignificant result (Cole et al., 2013).

2.4.1.2 Gender

The greater, though surely not wholly, studies on the subject seem to indicate lesser risk acceptance among females than their male counterparts, even yet the reason is vague either hypothetically or practically (Cohen Einav, 2007). The study of the authors reviewed showed a positive association between a household's gender and the purchase of microinsurance schemes.

2.4.1.3 Employment/Occupation

Relatively recent studies such as Giesbert (2010) and Chankova et al. (2008) report a positive relationship between household's demand for microinsurance products and their employment status or the type of occupation. This result implies that the employed are more likely to purchase microinsurance products compare to the unemployed. This could be attributed to their financial capacity to do so. However, Bendig et al. (2010) found a negative relationship

between a household's demand for micro health insurance products and employment status. Giesbert (2010) the research reported a positive influence of micro-life insurance on a household's gender.

2.4.1.4 Education

Education should have an expanding impact on the time of dependency, which may build interest for mortality scope. A greater level of education is thought to be emphatic. Furthermore, taught family units will probably take up protection (Chankova et al., 2008; Giné et al., 2008). Again, (Chankova et al., 2008; Ito & Kono, 2010). Bendig et al. (2010), Giesbert et al. (2011), and Bendig and Arun (2011) in their study also found a positive relationship between household's demand for micro-life insurance products and their educational level.

2.4.1.5 Dependency ratio/Household size

Considering the hypothetical literature of Lewis (1989), it is accepted that the current estimation of the recipients' utilization might surge with the young dependents of the family unit, while a greater number of youthful dependents increase the demand for mortality scope and a higher number of aged dependents surge the purchase of microinsurance schemes. Bendig and Arun (2011) and Giesbert (2010) in their studies found a positive relationship between the demand for micro-life insurance products and household size or the number of dependents. Schneider and Diop (2001) in their study found a positive association between household demand for health micro-insurance products and the household size or the number of dependents.

Contrary to many studies, Ito and Kono (2010) found a negative association between the demand for micro health micro-insurance products and household size or the number of

dependents, since family units with a greater percentage of ill-fated memberships have a greater probability of subscribing to health micro-insurance schemes.

2.4.2 Economic Factors

This section of the chapter reviews the empirical literature on household's demand for micro-insurance products and economic factors. The major economic factors considered in the review were the price of microinsurance products, wealth, and income of households.

2.4.2.1 Price of Insurance

As per the standard economic concept, the fee of a good that is normal is required to be contrariwise linked to a demand for goods. Numerous research estimates the price sensitivity of Micro-insurance by randomizing markdown coupons or subventions. Research in India suggested that rainfall insurance demand is sensitive to price (Cole et al., 2013) like many other studies in different settings. Mobarak and Rosenzweig (2012) in their study reported that a 50% premium fall compared to the actuarial fee leads to the upsurge of the likelihood of the household's adoption of the product by 17.6%. Cole et al. (2013) reported that irrespective of premium been meaningfully lesser than actuarially reasonable premium; lesser than half of the consumers subscribe to rainfall micro-insurance schemes. Certain studies indicate that the inadequacy of subscription of microinsurance is related to the inadequacy of microinsurance experience.

2.4.2.2 Income

Considering the household's income level, life microinsurance subscription might rise, as human resources rise with a greater level of wealth, i.e. generates a greater need for death coverage to preserve wealth and the purchasing ability of family heads and dependents. Browne and Kim (1993), Truett and Truett (1990), Lewis (1989), and Outreville (1996) reported that life microinsurance purchase is positively associated with income employing

each family's information both in developing and developed nations setting. Outside life microinsurance (Giné et al., 2008) and particularly health micro-insurance (Jütting, 2003; Pauly, 2004; Bhat & Jain, 2006; Dror et al., 2007), households in developing countries are relatively likely to purchase microinsurance when income increases.

2.4.3 Social and Cultural Factors

The relationship between key socio-cultural factors of households and their demand for microinsurance products is discussed in this section of the study. The major socio-cultural factors reviewed included risk aversion and the trust of the household.

2.4.3.1 Risk Aversion

Considering less developed nations, there is a suggestion that risk-averse individuals have a lower probability of subscribing to micro-insurance (Giné et al., 2008), then that family that perceives themselves relatively highly availed to dangers have a lower probability to purchase micro-insurance schemes like life micro-insurance (Bendig et al., 2009). Cole et al. (2013), Kouame and Komenan (2012) and Giesbert et al. (2011) reported that individuals that are relatively more risk-averse have a greater probability of purchasing micro insurance schemes. Numerous potentials have been projected to elucidate this unswerving reflection that persons that are risk-averse and micro-insurance subscriptions are inversely linked. Dercon et al. (2011) reported variation in risk behavior athwart the two spheres; however, rarely see those behaviors to be important concerning micro-insurance subscription.

2.4.3.2 Trust

Trust is a mitigating factor and its importance for microinsurance participation is suggested (Dercon, 2008; Schneider, 2005; Basaza et al., 2008; Patt et al., 2009). Among services offered by microfinance providers, insurance needs the highest degrees of trust on the customer side. Trust, however, is a vague concept and cannot be easily tested for. Various

quantitative studies tried to control for this influence. Gine et al. (2008) in their study in India reported that a higher level of trust of microinsurance service providers is significantly associated with the micro-insurance subscription. Cole et al. (2013) also reported a positive relationship between Indian households and full trust for microinsurance service providers. Morsink and Geurts (2011) report that customers of a Typhoon-associated micro-insurance program in the Philippines depend on the claim disbursement practices of trustworthy peers. In the Ghana context, the study of Akotey et al. (2011) revealed a positive relationship between the household's perceptions of MFI/Insurer and the household's demand for microinsurance products.

2.4.3.3 Religion

Religion is theorized to be associated with life insurance demand for two reasons: firstly, the historic development of life insurance was often in conflict with religious views and for some time condemned as distrust in God's protective care; secondly, a society's culture is said to be influenced by religious beliefs and related to levels of risk aversion (Douglas & Wildavsky, 1982). Macroeconomic studies have found that the demand for life insurance is significantly less widespread in predominantly Muslim countries – like Indonesia (Browne & Kim, 1993). Yet, this might not be evidence for higher religious salience or risk aversion in Islamic imprinted societies but rather a result of constrained life insurance supply. For a believing Muslim, the regular life insurance contract is not a viable option due to Islamic regulations (Redzuan et al., 2009).

2.4.3.4 Financial literacy

The household's literacy in finance is anticipated to cause a micro-insurance subscription increase. Cole et al. (2013) reported that households with a higher level of financial literacy

have a higher level of purchasing micro insurance schemes. This result is similar to the finding of Cai and Song (2011) and Norton et al. (2011) who also reported a positive relationship between financial literacy and households purchase of microinsurance products. Gine et al. (2008) reported that the inadequacy of microinsurance scheme comprehension is rated as the second-highest factor for the lower subscription of households to microinsurance schemes.

2.4.4 Structural/institutional Factors

The influences of structural or institutional factors on household's demand for microinsurance products are reviewed in this section of the chapter. The major structural or institutional factors reviewed included the quality of the services provided by insurers and risk exposure.

2.4.4.1 Quality of service

De Allegre et al. (2006) reported that the quality of health center service in remote West Africa is significantly associated with the choice to subscribe to community-based microinsurance. Dong et al. (2009) note that along with health requirements and micro health service subscription, quality of service is a significant element in micro-insurance non-subscription. Likewise, Nguyen and Knowles (2010) reported that the subscription to health micro-insurance in Vietnam upsurges meaningfully with the anticipated paybacks of micro-insurance as evaluated by the quality of provided services and the distance of the household from the available service.

2.4.4.2 Risk exposure

Numerous researchers have researched how risk exposure, principally the influence of previous experiences of dangers or risk, influences a household's subscription to microinsurance. Arun et al. (2012) in research carried out in Sri Lanka reported solid proof

of a strong positive association between shocks in the past and the household's subscription to microinsurance products. However, the studies of Galarza and Carter (2010) and Cole et al. (2013) reported no relationship between the constructs.

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CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter contains the research approach adopted for the study, study population, the sample frame and sampling technique; tools used for data collection, data analysis techniques as well as data sources are clearly outlined.

3.1 RESEARCH DESIGN

This study employed a survey design because it is a quantitative method for gathering information from a sample. Also, because it is made up of a preset of questions that are given to respondents (Zechmeister & Jeanne, 2011). In general, it is primarily used for obtaining data about a mainstream topic quickly. It helps researchers to share new features or trends with their sample. The study further adopts a cross-sectional survey since the sample is taken from the target population and studied once. The cross-sectional survey was used because it gives room for the use of both descriptive and analytical methods. Also, it enables researchers to quickly gather data within a short period. The study employed both descriptive and analytical methods.

3.2 STUDY POPULATION

The surveyed population of this study was all households in the Tamale metropolis of the Northern region of Ghana. Based on the 2019 report of the Ghana Statistical Service (GSS), the population of the Tamale metropolis is 275,364. The study relied on this projected population figure because it presents a more current population figure for the Tamale metropolis. The study further grouped the communities in the Tamale metropolis into income groupings due to the nature and objectives of the study. The communities were categorized into income levels because Boccaletti et al. (2000) for instance suggest that households with higher income are most likely to demand more products.

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUES

The situation of collecting data from the complete population due to economic and time constraints makes sampling an inevitable aspect of research work. The study, therefore, uses

three sampling methods, and which are stratified sampling, quota sampling, and simple random sampling. Based on the objective of the study, the communities in the Tamale metropolis have been categorized into three income groupings thus low, middle, and high income. The reason for using income groups as a basis is that consumption is a function of income (Edgmand, 1987), and its determination as to the single most important factor in consumption.

After the stratification, the study used quota sampling to select four communities out of each income group and the number of respondents in each subsample. The number of respondents in each subsample can be seen in Table 3.1 below. Quota sampling was used because it makes the comparative analysis of two or more subgroups easier.

The study employed simple random sampling to select households as respondents. The simple random sampling was used because the sought to give every member of the population an equal chance of being selected.

3.4.1 Sample size

A total sample size of 399 households was randomly selected based on the De vaus (2002) sample size proportion formula given as $n= N/1+N (e^2)$

Where;

n is the Sample size

N is Population

e is Significance Level

$$n= 275,364/1+275364(0.05^2) \quad n = 399.4$$

Table 3. 1 Distribution of Households Sampled within the Sampled Residential

Income groups	Communities	Number of households
High income	Russian Bungalows	19
	SSNIT Flats	19
	Fuo	19
	Kalponhini Estate	19
Total		76
Middle income	Choggu	30
	Gurugu	30
	Gumbihini	30
	Gumani	30
Total		120
Low income	Sangani	50
	Sakasaka	51
	Salamba	51
	Tishegu	51
Total		203
Overall total		399

Source: Survey Data (2020)

3.4 DATA COLLECTION

3.4.1 Source of data

Data for this research is obtained from a primary source. The primary data for this study was collected from respondents through the use of questionnaires; this is essentially qualitative in nature. Additionally, data on the household's level of knowledge and awareness about microinsurance products and the determinants of microinsurance subscriptions in Tamale was primary in nature.

3.4.2 Data Collection Instrument

This study depends on structured questionnaires to gather the primary data. The study used a structured questionnaire because it is much less steeply-priced in terms of time and money. It is also easy to analyze (Gray, 2009).

The questionnaire incorporates 4 primary sections. Section I the first section had to do with the household's socio-demographic characteristics such as age, gender, marital status, household size, employment status, the level of education income levels Section II the second section examined the households awareness of microinsurance products. Section III the third section examined the demand for microinsurance products. Section IV the fourth section of the questionnaire provided statements to identify factors influencing the household's demand for microinsurance products.

3.5 DATA ANALYSIS

Collected data are analyzed using mixed methods. Collected data are edited and entered into Excel for descriptive statistics where responses to questions are described using frequency tables, weighted averages, and standard deviations.

3.6 RELIABILITY AND VALIDITY

For the reliability and validity of this piece of work, the questionnaires were pretested at Lamashegu, Dungu, Jisonaayili, and Zogbeli which informed the final arrangements of questions to fit the study objective. Also, questions administered use simple English language ranging from close to open-ended ones. More close-ended questions are used to avoid the tendency of overburdening the respondents. The questionnaires which are the primary data collection instrument for this research were also properly designed to gather the variables for finding out the level of awareness and determinants of microinsurance subscription within the Tamale Metropolis.

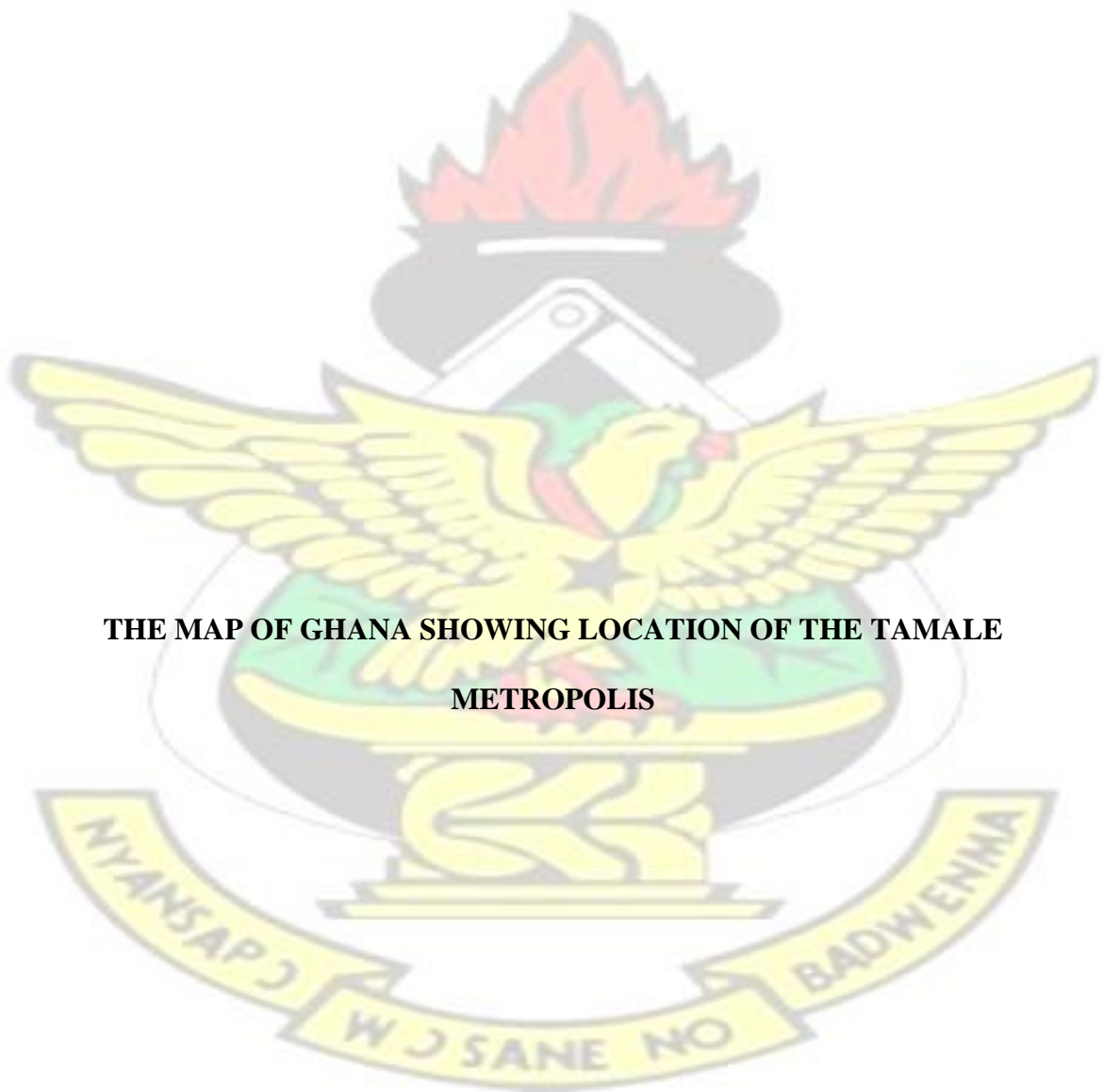
3.7 ETHICAL CONSIDERATION

This study employed the following practices to make sure there is a complete ethical consideration; firstly, the researcher ensures that the anonymity of the respondents is maintained through maintaining their identity from different respondents. Additionally, the researcher ensured that all the facts that are collected are duly recognized and serve as a reference to the study. The identification of the researcher as a postgraduate student of Kwame Nkrumah University of Science and Technology is thoroughly disclosed to all respondents, to relieve the fears of respondents for the research.

3.7 PROFILE OF TAMALE METROPOLIS

Tamale Metropolitan is officially called the Tamale Metropolitan area. It is the capital city of the northern region of Ghana and it lies between latitude 9.16° and 9.34° North and longitudes 00.36° and 00.57° . The city is located 600 km (370 mi) north of Accra. It is located in the central part of the Northern Region and is approximately 180 meters above sea level. The topography is generally rolling with some shallow valleys which serve as stream courses. Tamale has a population of 275,364 people based on the 2019 report of the Ghana Statistical Service (GSS), and it is the fastest-growing city in West Africa. The city is a current hotspot for investment in the West African sub-region. Residents of tamale are into two major economic activities thus agriculture and commerce. Tamale has about twenty 17 insurance companies but has about two microinsurance companies namely Star Microinsurance Services Limited and Donewell Insurance Company Limited. Star Microinsurance Services Ltd was introduced by Star Assurance in July 2008. They sell about six policies and the most patronized policies are the investment funeral policy and child care policy. Downwell Insurance Company Limited also introduced microinsurance policies in June 2020.

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**THE MAP OF GHANA SHOWING LOCATION OF THE TAMALE
METROPOLIS**



**THE MAP OF TAMALE METROPOLIS SHOWING THE COMMUNITIES
WITHIN THE METROPOLIS**

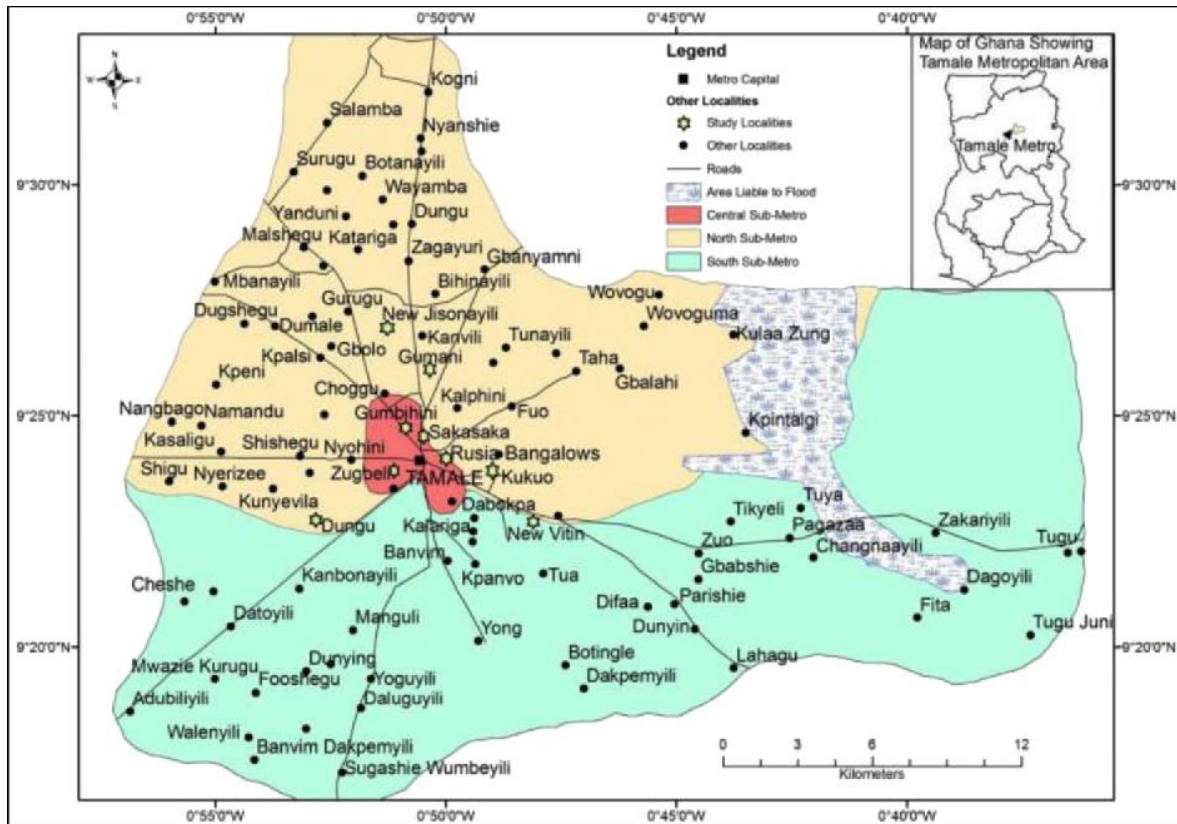


Fig. 2 Map of Tamale showing selected study communities. Source: Yakubu et al. 2014



CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF FINDINGS

4.0 INTRODUCTION

This chapter discusses some findings of the research. The discussions are in four sections. In these four sections are the results of all descriptive analyses based on survey data gathered. All the sections cover the results and discussions of the socio-demographics which focuses on the demography of respondents, household's awareness of microinsurance and its products, demand for microinsurance products, and reasons that necessitated for households subscription and non-subscription to these products.

4.1 SOCIO-DEMOGRAPHICS

The result of Table 4.1 shows that the majority (72.3%) of the households that subscribed to micro-insurance schemes were females whereas 27.7% were males. A large number of female subscribers of microinsurance schemes could be attributed to their risk aversion attitude. Out of the total households that have subscribed to micro-insurance schemes, 16% were between 21 and 30 years, 46% were between 31 and 40 years, 29% were between 41 and 50 years and 9% were 51 years or more. The majority (61%) of the surveyed household that have subscribed to micro-insurance schemes were also married whereas 27% were also single with the majority (75%) of subscribers being breadwinners of their families. The married have larger households which comes with high expenditure and so would prefer to smoothen consumption through the purchase of microinsurance schemes like a funeral investment, health and child care (education). The majority (87.7%) of the surveyed household micro insurers were also employed whereas 12.3% were unemployed. This result

could be explained by the fact that the employed relatively have more financial strength to buy micro-insurance schemes because they engage in income-generating activities. The majority (56%) of the subscribers were traders. The majority of the surveyed household micro insurers were between the monthly income category of GH¢200 and GH¢500. This, therefore, indicates that the majority of the surveyed subscribers of the microinsurance scheme were low-income households in the Tamale metropolis. Most subscribers (43%) have a daily inflow of income. This could be as a result of the majority of household micro insurance subscribers being traders. The majority (37%) of the surveyed micro insurers also have a basic level of education whereas 23.5% have no education. The majority (57%) of the surveyed household micro insurance subscribers were Christians. This could be attributed to the Islamic beliefs and restrictions on earning interest on investments especially since Tamale is an Islam-dominated city.

The result of Table 4.1 further shows that the majority 72.7% of the surveyed households that have not subscribed to microinsurance were males whereas 27.3% were also females. This result could be explained by the fact that males are generally risk neutral and have a lower likelihood of purchasing micro-insurance schemes compare to their female counterparts who are generally risk-averse. The majority (34%) of the households that have not subscribed to micro-insurance schemes were within the age category of 21 and 30 years and 30% were also within the age category of 51 years and more. This could be as a result of the younger and aged less likely to engage in income-generating activities and may not subscribe to microinsurance schemes.

Table 4. 1 Socio-Demographic Characteristic of Respondents

Socio-Demographics		Subscriber (N=292)		Non-Subscribers (N=107)		Total
		Frequency	Percent	Frequency	Percent	
Gender	Male	81	27.7	78	72.9	159
	Female	211	72.3	29	27.1	240
Age	21-30 years	47	16	36	34	83
	31-40 years	134	46	15	14	149
	41-50 years	85	29	24	22	114
	51 years+	26	9	32	30	58
Marital Status	Married	178	61	20	19	198
	Single	79	27	44	41	123
	Divorced	26	9	26	23.8	52
	Widowed	9	3	17	16.2	26
Breadwinner	Yes	219	75	40	37	259
	No	73	25	67	63	140
Employment Status	Employed	256	87.7	26	24	282
	Unemployed	36	12.3	81	76	117
Type of Employment	Farmer	32	11	6	6	38
	Trader	164	56	34	32	198
	Artisans	58	20	25	23	83
	Others	38	13	42	39	80
Monthly Income	Below GH¢200	61	21	z	25	88
	GH¢200-GH¢500	123	42	24	22	147
	GH¢501-GH¢1,000	76	26	21	20	98
	More than GH¢1,000	32	11	35	33	67
Inflow of Income	Daily	125	43	19	18	144
	Weekly	105	36	29	27	134
	Monthly	41	14	35	33	76
	Quarterly	15	5	13	12	28
	Yearly	6	2	11	10	17
Level of Education	None	69	23.5	13	12	82
	Basic	108	37	18	17	126
	SHS	64	22	14	13	78
	Tertiary/postgraduate/professional	41	14	28	26	69
	Others	10	3.5	34	32	44
Religion	Islamic	114	39	55	51	169
	Christianity	166	57	38	36	204

Source: field survey, 2020

The majority (72.9) of surveyed non-subscribers of microinsurance are men. Also, the majority (34%) of non-subscribers are between the ages of 21-30 years, and 30% being the aged (51 and above). The young and the aged are not subscribing to microinsurance because most of them do not earn an income. The majority (41%) of the surveyed households that are non-subscribers of microinsurance schemes were single with 23.8% divorced. The majority (76) of the surveyed non-subscribers of microinsurance schemes were unemployed and 33% within the high-income category followed by the low-income category with 25%. The majority of the high-income category are not subscribing to microinsurance because most of them have taken up formal insurance and finds the informal unattractive. Some of the low-income categories have less subscription due to very low financial capacity. Furthermore, the majority (32%) of the non-subscribers of microinsurance schemes have the highest level of education. Unsurprisingly, the majority (55) of the surveyed households that have not subscribed to micro-insurance schemes were Muslims.

4.2 AWARENESS OF MICRO INSURANCE AND ITS PRODUCTS

This section of the study examines the respondent’s awareness of micro-insurance and the source of the information for awareness. The results of the responses received from 399 households in the Tamale Metropolitan area are summarized and presented in Table 4.2.

The result of Table 4.2 shows that all of the households sampled knew micro-insurance. Despite their awareness, not all of them were subscribers of micro-insurance products. From the table below, 292 representing about 73% of households were subscribers of micro-

insurance. The remaining 107 constituting 27% although aware, are not subscribers of micro-

Level of awareness	Subscribers (n=292)		Non-Subscribers (n=107)		Total (n=399)
	Frequency	Percent	Frequency	Percent	Total Freq
Awareness					
Yes	292	73	107	27	399
No	0	0	0	0	0
Source of information					
Newspaper	0	0	0	0	0
Radio & TV	41	14	10	9	51
Internet	38	13	21	20	59
Microinsurance agents	149	51	50	47	199
Family & Friends	64	22	26	24	90

insurance products and/or policies.

Table 4. 2 Respondents Level of Micro-insurance Awareness

Source: field survey, 2020

However, the subscribers of the microinsurance scheme rarely are informed by radios, TVs, and the internet on the need to purchase various forms of microinsurance schemes.

Furthermore, out of the total non-subscribers of microinsurance schemes, 9% received the information from radios and TVs, 57% received the information from micro-insurance agents and 34% also received the information from family and friends but none received any information on microinsurance scheme from newspapers.

4.3 DEMAND FOR MICRO INSURANCE PRODUCTS

This part of the study discusses the proportion of the surveyed households in the Tamale metropolis that have subscribed to various forms of microinsurance schemes including property, health, life, and educational micro insurance schemes. The result of the section is presented in Table 4.3.

Table 4. 3 Micro-insurance Demand in Tamale Metro

Variables	Income Category			
	Low Income	Middle Income	High Income	Total
Currently subscribed to any form of microinsurance scheme				
Yes	170 (83.5)	95 (79)	27 (35)	292 (73.1)
No	33 (16.5)	25 (21)	49 (65)	107 (26.9)
Total	203 (100)	120 (100)	76 (100)	399 (100.0)
Form of insurance did you subscribed				
Life/Funeral	70 (41)	23 (24.1)	5 (20)	98
Property	0 (0)	0 (0)	7 (26)	7
Health	87 (51)	44 (46)	11 (41)	142
Education	13 (8)	25 (27)	4(13)	42
Others	0 (0)	3 (3)	0 (0)	3
Total	170 (100)	95(100)	27 (100)	292

Source: field survey, 2020

The result of Table 4.3 shows that the majority (75%) of the surveyed household heads have subscribed to varying forms of microinsurance schemes in the Tamale metropolis whereas 25% haven't. Out of the total surveyed low-income households of 203, the majority (83.5%) have subscribed to microinsurance products with 16.5% have not subscribed to any form of the microinsurance scheme. The form of microinsurance scheme predominantly subscribed by the majority (51%) of the low-income households was the health insurance scheme. This finding is not surprising since in 2011 the Ghana Business News also revealed that the mandatory National Health Insurance Scheme has the highest level of subscription of 65% with some non-operational membership. The majority (79%) of middle-income households have also subscribed to micro-insurance schemes whereas 21% have not. The majority

(46%) of the surveyed middle-income households have also subscribed to health microinsurance schemes whereas 27% have also subscribed to education and 24% to life/funerals micro insurance schemes. Furthermore, 3% have subscribed to other forms of microinsurance schemes and none of the middle-income households have subscribed to property microinsurance. The high-income households that have also subscribed to numerous micro-insurance schemes were 35% whereas 65% of the households have not. The high-income households have subscribed to varying and many forms of microinsurance products or schemes including health, property, life, and education. Most of the high-income households show less interest in informal insurance since they have subscribed to formal insurance.

4.4 DETERMINANTS OF MICRO INSURANCE DEMAND

This section of the study evaluates the factors affecting household subscriptions to microinsurance products in the study area. Table 4.4 reports the descriptive results of the major variables used in the conceptual framework in the literature review.

The majority 33% of the low-income households subscribed to microinsurance products due to its investment component whereas 28% subscribed to microinsurance because of mobilizing savings, 15% subscribed because of low premiums, 11% due to wider micro insurance coverage of service, 7% due to the Compulsory element in the micro-credit package and 6% due to the flexibility of premium payments. Surprisingly, none of the low-income households subscribed to micro-insurance schemes due to safeguarding against the numerous perils of life – illness, injury, natural disasters, or loss of property. This could be as a result of the surveyed household's religious beliefs such as they believe in God for

utmost care and protection and low financial literacy since the majority of subscribers have a low level of education.

Furthermore, the majority (35%) of the middle-income households subscribed to micro-insurance schemes due to its investment component whereas 24% subscribed to microinsurance products because of safeguarding against the numerous perils of life – illness, injury, natural disasters, or loss of property, 21% due to flexibility of premium payments, 13% due to the low premiums and 7% due to the Compulsory element in the micro-credit package.

Interestingly, the majority (95%) of the high-income households purchased microinsurance because of safeguarding against the numerous perils of life – illness, injury, natural disasters, or loss of property, whereas 5% purchased microinsurance because of the Compulsory element in the micro-credit package. This could be a result of high financial literacy such as a good understanding of microinsurance effectiveness in safeguarding against numerous life perils since the majority of the high-income surveyed households have a high level of education.

On the other hand, a majority (33%) of the low income surveyed households have not subscribe to micro-insurance schemes because they don't believe claims of microinsurance schemes would be paid, whereas 30% because the process of claiming micro insurance benefits are too bureaucratic/difficult, 21% have not purchased micro-insurance products due to lack of knowledge, 12% due to the belief of not needing insurance because they are susceptible to accidents and 3% due to the premium price. The majority (44%) of the middle-income non-subscribers have not yet purchased micro-insurance products because they don't believe claims of microinsurance schemes would be paid whereas 36% due to the process

of claiming micro insurance benefits are too bureaucratic/difficult and 20% due to lack of knowledge about microinsurance. The majority (69%) of the high-income subscribers have not yet subscribed because services rendered are often below premium paid, 23% due to lack of knowledge, and 8% due to the lack of trust in microinsurance companies in the payments of claims of microinsurance schemes.

Table 4. 4 Determinants of Micro-insurance in Tamale Metro



Source: field survey, 2020

Statements	Income Category				
	Low Income n=203	Middle Income n=120	High Income n=76	Mean	Std Dev.
Factors influencing subscription					
Safeguards against the numerous perils of life – illness, injury, natural disasters, or loss of property	0 (0)	23 (24)	26 (95)	16.33	14.22
The flexibility of premiums payments	11 (6)	20(21)	0 (0)	10.33	10.02
Low premiums	25 (15)	12 (13)	0 (0)	12.33	12.50
Compulsory element in the micro-credit package	12 (7)	7 (7)	1 (5)	6.67	5.51
Investment element in microinsurance schemes	56 (33)	33 (35)	0 (0)	29.67	28.15
Savings element in micro insurance schemes	47 (28)	0 (0)	0 (0)	15.67	27.14
Goodwill/long existence of microinsurance companies	19 (11)	0 (0)	0 (0)	6.33	10.97
Total	170 (100)	95(100)	27(100)		
Factors influencing non-subscription					
The price of microinsurance is too high	1 (3)	0 (0)	0 (0)	0.33	0.58
I am not financially literate enough to understand micro-insurance schemes	0 (0)	0 (0)	0 (0)	0.00	0.00
The process of claiming micro insurance benefits are too bureaucratic/difficult	10(30)	9 (36)	0 (0)	6.33	5.51
I don't like micro-insurance because I believe is for only the rich	0 (0)	0 (0)	0 (0)	0.00	0.00
I don't trust the microinsurance providers	11(33)	11 (44)	4 (8)	8.67	4.04
I feel less exposed to the risk to purchase microinsurance	4 (12)	0 (0)	0 (0)	1.33	2.31
Micro insurance products are not accessible	0 (0)	0 (0)	0(0)	0.00	0.00
Coverage of services is too narrow	0 (0)	0 (0)	0 (0)	0.00	0.00
The quality of services provided under micro insurance schemes are too poor	0 (0)	0 (0)	34 (69)	11.33	19.63
I am not aware of any form of microinsurance products	0 (0)	0 (0)	0 (0)	0.00	0.00
I don't have much knowledge about micro-insurance schemes	7 (21)	5(20)	11 (23)	7.67	3.06
Total	33 (100)	25 (100)	49(100)		

Results from table 4.4 further show to a great extent that the investment element (*mean of 29.67 and standard deviation of 28.15*), Safeguarding against the numerous perils of life

(*mean of 16.33 and standard deviation of 14.22*), and saving elements of micro-insurance schemes (*mean=15.67, standard deviation=27.14*) are major determinants of micro-insurance subscriptions in Tamale Metro; given the three income levels. On a moderate level, Low premiums (*mean of 12.33 and standard deviation of 12.50*) and flexibility of payments determine micro-insurance subscription (*mean of 10.33 and standard deviation of 10.02*) influence micro-insurance subscription in Tamale Metro. Other determinants of micro-insurance subscription include the compulsory element in micro-credit (*mean=6.67, standard deviation=5.51*) and the goodwill and/or long existence of micro-insurance (*mean=6.33, standard deviation=10.97*) respectively.

On the other hand, poor quality of services with (*mean of 11.33 and standard deviation of 19.63*), lack of trust in micro-insurance providers (*mean of 8.67 and standard deviation of 4.04*), lack of knowledge about micro-insurance schemes (*mean of 7.67 and standard deviation of 3.06*) and the difficulty and bureaucratic process of claiming micro-insurance benefits (*mean=6.33, standard deviation=5.51*) are among the top contributing factors influencing household's non-subscription to micro-insurance products in Tamale Metro. The belief that one safe from any risk (*mean=1.33, standard deviation=2.31*) and the high price of micro-insurance (*mean=0.33, standard deviation=0.58*) also influenced the non-subscription of households to micro-insurance, given the three income levels in the Tamale Metropolitan area respectively.

Furthermore, financial literacy, product accessibility, product awareness, the narrowness of service coverage, and the perception that microinsurance is for the rich (*mean=0.00, standard deviation=0.00*) did not affect microinsurance subscriptions, given the three income levels in the Tamale metropolis.

4.5 DISCUSSION OF FINDINGS

The result of this study shows that the majority of the households that subscribed to microinsurance schemes were females with 72.3%, most subscribers being between the ages of 31 and 40 years with 46%, whereas 61% of the surveyed household that has subscribed to micro-insurance schemes were also married with the majority (75%) of subscribers being breadwinners of their families and 87.7% of the surveyed household micro insurers were also employed are consistent with available literature. For example, Saqware, (2012) found that employment, marital status, utilization of the services of MFIs, education, exposure to risk, and knowledge about microinsurance are crucial determinants of microinsurance products.

The study results also show that majority (56%) of the subscribers were traders and most of the surveyed household micro insurers were between the monthly income category of GH¢200 and GH¢500 with most subscribers (43%) having a daily inflow of income. This, therefore, indicates that the majority of the surveyed subscribers of the microinsurance scheme were low-income households in the Tamale metropolis and the level of income is not a significant determinant of microinsurance demand but rather the rate or frequency at which income is earned or received. This is in disagreement with Saqware, (2012) findings which showed that income was a negative influencer of microinsurance take-up.

The result that the majority (37%) of the surveyed micro insurers also have a basic level of education whereas 23.5% have no education but have households not subscribing to due to lack of microinsurance knowledge is consistent with available literature. Akotey et al (2011)

reported that formal education is not a significant determinant; rather one's level of insurance knowledge has a positive and significant impact on micro-insurance demand.

The majority (57%) of the surveyed household micro insurance subscribers were Christians though Tamale metropolis is an Islamic-dominated city. This could be attributed to Islamic beliefs and restrictions on earning interest on investments. This result is a match with the reviewed literature. An example is Gustina & Irwani Abdullah (2012) revealed religion is one of the major variables found to negatively affect life insurance demand.

Also, the results of the study revealed the investment element of microinsurance, protection from risks, savings element of microinsurance, as the three factors that influence microinsurance demand positively this is in agreement with the reviewed literature. For instance, Akotey et al (2011) reported that premium flexibility is one of the factors that influence microinsurance demand.

Furthermore, the findings of this study show that trust is a major determinant of microinsurance subscriptions which is in agreement with the literature reviewed. An example is (De Allegri et al. 2005; Cole et al. 2013; Giné et al. 2008; Morsink and Geurts, 2011) revealed that trust is a crucial determinant of microinsurance.

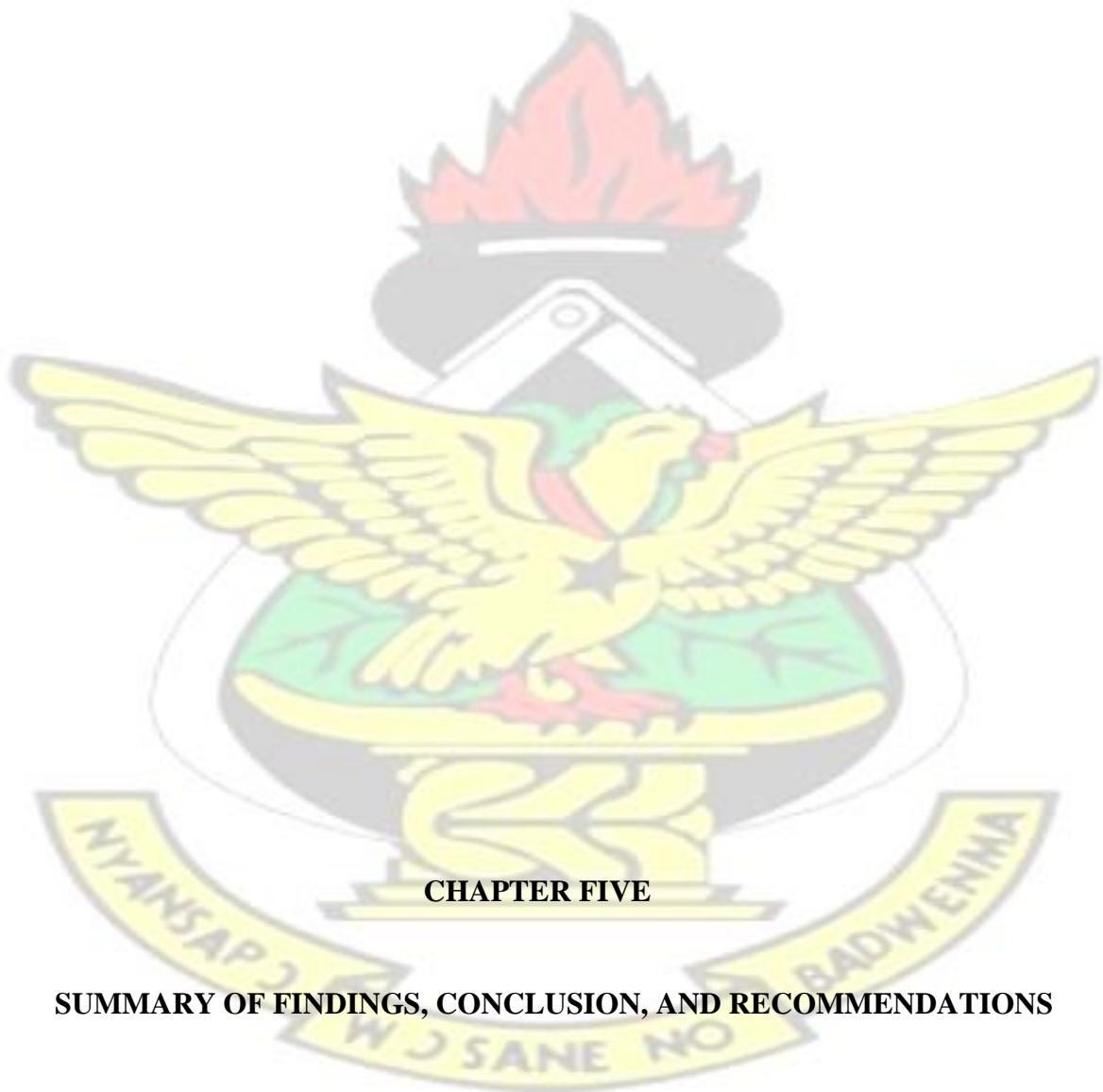
4.6 CRONBACH'S ALPHA VALIDITY TEST

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on standardized items	Number of items
.748	.741	6

Reliability analysis was carried out on 6 items. The Cronbach's Alpha revealed the questionnaire to reach acceptable reliability of 0.748. The reliable variance of the score is 75% and the error variance is 25%.

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CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.0 INTRODUCTION

This section of the study shows a summary of the findings of the study, conclusion, and recommendations.

5.1 SUMMARY

The research revealed that most households were aware of microinsurance and its products. It found out that households received information about microinsurance and its schemes mostly through microinsurance agents and family and friends respectively. However, households were also informed through radios, TVs, and the internet on the need to purchase various forms of microinsurance schemes.

The study revealed age, gender, income, employment, marital status, income level, financial literacy, the flexibility of premium payments, price, compulsory element in the micro-credit package, Investment element in microinsurance schemes, savings element in microinsurance schemes, goodwill or long existence of microinsurance companies, risk aversion attitudes of households, household size positively micro-insurance scheme subscription. However, trust, the process of claiming benefits, quality of service provided, religion, and knowledge was found to negatively affect household's subscription to microinsurance schemes. Also, the study revealed that product accessibility and narrowness of service coverage had no impact on microinsurance demand.

The study showed that the demand for most microinsurance products is high. It found out that majority of households subscribed to micro health insurance, life or funeral, education, and property.

5.2 CONCLUSION

The findings of this study show that most households are aware of microinsurance and most of them were informed about microinsurance and its products through microinsurance agents and their family and friends. Also, the study shows that microinsurance is in high demand currently than in previous times with health and life/funeral microinsurance the most policies

subscribed to. Lastly, the study shows that investment, risk management, and savings mobilization significantly influence microinsurance subscriptions positively whereas flexibility of premium payments, compulsory element in micro-credit and goodwill, and/or long existence of company also moderately affected the subscription to microinsurance positively. On the other hand, quality of service, lack of trust, lack of knowledge about microinsurance products, and the difficult and bureaucratic process of claiming benefits greatly affected the demand for microinsurance products negatively whereas the belief of being safe from risk and high microinsurance price less affected microinsurance subscription negatively. Again, financial literacy, product accessibility, product awareness, the narrowness of service coverage, and the perception that microinsurance is for the rich had no impact on microinsurance demand.

5.3 RECOMMENDATION

The study recommends that microinsurance companies should increase and prioritize the education of people on microinsurance products and benefits. This can be done by training staffs most especially the company's agents in marketing or communication, employing marketing or communication professionals and also investing in radio/ TV or internet advertisement.

The study recommends that microinsurance companies and all other organizations delivering microinsurance services should extend services to rural areas (bankable poor) that are most vulnerable to life perils. To achieve this, the microinsurance companies should design more innovative schemes that are needs tailored and can also liaise with licensed microfinance institutions in such areas to effectively offer micro insurances services. This will help them make more profit, expand, and make a greater impact in the lives of the vulnerable in society.

The study further recommends that service providers should make the process of claiming benefits more easy, fast, and relaxed to increase customer's demand for their products. Also, service providers should improve on the services they provide to make their products more attractive to the high and middle-income levels of households. Lastly, service providers should design schemes that give room for low or no interest due to some religious beliefs so that they can reach most of their target group.

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5.4 RECOMMENDATION FOR FURTHER STUDIES

The study recommends that further studies in this area can be done for the entire region since this study is limited in scope in terms of geography and thematic areas. Especially, when people living in rural areas those hard hit with life perils. Geographically, the study selected four communities within each income category in the Tamale metropolis which limits the study in generalizing findings.

The research recommends a further study in assessing the effectiveness of microinsurance in risk management, savings mobilization, and investment. The relevance of this study is as a result of the propensity of influence these factors have on the demand for microinsurance schemes. Also, the failure of microinsurance companies to deliver expected benefits would lead to a massive decrease in the subscription of microinsurance products.

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Appendix

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

INSTITUTE OF DISTANCE LEARNING (IDL)

QUESTIONNAIRE

Dear Respondent,

I am an MSc student of KNUST undertaking a study on the determinants of Microinsurance subscriptions in the Tamale Metropolis. This study forms part of the requirement for the program of Master of Science in Accounting and Finance in the Department of KNUST. Please, read each question carefully before responding, and then circle or tick the appropriate answer in the designated space. Please answer to the best of your ability. You are rest assured that the study is for only academic purposes; all and every information provided will therefore be treated with the utmost confidentiality. Thank you for your help.

Socio-Demographic Characteristics

1. Gender:

Male [] Female []

2. Age of respondent:

21-30 years [] 31-40 years [] 41-50 years [] 51 years + []

3. Marital status

Married [] Single [] Divorced [] Widowed []

4. Are you a breadwinner?

Yes [] No []

5. Household size:

6. Employment status

Employed [] unemployed []

7. Type of Employment

Farmer [] Trader [] Artisans [] Others, please specify

8. Monthly income

Below GH¢200 [] GH¢200-GH¢500 [] GH¢501-GH¢1,000 []

More than GH¢1,000 []

9. How often do you receive income?

Daily [] Weekly [] Monthly [] Quarterly [] Yearly []

10. What is your level of education?

None [] Basic [] SHS [] Tertiary/postgraduate/professional []

Others (Please specify).....

11. Religion

Islamic [] Christianity [] others []

Awareness of microinsurance and its products

12. Are you aware of microinsurance and its related products?

Yes [] No []

13. If yes, what is your source of information/awareness about microinsurance and its products?

Newspaper []

Radio & TV []

Internet []

Microinsurance agents []

Family & Friends []

Demand for microinsurance products

14. Have you currently subscribed to any form of microinsurance scheme?

Yes [] No []

15. If yes, what form of insurance did you subscribe to?

Life/Funeral []

Property []

Health []

Education []

Others (Please specify).....

Determinants of Microinsurance Subscription

16. The following statements indicate factors that influence micro insurance subscription.

You are required to select among the statements which factor(s) influence your subscription to microinsurance. Please tick in the appropriate box which of the statements relate to you.

Statements	
The price of microinsurance is too high	[]

I am not financially literate enough to understand micro-insurance schemes	<input type="checkbox"/>
I feel less exposed to the risk to purchase microinsurance	<input type="checkbox"/>
I don't trust the microinsurance providers	<input type="checkbox"/>
I was influenced by friends and relatives to purchase the product	<input type="checkbox"/>
Microinsurance products are not accessible	<input type="checkbox"/>
Coverage of services is too narrow	<input type="checkbox"/>
I am not aware of any form of microinsurance products	<input type="checkbox"/>
I don't have much knowledge about micro-insurance schemes	<input type="checkbox"/>
The quality of services provided under micro insurance schemes are too poor	<input type="checkbox"/>
Safeguards against the numerous perils of life – illness, injury, natural disasters, or loss of property	<input type="checkbox"/>
The flexibility of premium payments	<input type="checkbox"/>
Low premiums	<input type="checkbox"/>
Compulsory element in the micro-credit package	<input type="checkbox"/>
Investment element in microinsurance schemes	<input type="checkbox"/>
Savings element in microinsurance schemes	<input type="checkbox"/>
Goodwill /long existence of microinsurance companies	<input type="checkbox"/>

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