

**ADDRESSING FACTORS AFFECTING FIRE INSURANCE UPTAKE
A CASE STUDY OF MAKENI RESIDENTS IN ZAMBIA AT HOUSEHOLD LEVEL**

BY

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A Dissertation Submitted to the University of Zambia in Partial Fulfilment of the
Requirements for the Award of Master of Business Administration in Management Strategy

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DECLARATION

I, **Bervin Momba**, do hereby declare to the best of my knowledge that this piece of work is my original study and that the ideas and work of other persons in this dissertation have been duly acknowledged in the references. To the best of my knowledge, this work has not been presented previously partially or as whole at any other University for similar purposes. Errors and omissions if any in this work are purely mine.

Signature:.....

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APPROVAL

This dissertation by **Bervin Momba** approved as a fulfilment of the requirements for the award of the degree of Master of Business Administration in Management Strategy

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ABSTRACT

This study addressed factors affecting fire insurance uptake at household level among Makeni residents in Lusaka, Zambia. In carrying out this study, a survey was conducted. The target population was the residents of Makeni. The sampling technique used was simple stratified random sampling where 170 respondents were drawn from a population of the entire Makeni residents. The study collected information using a survey questionnaire. Analysis of the data was done using Statistical Package for Social Sciences (SPSS) to come up with various descriptive statistics. Finally, data was imported into STATA software where logit multivariate model regression was used to address factors affecting fire insurance uptake at household level. The study findings indicated that there were some social economic factors, diffusion factors, and customer value perceived factors and risk behaviour among Makeni Residents that affected fire uptake insurance. Further, the research concluded that there were various factors affecting fire insurance uptake among Makeni Residents differently at household level, though the fire uptake has been found to be very low at 39% visa vie less than 5% and less than 10% respectively. The study thus recommended that the government should continuously improve the country's GDP and per capital so that fire insurance uptake increase; government should take deliberate measure by way of regulation to introduce compulsory household fire insurance; insurance firms still have a big role to market their various products to the consumers through modern innovation technics and that consumers have to seriously embrace the idea of insurance as a financing instrument to mitigate their risks in day to today life.

Key Words: *Factors; Fire insurance; Uptake and Insurance industry*

DEDICATION

I wish to dedicate this work to my loving wife Zere Phiri Momba who tirelessly provided support throughout this journey. Our children Chabota Grace Momba and Chileleko Bervin Momba for their study companionship and unwavering support throughout the long period of my study.

My parents Mr. Apren H. Momba and Mrs. Grace M. Momba, all my sisters and brothers for the encouragement and earnest prayers.

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LIST OF ACRONYMS

A	Agreed
CPV	Customer Perceived Value
CSEE	Central and South-Eastern Europe
CSO	Central Statistical Office
DA	Disagreed
DMMU	Disaster Management and Mitigation Unit
DMU	Disaster Management Unit
FSDZ	Financial Sector Deepening Zambia
GDP	Growth Domestic Product
GWP	Growth Written Premium
IAZ	Insurance Association of Zambia
KPMG	Klynvelp Peat Marwick Goerdeler
MFIs	Micro Finance Institutions
NS	Not sure
PIA	The Pension and Insurance Authority
PwC	Price Waterhouse Coopers
SA	Strongly agreed
SD	Strongly disagreed
SPSS	Statistical Package for Social Sciences
ZIIS	Zambia Insurance Industry Survey
ZSIC	Zambia State Insurance Corporation

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

World over, global insurance penetration has remained very low of about less than 7% vis-a-vis life and non-life insurance from 1980 to 2016 (Swiss Re, 2018), yet world investments have continued to register growth in both developed and less developed countries of the world (World Bank Group, 2017). Though insurance is new, its economic contribution and importance cannot be undermined in mitigating economic loss. Ehiogu, Eze and Nwite (2018) acknowledge that current business world without insurance is untenable, hence the significance of insurance in business organisations. Comparing developed and less third countries of the world, global insurance has fairly penetrated in most developed countries compared to African economies (3.65%; Emerging Asia (2.96%); Middle East (1.35%), Central and Eastern Europe (2.01%), South and central America (3%), Oceania (5.6%), Western Europe (7.7%), North America (8.03%) and Advanced Asia (11.8%). Low penetration level shows many opportunities to invest in the insurance industry.

In Africa insurance penetration levels across the countries have equally remained low despite an increase in economic growth. Swiss Re revealed that South Africa in Africa is the largest insurance market at 44% and many countries in Africa including Zambia are at less than 1%. This scenario shows that African's economies despite huge investments from bilateral and multilateral corporations have not benefited fully from economic benefit of insurance as most developed countries have done. KPMG (2014) observed that with Africans, the majority were still struggling in meeting basic needs of life and thus insurance considered largely a luxury.

In Zambia, insurance penetration level remained very low as compared to other countries within the sub region, region and globally (Swiss Re). The Pension and Insurance Authority's (PIA, 2018) annual report showed that the industry penetration ratio in Zambia was at 2.29%. The insurance penetration ratio is a measure on how deep a country's insurance market is (Mahul et al. (2010). The table shows Growth Written Premium (GWP); Growth Domestic Product (GDP) or penetration ratio for Zambian insurance industry from 2014 to 2018.

Table 1: GWP Growth rate, GWP to GDP Ratio (2014-2018)

Year	2018	2017 (Restated)	2016	2015	2014
GWP	3, 183	2, 455	2, 107	1, 792	1, 524
GDP (Constant)	139,203.4	134, 270.6	129,700	125,004	121,457
Annual GWP Growth	16%	12%	17%	15%	17%
Annual GDP Growth	3.7%	3.5%	3.8%	2.9%	4.7%
GWP/ GDP Penetration Ratio)	2.29%	1.83%	1.62%	1.43%	1.25%

Source: PIA, 2018

The table above revealed Zambia's low-level penetration which has slightly improved from 2014 to 2018, that is from 1.25% (2014) to 2.29% (2018). The Insurance Association of Zambia (IAZ, 2018) concluded in that;

The country's large population remains uninsured as only 2.8 % of adults in Zambia has one form of insurance or another as per report. Despite the importance of insurance for economic development, social protection and means of protection against risk such as fire, death, healthy, injuries and investments, most African countries lack access to insurance products.

The picture about insurance penetration or uptake shows that insurance industry is still lagging behind at a global, regional and domestic (Zambia) levels, yet economic opportunities are thriving. On comparison globally, life insurance penetration had been slightly higher than non-life insurance.

1.2 Background

The presence of fire dates back to the time of human existence. Fire is important in the lives of many people and the environment. Doerr and Santi'n (2016), observed that fire was an important part of human civilization and a necessary perturbation to preserve ecosystem health and stimulate rejuvenation. Despite having significant contributions to both human and the environment, it has as well a negative effect on people's lives visa-a-vie damaging of properties

and the environment. The losses resulting from fire damage are huge and unexpected, causing deaths, damage to properties and negatively significant impacts on the environment (Doerr and Santi'n, 2016; Global Fire Monitoring Center, 2012; Guha, Below and Hoyois, 2013; Badger, 2015; Stephenson, Handmer and Robyn, 2013 and, Rahn (2009). The results of these losses have caused economic, social and environmental problems to human beings.

As a result of damage to properties and infrastructures, the world over had/has recognised the economic importance of fire through many different ways. In England, the history and development of fire insurance can easily be traced back to 1601 A.D. when the Poor Relief Act was enacted (Encyclopædia Britannica, 2014) and later in 1666 a great fire in London destroyed about 80% of the city sowing the seeds of fire Insurance (Evans, 2007). Xin and Huang (2013) acknowledged this world economic protection for buildings by saying:

Society has responded to the threat of fire in buildings in many ways, including fire department intervention, insurance, building regulations, education on fire hazards, controls on the use of materials and products in buildings, and the design of buildings to resist the effects of fire.

Therefore, buildings such as house dwellings can be insured from fire accidents in what is called house fire insurance, house owners or householders. Encyclopædia Britannica (2014) stated the purpose of fire insurance as;

The provision against losses caused by fire, lightning, break in, outburst of pipes, flooding and the removal of property from premises endangered by fire. The insurer agrees, for a fee, to reimburse the insured in the event of such an occurrence.

Insurance is seen as one of several risk financing instruments (Xin and Huang) and is able to provide compensation to house owners, house tenants, building infrastructures of businesses and governments. In this kind of arrangement, the policy holder is able to recover the damaged properties and able to recover from the shocks caused by various accidents. Schafer et al. (2018) revealed that many have argued that insurance must go beyond post-disaster reimbursement to pro-actively prevent damages from occurring.

In Zambia, the Zambia Insurance Industry Survey (ZIIS, 2019) revealed that total insurance market penetration had remained relatively low for the past five years, averaging around 1% mark for the industry. The survey further revealed that out of that 1%, non-life insurance was

found at 0.68% in 2018 and 0.73% in 2017. Much of non-life insurance consisted of motor vehicles and health (Africa Insurance Barometer, 2019). This shows that Zambia's fire insurance penetration at household level remained very low when compared to motor vehicles and health. This is surprising because despite Zambia's recent skyrocketing of housing development by both private and public sector across the country and with the current stock at over 2.5 million houses, estimates of only less than 10% of the households were insured across the country (Central Statistical Office, 2010). This means that most of the households had remained without insurance, hence low penetration and uptake level for this sector.

Many researchers have published empirical researches on insurance penetration and uptake and have identified different outcomes as to why non-life insurance remained low and have identified fire insurance uptake having the lowest margin. Therefore, this study has found it important to examine factors affecting fire uptake among Makeni Residents in Zambia.

1.3 Problem Statement

According to Pension and Insurance Authority (PIA, 2018), Zambia recorded low insurance penetration level at 2.3%, fire insurance had the lowest uptake levels in market share of less than 1%, and suggested that the situation is expected to continue in the near future. KPMG (2014) concluded that the low insurance penetration level was as a result of the majority of Africans struggling in meeting their basic needs and therefore, insurance was largely considered a luxury. Despite the country's housing infrastructure doubling in the last decade, the majority of the households have no form of insurance safeguarding against such devastating perils at family level.

This has made government, private and many residents at household level to continue losing millions of Kwachas from the loss of their houses and properties. The Zambia Insurance Journal (2016) recorded how fire inferno in Zambia had destroyed properties worthy millions of Kwachas from different sectors: COMESA trading centre, City Market trading complex, Down town shopping mall, Embassy Mall, Soweto Market, Chisokone Market as well as many more private dwelling houses in residential communities including Makeni. This means that owners of these properties be it government, private or individuals were financially crippled and poverty increased in a situation where they did not insure their properties. This in turn affect government coffers as the government had to intervene in some situation through Disaster Management Unit (DMU). This study thus, attempts to gain a deeper understanding

of the factors affecting fire insurance uptake among Makeni Residents at the household level, backed by limited knowledge in the literature regarding factors affecting fire insurance uptake in the Zambian insurance industry.

1.4 General Research Objectives

The general research objective of the study was to address factors affecting fire insurance uptake among Makeni Residents at the household level.

1.4.1 Specific Research Objectives

- 1) To profile the social economic determinants of Makeni residents.
- 2) To test the diffusion theory and the customer value perceived theory with a view to determine the compelling uptake factors of fire insurance policy.
- 3) To determine the risk behaviour among Makeni Residents.

1.5 Research Questions

The questions that need to provide data for this current study are;

- 1) What are the social economic characteristics of Makeni residents?
- 2) What extent do diffusion and customer perceived value theories affect fire insurance uptake among the household residents of Makeni?
- 3) What are the risk behaviour among Makani residents?

1.6 Significance of the Study

The study will improve insurance uptake and bring about growth among insurance providers in Zambia. It will also assist the insurance providers to package their policies in a manner that is easily understood in tandem with the realities in the market, this in turn will enhance national protection against financial losses and damage to property arising from insured perils at domestic, enterprise and national assets. This information will as well help policy makers in Zambia. Furthermore, increased penetration and uptake of fire insurance by the general populace will during the time of disaster, provide relief to Government expenditure through its Disaster Management and Mitigation Unit (DMMU) as policy holder will seek indemnity for protection from the insurance companies through their respective policies.

Lastly, the results of the study shall form basis of future research and provide measure which the Pension and insurance Authority could use to stimulate market penetration and insurance penetration through financial inclusion.

1.7 Scope of the Study

It is restricted to fire and non-fire insurance consumers at household level in Makeni's residential area of Lusaka, Zambia. The study will rely on the insights drawn from the respondents on the factors affecting fire insurance penetration in Zambia.

1.8 Limitation of the Study

This study was quantitatively designed. Since this topic is not much investigated, qualitative studies are required to explore more information of factors affecting fire uptake insurance at household level. The study was limited to Makeni Residents only. Therefore, such a study's findings may not be generalized to the rest of Zambian communities as this issue is quite important in the economic development of this country.

1.9 Operational Definitions

In readers and the researcher must have common understanding, therefore, definitions of variables used have been defined below;

Factors:	a circumstance, fact, or influence that contributes to taking up or not taking up insurance
Fire insurance:	insurance taken out to cover the cost of damage caused by fire and allied perils at household level
Uptake:	the action of taking up or making use of insurance for protection against losses and mitigations of residential risks
Insurance industry:	the companies, people, and activities that are involved in providing insurance for protection.

1.10 Organization of the Report

This report opened with chapter 1 highlighting the background information about the subject studied. It covered subtitles: the problem statement, objectives, research questions, hypothesis, significance of the study, scope of the study, operational definitions, chapter summary and organisation of the report. Chapter II gave a detailed analysis of literature reviewed from many regions. Chapter III looked at theoretical and conceptual frameworks for the problem studied. Chapter IV provided the methodology used in this study. Chapter V was dedicated to the findings of the study. Chapter VI discussion of the study and finally Chapter VII provided the conclusions and some recommendations for future projects.

1.11 Chapter Summary

Chapter one provided the background of the study by bring out the problem at hand with low insurance uptake. The chapter continued with other sections that included: research objectives and research questions, hypotheses, significance of the study, operational definitions and summary chapter. The next chapter attempted to look at relevant literature reviews.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In chapter one, the researcher took time to introduce the research topic and its justification. The problem of lack of fire insurance uptake was laid bare making the justification of the current research to go ahead. The chapter outlined the background of study, problem statement, research questions and objectives, limitations and delimitation of study, significance of the study, and defines key terms in the study.

The purpose of this chapter is to review relevant literature or empirical studies related to the current study on fire uptake insurance. Hambulo (2016) in his research entitled, “Catholic Education and Identity Reformation in Zambia’s Southern Province” had revealed a number of advantages as to why carrying out literature review is significant in any study to be undertaken. Hambulo chronicled the importance of reviewing literature in that:

Literature review is central to any research study because it provides the logical rules, ideas or beliefs upon which the research is based. It also provides the researcher with the much-needed insight into what has been done in the field or subject being studied, how it was done and what conclusions and recommendations were made. It also helps in identifying the weaknesses and strengths of the study. Additionally, a review of literature is important because it contextualizes the current study by placing it within the context of other similar studies in order to strengthen it and provide a significance or justification for it. Moreover, a thorough review of literature helps the researcher to avoid duplication of studies already done on a particular subject.

Therefore, because of so many advantages of carrying out literature review in any study, the researchers as well spent time to review relevant researches at international, regional and domestic levels.

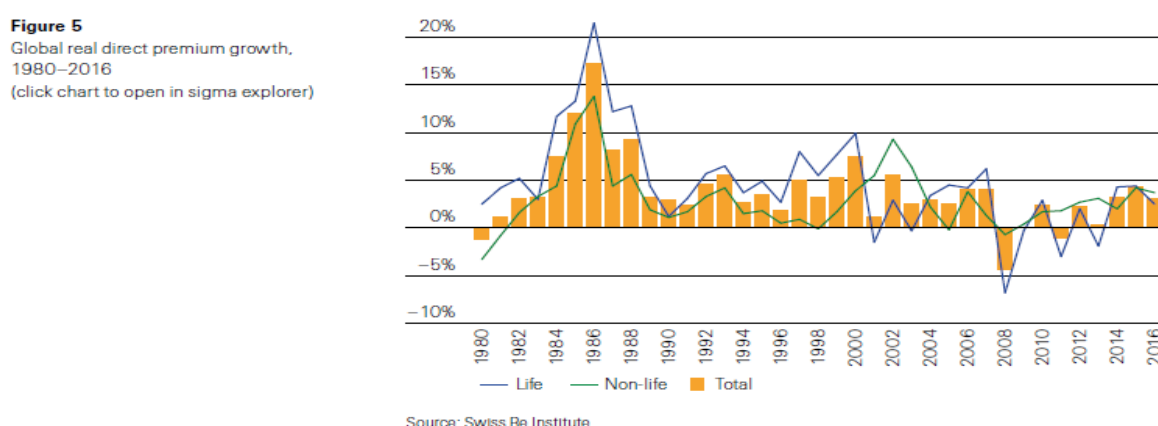
2.2 Overview of Global Insurance and Penetration

According to Swiss Re Institute (2017), the global insurance premium growth slowed total direct premiums written grew by a fairly solid 3.1% in real terms in 2016, down from 4.3% in 2015. Swiss Re Institute observed that:

The slower rate was due mainly to considerably lower growth in the advanced markets, while China pushed up growth among the otherwise also slowing emerging markets. Premiums in nominal USD terms were up 2.9% to USD 4732 billion. Nominal USD growth was slower than real growth due to currency depreciations, particularly in the UK and some emerging countries. Global premium growth slowed to 3.1% in 2016, mainly due to weaker growth in the advanced markets.

The figure below shows the overview of global insurance and penetration from 1980–2016.

Figure 2.1: Global real direct premium growth, 1980–2016



The figure above shows the position of global life and non-life insurance. Swiss Re Institute observed that global life and non-life insurance have been fluctuating from 1980 to 2016 due to many world economic and social factors. Among the latest trends, is as a result of:

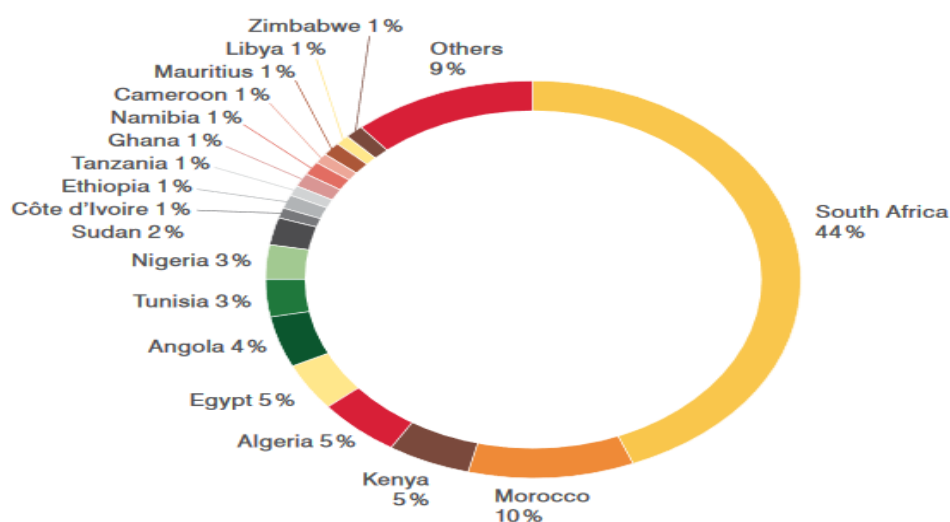
China is the world's third largest insurance market in terms of total premiums, after Japan and the US. Total direct premium volume in North America and Western Europe in 2016 was roughly the same as the previous year, at USD 1.4 trillion. With USD 466 billion, China is the third largest market and almost the same size as the second largest Japan (USD 471 billion), but still much smaller than the US (USD 1.35 trillion). It is possible to explore the shift of regional premium volumes, and the rise of China from the 16th largest market globally in 2000 to its current position as number 3, which it has held since 2015.

Global real direct premium growth from 1980 to 2016 figure is a good piece of literature for this current study as it has revealed the position of life and non-life insurance industry. Though

both life and non-life insurances have not performed well as shown on the figure, on average life insurance performed better than non-life insurance. On average, globally, there has been low levels of penetration. The low levels of penetration for both insurances offer opportunities in many countries as economic growth is showing growth in many countries of the world. All this economic growth will require economic protection, hence factors affecting insurance must be studied.

2.3 Overview of Africa Market as a Continent

The population of Africa has been estimated at about 1.2 billion across 54 Countries. Though population growth is increasing at an increasing rate, economic development has been increasing as well as Gross Domestic Products (GDPs). This is a general fact, that is, if one has to look at the past decade, the GDPs of most African countries have achieved an impressive economic growth rate and is expected to increase in the next decade. Because of this economic growth, insurance or economic protection becomes an important component of the economy. The table below shows how selected African countries have penetrated the insurance market. The figure shows South Africa at 44%; Morocco at 10%; Kenya, Algeria and Egypt at 5% respectively; Angola at 4%, Tunisia and Angola at 3%, Sudan at 2%; and the rest at 1% insurance penetration. This shows that South Africa is by far Africa's largest insurance market. Other major markets include Morocco, Egypt, Kenya, and Nigeria. The top 5 markets are able to account for about 85 % of total premiums.



Source: Dr. Schanz, Alms & Company, based on Swiss Re Institute, Sigma No 3/2018, sigma-explorer.com.

Figure 2.2: African countries and their insurance penetration.

According to Crawford et al, (2018), it was observed that among the top 5 markets, Kenya's insurance grew faster than the rest in 2015, reaching a compound annual growth rate of slightly more than 10 % from 2011 – 2015.

The general picture of the rest of the countries shows that there has been very low uptake of insurance in Africa. This means that there are many factors that affect the uptake of insurance in Africa. The low uptake of insurance in Africa does not mean that all types of insurance are at the same level of penetration. African Insurance Barometer (2019) observes that there are some types of insurances that are growing on the market. The figure below shows the fast-growing industry in the insurance business in Africa

Figure 2.3: Fast Growing insurance products



Source: African Insurance Barometer (2019)

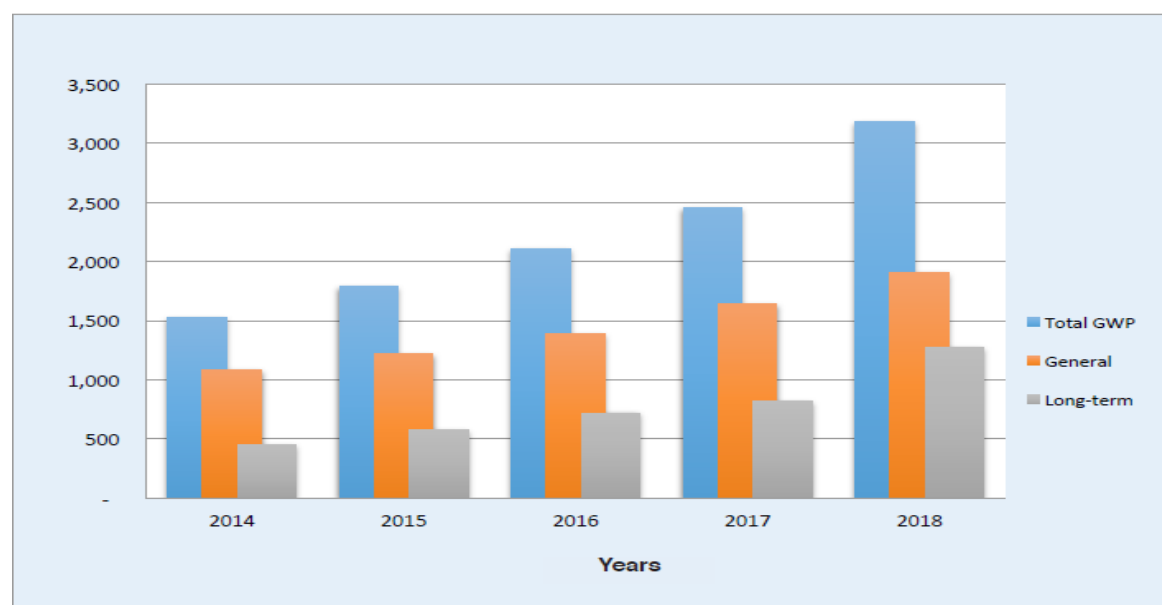
The figure above shows motor industry topping in Africa at 12%; followed by life insurance at 10%, and health insurance at 9%. The three types of business insurance are the fastest growing in Africa.

2.4 Insurance Company Market Penetration in Zambia

Bahloul and Bouri (2016) refer to penetration rate that permits one to identify the insurance activity in terms of premium volume as a percentage of GDP in a respective host country and the macroeconomic variable represented by the GDP. Therefore, penetration measures development of an insurance sector. According to Mahul et al. (2010), insurance penetration rate is expressed as the ratio between insurance premium volume and GDP; non- life insurance penetration is expressed as the ratio between non- life insurance premium volume and GDP. Mahul et al. (2010) the agricultural insurance penetration rate is lower than the non- life insurance penetration in all groups of countries classified by development status. The table

below shows Insurance Performance relative to national GDP in the short and long term from 2014 to 2018.

Figure 2.4: Insurance Performance relative to National GDP – Long Term and Short Term



Source: Pension Insurance Authority (2018)

According to Pension Insurance Authority (2018), Zambia's penetration insurance had remained low with the industry ratio of 1.15% in the year 2018 as compared to 1.16% in 2017. The table below shows Zambia's penetration from 2014 to 2018 for life insurance and non-life insurance. Comparing life insurance and non-life insurance penetration, non-life insurance has performed better than life insurance from 2014 to 2018 respectively. Further comparison of life insurance and non-life insurance premium, non-life insurance has performed better than life insurance from 2014 to 2018 respectively. This shows that non-life insurance has gained market. Table 3: Comparing life insurance and non-life insurance penetration and premium of life and on-life insurance from 2014 to 2018 and industry as a whole

Table 2: Insurance Penetration

Year	2014	2015	2016	2017	2018
Gross Domestic Product-Mkt Price	171.316	232.269	216.094	245.685	279.441
Life Insurance Premiums	0.630	0.770	0.814	1.022	1.294
Life Insurance Penetration	0.37%	0.33%	0.38%	0.43%	0.46%
Non-life Insurance Premiums	1.217	1.388	1.652	1.799	1.907
Non-Life Insurance Penetration	0.71%	0.60%	0.76%	0.73%	0.68%
Total Industry Premiums	1.848	2.159	2.467	2.821	3.201
Insurance Industry Penetration**	1.08%	0.93%	1.14%	1.16%	1.15%

Figures in billion kwacha

$$**\text{Insurance Penetration} = \frac{\text{Gross Premium}}{\text{GDP}} \times 100\%$$

The insurance penetration has remained low and constant around the 1% mark for the past 5 years as depicted in the Table above and the Figure below. The penetration of insurance in 2018 was 1.15% as compared to 1.16% in 2017.

Source: IAZ Industry report, 2018

Though this information has not provided much information about types of non-life insurance in Zambia, fire uptake must be an important element by looking at the construction of houses and infrastructure. There is need to ascertain factors that affect it. The low levels of penetration of both provide an opportunity for the insurance industry to tap into the uninsured market. The low levels of insured citizens provide a huge opportunity and potential to generate demand.

2.5 Empirical Literature on Uptake Insurance at International Level

Cheng Yuan and Yu Jiang (2015) carried out a study on factors affecting the overall insurance in China that included life insurance and nonlife insurance. The research used provincial data which was secondary between provided between 2000 and 2012.

Empirical results indicated that level of income, development of insurance market and level of marketization are the common factors; level of education, development of social security pension, children dependency ratio and elderly dependency ratio mainly affected life insurance; inflation mainly affected the nonlife insurance. With the results that were achieved, it was overall concluded that China being the largest developing country in the world, had achieved rapid development of insurance market since the reform and opening up of China. Cheng

Yuan and Yu Jiang's research is an eye opener of what goes on in China. Though fire insurance had not come out distinctly, there is no doubt that fire uptake could lag behind when the rest of the insurances are advancing. China and Zambia are both developing countries, but economic conditions differ in both countries.

Petkovski and Jordan (2014) studied or examined the determinant of non-life insurance consumption in 16 countries in Central and South-Eastern Europe (CSEE) during the period 1992-2011. These 16 countries in Central and South-Eastern Europe were: Albania, Belarus, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, FYROM, Moldova, Poland, Romania, the Slovak Republic, Slovenia and Ukraine. The model used to analyse data was an econometric model called Larsson et al. (2001) cointegration test and the dynamic ordinary least squares. The findings were quoted as follows:

In DOLS regressions, the long-run effects - β were all positive, ranging from 0.15 (Albania) to 1.27. From the results obtained from single-equation DOLS test, it was concluded that mostly in developing countries such as Poland, the Czech Republic, Slovenia, Hungary, and Lithuania there were strong long-run relationships among the selected variables. From the panel test estimates of long-run cointegrating vectors indicated a positive association between GDP per capita and non-life insurance consumption. GDP per capita has a positive impact on non-life insurance consumption during the period under investigation. Obviously, increased income allows for higher consumption in general, makes insurance more affordable, and creates a greater demand for non-life insurance to safeguard acquired property.

On the impact of macroeconomic conditions on purchasing decisions of non-life insurance, Petkovski and Jordan concluded in this way;

Positive impact of macroeconomic conditions on purchasing decisions of non-life insurance indicates that the good shape of the domestic economy in countries in CSEE is a source of the growth of operations of the real sector and other customers of insurance companies and creates higher demand for new insurance (i.e., property insurance and protection against financial risk). At the same time, dynamically growing economy is associated with lower values of gross paid claims.

On trade and non-life insurance, they concluded that:

We also find that trade is significant, suggesting that more open countries accumulate more insurance assets. The impact of trade seems to be captured by the size of population, where the results in our study show that these variables have positively and statistically significant influence of non-life insurance consumption reflecting the importance of external trade in small and open economies.

With regard to other institutional factor and non-life insurance, they concluded by saying:

Also the results from other institutional factor underline the importance of rule of law in non-life insurance consumption. Therefore, it is worth noticing that protection and enforcement of property rights will facilitate the demand of non-life insurance policies.

On education, there conclusion was:

Also, we think that the level of education will have a positive effect on the demand for non-life insurance. The reasoning for such statement is that elevating the education level of population would be useful to enhance the understanding of financial products presented on the market and possible benefits from using them by potential consumers.

With regard to inflation and non-life insurance;

Inflation appears to have negative influence on non-life insurance consumption. Therefore, macroeconomic stability plays an important role in the development of non-life insurance market.

Their overall conclusion was:

Central and South-Eastern Europe countries are regarded to be a highly potential region with dynamic and fast-growing insurance markets.

In Petkovski and Jordan' studied on the determinant of non-life insurance consumption in 16 countries in Central and South-Eastern Europe, the factors affecting non-life insurance were found as indicated above. Petkovski and Jordan's study is appropriate chosen as this current study will deal with fire insurance uptake which is a non-life insurance in Zambia's Makeni Residence. Though Central and South-Eastern Europe countries are different from Zambia, the research has made aware of what is happening in other countries of the world. Petkovski and

Jordan's study was generalized about non-life insurance in Central and South-Eastern Europe countries, the current has proposed fire insurance uptake.

A study entitled, "determinants of insurance pervasiveness: a cross-national analysis." was carried by Park et al. (2002). The main objective was to determine the impact of sociocultural variables on the degree of insurance pervasiveness in 37 countries across the globe.

The results of the study revealed that in 37 countries across the globe, there were certain cultural and socio-political variables significantly influenced the level of insurance pervasiveness. The most significant were masculine–feminine dimension of national culture, aggregate income, socio-political stability, and government regulation had statistically significant effects.

The literature reviewed above was appropriate for this study as it highlighted what goes on in many different parts of the world. The literature armed the researcher about factors affecting insurance in the other parts of the world. Though the situation may be similar elsewhere, it may be different in Makeni Residential Area.

2.6 Empirical Literature on Uptake Insurance at Regional Level

Gitau, P. N. (2015) in his Assessment of Cultural Factors Affecting Insurance Uptake a Survey of the Nairobi County Central Business District. According to Gitau, insurance uptake had remained low at 3% of the country's GDP as at 2014 despite many developmental activities in the social, economic and political changes in Kenya for the last decade. It was for that reason that the study was justified to establish the effect of cultural factors on the uptake of insurance in Kenya. The study employed a descriptive research design with the help of a questionnaire. The existing and potential insurance customers within the Nairobi CBD were targeted for the study where 100 respondents were chosen using convenience sampling technique. Based on the findings the study concluded that religion, cultural taboos and beliefs, cultural attitudes and values; language used by insurance sales agents, and lack of education had a negative effect on the uptake of insurance in Kenya.

The study by Gitau (2015) was relevant to this current study because of many factors revealed in his study. It has provided a significance or justification for this current study in that Gitau did not itemize insurance uptake in one particular product such as fire, housing, car and education. He generalized insurance uptake and why it had remained low at 3% in Kenya's

GDP. The general conclusion was that there were some cultural factors that negatively affected insurance uptake in Kenya. Gitau's research in Kenya, has provided the researcher with the much-needed insight into what culture can do to insurance uptake even in Zambia given that Kenya and Zambia are closer to each other though the environment, socio-economic conditions may not be the same. In Gitau's research, it's not known how culture may impact negatively or positively on fire uptake that this current study intends to study here in Makeni Suburb of Zambia.

Another study in Nairobi, Kenya in 2017 by Murigi was carried out on the penetration and uptake of insurance in Kenya: a case of shopping malls in Nairobi county. The general objective was to establish the factors that contributed to the low penetration and uptake of insurance in Kenya. The specific objectives were to examine how social aspects, how low literacy levels and how lack of technological innovations affect the uptake of insurance. The study used explanatory research design where three malls were selected from a total of 30 shopping malls in Nairobi County, Kenya. The data collection instrument used was a questionnaire having both open and close ended questions.

The results of the study found many negative influences of many factors affecting uptake negatively. In the study many challenges were revealed; general lack of trust of insurance companies by the general public and poor agents' integrity; poor claims management in the industry adversely affected by fraud arising from unprofessional conduct of players; Misguided customers on the type of policies to take and that insurance companies acted very slowly in processing claims. The study further revealed more challenges that included: Many individuals depended on their extended families to access personal savings in case of an emergency as opposed to insurance. The study established that customers read the policies but misinterpret certain clauses; insurance products were complex and legal contracts were poorly understood by consumers.

The study also went to establish many challenges in the insurance industry that included: Low level of awareness and lack of knowledge of insurance products; only educated people were more likely to purchase insurance policies; insurance companies in Kenya faced the challenge of limited expertise and skills amongst their workers; social media had been underutilized by the insurance sector in Kenya; lack of digitization by insurance companies negatively affected customer interaction in the course of a policy period; lack of digitization denied insurance

companies important feedback from customers, and a lot of paperwork involved in processing claims by insurance companies which discouraged customers.

The reviewing of Murigi on shopping malls in Nairobi Kenya was relevant to this current study as this current study proposes to study on the uptake of insurance by households in Zambia. Though shopping malls were owned by companies and, houses and property by landlords and tenants they are prone to fire risks, therefore, the structures and the properties must be insured. If companies fail to insure their infrastructures and properties, one may expect landlords and tenants failing to insure their houses and properties altogether in Zambia. Murigi did not specify the type of insurance on the shopping malls, one would expect fire insurance to be part of the insurance that shopping malls may venture into. This current research has specified its study on factors affecting fire insurance uptake in Makeni Residential Suburb.

Olaleye and Adegoke (2009) carried out their research on homeowners' perception of insurance of real estate development in Lagos, Nigeria. The main purpose of their research was to examine the views held on property insurance by homeowners in Ire-Akari and Ikeja areas of Lagos State, Nigeria. The specific objectives were to establish factors responsible for lack of insurance culture in this area of homeownership.

Quantitative data was collected using a closed questionnaire which was administered to 485 homeowners. The homeowners were selected using a systematic random sampling technique, in the two areas Ire-Akari and Ikeja studied. A household head/owner was targeted in the survey in each of the building selected. The modes of data analysis were frequency distribution, mean and standard deviation measure and Chi-square test.

The results of the study revealed many interesting issues about homeownership insurance. Out of the total number of respondents targeted, 62.9% agreed that property insurance was essential, and only 40.3% of the homeowners insured their properties against unforeseen occurrences. Further, the study revealed that homeowners' attitude was influenced by the poor service culture of insurance companies and crime in the insurance industry. The model revealed that homeowners' lack of insurance culture was significantly associated: Educational qualifications ($\chi^2 = 41.387$, $p < 0.01$), family size ($\chi^2 = 12.199$, $p < 0.05$), level of income ($\chi^2 = 36.585$, $p < 0.01$) and level of awareness ($\chi^2 = 27.987$, $p < 0.01$). It was finally concluded that the lower the level of income, educational qualification and level of awareness on the part of homeowners, the more the likelihood that they would not insure their properties.

The study by Olaleye and Adegoke is relevant to the current study, reason being that both Olaleye and Adegoke, and this current study's attention is on 'the homeownership insurance, which is the basis of this study. Though Olaleye and Adegoke did not focus on fire insurance uptake as a whole, it is proposed that it was covered generally on home ownership insurance. Though the environment, economic and social are not the same in both countries, Olaleye and Adegoke's research forewarns the current study of what is on the ground with home ownership insurance in other countries. Therefore, leaving a knowledge gap for this study in Makeni of Zambia about factors affecting fire insurance uptake in Zambia.

2.7 Empirical Literature on Uptake Insurance at Local or Domestic Level

Price Waterhouse Coopers (PwC, 2019) carried out a survey in the insurance industry sector in Zambia. The main purpose of the survey was to analyse the risks and challenges facing Zambia's insurance industry over the short, medium and long-term. According to PwC, the survey was the first of its kind. Data was collected from 33 insurance companies currently operating in Zambia using a questionnaire and with interviews from key players in the sector. The survey was conducted Out of 33 insurance companies, only 19 were able to respond. From the 19 insurance companies, six companies were from the life insurance sector and had a combined market share of 79% in the life sector, while 11 came from the non-life sector, with a combined market share of 75%. The remained two companies came from the minority reinsurance sector. Market share for respondents was based on sector analysis by the Pensions and Insurance Authority (PIA), the insurance industry's regulator, and the Insurers' Association of Zambia (IAZ) for the year ended 31 December 2018.

Price Waterhouse Coopers (PwC, 2019) carried out a survey in the insurance industry sector in Zambia. The results of the survey found five main issues pressing all the insurance companies. This was from non-life, life or reinsurance. These were: Recoverability of premium debtors was the biggest challenge facing insurance companies; Economic environment; Regulatory environment; Understanding the role/benefits of insurance among the Zambian population (lack of consumer awareness) and Availability of skilled resources.

One result which is important for this study was the non-life insurance companies versus the industry. The findings were displayed on the table below,

Table 3: Top Five issues For Non-Life Insurance Companies versus the Industry

Issues	Average Score	Subsector Rating	Industry wide rating
Recovery of premium debtors	9.08	1	1
Economic environment	4.50	2	3
Regulatory environment	4.17	3	5
Understanding the role/benefits of insurance among the Zambian population	3.92	4	2
Availability of skilled resources	3.92	5	4

Source: Price Waterhouse Coopers

Price Waterhouse Coopers (PwC, 2019) summarised the table above and noted;

The non-life insurance sector ranked these issues differently to the broader industry. While recoverability of premium debtors was rated highest for both the industry and the non-life subsector, regulatory environment replaced economic environment in second place for non-life insurance companies (regulatory environment was number three in the industry rankings). Meanwhile, the economic environment was pushed to number four for non-life insurance companies (it was number two for the industry), while understanding the role/benefits of insurance amongst the Zambian population was the fifth most pressing issue for non-life companies compared to fourth for the industry as a whole.

The study by Price Waterhouse Coopers (PwC, 2019) is relevant to this study because it informed the researcher about the risks and challenges facing Zambia's insurance industry over the short, medium and long-term. Of particular importance is the non-life insurance which was not elaborate to categorise them so that fire insurance is given its position among them for the researcher to conclude how it is being affected. The study on non-life insurance did not specific which group of the Zambian population was covered. Further, the study also revealed how non-life insurance is affected by lack of consumer awareness and economic hardships. The generalization of the findings on the benefits of insurance among the Zambian population gives a knowledge gap to study factors affecting uptake insurance among Makeni residents in Zambia.

Manje in 2005 researched on, “Good and Bad Practices in Microinsurance”. The main purpose was to ascertain whether Madison Insurance was able to reach the low-income market through Micro Finance Institutions (MFIs) with an emphasis on PULSE Holding Limited which was the oldest in partnership.

The results of the study revealed that the microinsurance provision in Zambia was a new concept with an impressive increasing rate of expansion. It was further reported that the range of microinsurance products remained narrow with most of the products being closely linked to microcredit. It was found that microinsurance in Zambia largely consisted of credit life and funeral coverage for microfinance borrowers and their family members. Madison had reached over 100,000 low-income persons together with MFI borrowers and their family members. The partnership between Madison and the MFIs had allowed the market to be penetrated reaching customers that could not serve be served by MFIs on its own with a product that has been quite profitable.

Manje’s survey is importance for this study as it revealed how microinsurance is trying to help the low-income people to insure their businesses, though the rest is not impressive by looking at the responses that came from customers. The only product that customers have accessed despite having an opportunity to insure many products were the credit life and funeral coverage for microfinance borrowers and their family members. The willingness by Madison to insure different products under microinsurance package is a testimony enough for those low-income people.

Manje’s survey presents an opportunity for this current research to research on factors affecting fire uptake insurance in Makeni Residential Area because there is no excuse for them to fail to borrow when such a programme is willing to assist the low-income group.

The Bank of Zambia, partnered with Financial Sector Deepening Zambia (FSDZ) with advisory support from FinMark Trust, executed the FinScope Zambia 2015 survey. The objectives of the study included that of: Tracking overall trends in financial inclusion over time in terms of: changes in the levels of inclusion – both formal and informal inclusion and changes in terms of the type of financial services being used and the type of providers, and assessing whether Zambia was on track in terms of achieving national financial inclusion targets.

The data for the survey was provided by the Central Statistical Office (CSO) of Zambia drawn from the sample frame of 2010 population census. The 866 enumerators collected the data. The

sample was both representative at national and provincial levels, as well as representative of urban and rural districts within provinces. The mode of data collection was through interviews which was captured electronically using a mobile phone-based platform as well as face-to-face interview using a structured questionnaire. Random samples and systematic random sampling technique were used to collect data. The respondents consisted of individuals from 16 years and above representing the adult population – 8.1m.

The findings revealed that more than half of the adult population lived in the rural areas; 51.0% of the adult population were female and 60.1% (4.9 m) adults were 35 years or younger. There were many other findings to this survey that the researcher has not found significant to report on them. One interesting finding of the survey was about the barriers to uptake formal products/services in the insurance products. The table below shows how insurance performed in 2015.

Table 4: Percent of Adults Who do not have/use Insurance Services

Have not heard about insurance*	42.6
Cannot afford it	14.5
Does not know how it works (awareness)	11.2
Does not know the benefits of insurance	5.2
Does not know how to get it/where to get it	4.2

Source: Finscope (2015)

20% of adults who have heard about insurance are insured – only 15% claim to have heard of insurance. The table above showed how insurance fared in Zambia in 2015.

Finscope survey is an important literature reviewed for the current study. It has clearly shown the researcher the problem encountered by the insurance companies' failure to increase their business. According to Finscope (2015) lack of awareness as depicted on the table as having the most significant barrier to insurance penetration and uptake among the Zambian population. The reported further indicated that out of 100% adults, only 88.3% adults had never heard of insurance in their lives.

The study presented a knowledge gap for the current study. The survey did not categorise insurance such as life and non- life insurance. The non-life insurance was also not categorized to ascertain how fire insurance fared. The study also did not indicate whether urban areas were lagging behind in fire insurance. The generalization of the insurance presents a knowledge gap for this current study.

Chirwa in 2019, carried out a research for insurance uptake among Chilenje marketeers in Zambia. The research revealed a number of problems affecting insurance. The target population was the marketeers trading at Chilenje Market in Lusaka District. The sampling technique used was individual probability sampling where 100 respondents were drawn from a population of 1,450. The study collected information using a survey questionnaire. Analysis of the data was done using the Statistical Package for Social Sciences (SPSS). Data was analysed and presented in the form of descriptive and inferential statistics. Correlation analysis was also done to test the relationship between the various study variables.

These problems were: Negative perception of insurance among the marketeers was the most challenging resulting in many marketeers not having any form of insurance; product offerings were limited to the needs of consumers in the insurance industry; lack of government support and financial inclusion was a challenge and further stated that most insurance providers were running away from informal sector in providing insurance due to their business systems that were not regulated for their activities, poor customer experience and finally, education was lacking among the marketeers and contributed significantly to low penetration and uptake.

Further, his study revealed that revealed that for insurance uptake to increase, ZSIC Life must ensure that there is research conducted to determine the product type and pricing; consumer education; diverse distribution channels; flexible payment solutions and quality customer. The reviewing of Chirwa research for insurance uptake among Chilenje marketeers in Zambia is relevant to this study. Chirwa revealed a number of problems among the marketeers in Chilenje. There are a number of differences between Chilenje marketeers and Makeni Residence. The socio-economic environment may not be the same, as Makeni Residence may present a different picture altogether but the institution factors from ZSIC Life and the General companies may have the similarities, hence researching on factors affecting fire uptake in that proposed area. According to the 2016 World Bank Financial Capability Survey, on financial inclusion tested evidence, low insurance penetration was as a result of poor financial inclusion among the Zambian population across the country from both rural and urban sectors.

In a related research carried out by Chileshe (2009) in Zambia, on the assessment of viability of electronic commerce (e-commerce) in the insurance industry in Zambia. Empirical evidence was provided as to why insurance had lagged behind in Zambia. The study revealed that one of the main challenges to insurance was that the market lacked effective e-commerce and e-business insurance industry in trying to tap unpenetrated market in the industry in Zambia. It was further noted that the insurance industry was not as fast as the banking sector in adopting technology advancement in their service delivery and value creation for the product offerings.

Chileshe's report is relevant to the current research in that it revealed how insurance companies were still lagging behind in terms of technology. Currently technology is an important factor in business especially among the elites in society because it provides for so many opportunities to do business. This information is important to the researcher as the research advances in collecting data from respondents of Makeni Residence.

2.8 The Research Gap

The effect of low market penetration on fire insurance at household level has not been widely covered in most of the studies. Most of the researchers have generally focused on a combination of factors affecting penetration on insurance with a combine approach of microinsurance to address penetration at household level. This has not yielded much results to address penetration of fire insurance at household level in much as the correlation of microinsurance exist. This is largely inadequate because fire insurance does not entirely fall under microinsurance in entirety. Therefore, a model that specifically address uptake at household level for fire insurance is required.

CHAPTER THREE

THEORETICAL AND CONCEPTUAL FRAMEWORK

3.1 Introduction

Chapter two reviewed different types of literatures from domestic, regional and international perspectives. Relevant concepts of insurance in general and the performance of insurance players in the market were reviewed. The chapter also discussed penetration challenges in Zambia through review of similar studies.

This chapter looked at the theories that can be used to understand factors affecting fire insurance uptake at household level. As discussed in the earlier chapters one and two respectively, fire insurance penetration challenges at household level is basically facing similar challenges to that of other classes of insurance despite being one of the oldest forms of insurance. Therefore, this chapter gives reasons first as to why different theoretical frameworks will be used to understand factors affecting household fire uptake insurance.

3.2 Theoretical Framework

The theoretical framework guiding this study is very holistic as guided by the literature reviewed on factors affecting insurance in general. Therefore, not one approach can afford to explain insurance uptake. Multi-dimensional theories combined together can explain such a phenomenon. Swiss Re Institute (2017) claimed that various socio-economic, institutional and cultural factors affect insurance uptake or penetration. Swiss Re Institute provided a clue as to how far differences in culture can affect insurance of e-commerce in various ways. In Kenya, Langat, Naibei and Getare (2017) found that there was significant relationship between consumer behaviour and insurance uptake and that economic factors, demographic, product awareness greatly influenced the uptake of insurance services when studied determinants of insurance uptake in developing countries.

In another study by Li, Moshirian, Nguyen and Wee (2007) when examining the determinants of life insurance consumption in OECD countries, they found a significant positive income elasticity of life insurance demand, increased with the number of dependents and level of education, the country's level of financial development and its insurance market's degree of competition, whereas high inflation and real interest rates tended to decrease consumption.

Overall, life insurance was better explained when the product market and socio-economic factors were jointly considered. In Kenya, Gitau found a variety of cultural negatively affecting the uptake of insurance: among them cultural taboos and beliefs, cultural attitudes and value language used by insurance sales agents and lack of education has a negative effect on the uptake of insurance in Kenya.

This theoretical framework to be developed by the researcher must illustrate the multidimensional effects of factors affecting fire uptake of insurance on the residents of Makeni. Makeni, being a cosmopolitan suburb, one expects varieties of factors. At an individual level, one or two may find socio-economic, cultural and institutional factors among many to have affected the low uptake of fire insurance. Therefore, using the holistic approach model as a guide, the researcher explored these factors using the diffusion theory supplemented by customer perceived value (CPV) theory, social exchange theory (SET) and rational choice theory.

3.2.1 The Diffusion Theory

The theory was coined in 1960 by Lionberger. Lionberger stated that for people to accept new information, the information has to be processed prudently in five stages. According to Rogers (1983, 3rd Ed.) diffusion and communication processes are:

Communicated through certain channels overtime among the members of a social system and that communication is a process in which participants create and share new information with one another in order to reach a mutual understanding.

In this regard, reaching a mutual understanding requires communication to be a two-way system. According to Lionberger, when people receive this information and reach a mutual understanding, they have to go through five stages. These stages according to Lionberger are awareness stage; the interest stage; evaluation stage; trial stage and adoption stage. According to Rogers, adoption stage has five categories for participants to adopt a new idea. These groups are: The Innovators, early adopters, early majority, late majority and laggards. Both Lionberger and Rogers have a similar understanding of a new idea to be passed on to a closed, cultural and social system. In all these categories, Rogers emphasized that the change agent becomes more important because he/she has to become active in encouraging an opinion leader to adopt or reject an innovation.

The slow growth in fire insurance in Zambia can be explained by the diffusion theory, because insurance is a new concept among the citizens of Zambia especially when it comes to household fire uptake. In times of calamities, it is a well-known story about relatives and friends helping those in a tragedy such as death and fire among many instead of the new concept which has many regulations. Here, culture plays a significant role. Therefore, in order to change the mentality of the citizens that have to go through the five stages of innovators, early adopters, early majority, late majority and laggards is not an easy task. The change agent being the insurance companies have to play a big role for people to understand the importance of fire insurance or insurance as a whole.

3.2.2 The Customer Perceived Value Theory

The second theory under consideration is the customer perceived value theory to try to solve the problem of slow growth in fire insurance. According to Alshibly (2015), Customer Perceived Value has been defined as the difference between the prospective customer's evaluation of all benefits and all the costs of an offering and the perceived alternatives. Customer Perceived Value is equal to what customer gets (benefits) minus what he gives (costs). Kotler and Armstrong (2010) define customer benefit as:

A perceived monetary value of the bundle of economic, functional and psychological benefits customers expect from a given market offering because of the products, services, personnel, image involved and customer cost as a perceived bundle of costs customers expect to incur in evaluating, obtaining, using disposing of the given market offering, including monetary, time, energy and psychological costs.

This theory is self-explanatory in that a customer must be able to understand and evaluate the benefits and costs attached to the phenomenon at hand. In other words, there is cost benefit analysis that is involved. Oliver (2010) supports this latter explanation in that a customer must be able to define what satisfaction is in his/her own perspective rather than the parameters set by the seller of goods and services. That satisfaction must be the difference between the cost incurred and the benefits. All this cost and benefit analysis can come in because the insurance companies have done their parts by communicating to the innovation to the customers.

In order for the customer to evaluate the benefits and costs attached to the phenomenon, the customer must have full information from the insurance companies. This means that for an insurance company to attract customers, they must tailor their products to a level that a

customer can afford. The biggest problem in organisations is that the customer is not at the heart of the organisation or the customer is not a business. The shareholders feel the organisation belongs to them as long as they get the profits. It is for this reason that Kotler and Armstrong (2010) proposed the modern customer-oriented organization chart in which customers are placed at the top of the organisation. This means that the customer is the most important person in the organisation followed by workers of that organisation. By doing this, the insurance company will grow and keep the customers and the customer will see the benefits to themselves.

3.2.3 Social Exchange Theory

The third theory under consideration is the social exchange theory to try to solve the problem of slow growth in fire-life insurance. Thibaut and Kelley (1959) uses economic parameters that include cost and benefits to predict behaviour. The only difference between Customer Perceived Value above and social exchange theory is that the latter factors in the consequences of behaviour are of significant before making a decision on low costs low and high rewards. A key aspect of this definition is the inclusion of rewards and sanctions are key and mechanisms enforcing power in social exchange (Stanton and Stam, 2003). Further, Stanton and Stam argued that promising reward to an individual pushes toward a promotion-focused self-regulatory mind-set, whereas the threat of punishment pushes individuals toward a prevention focused orientation (Stanton and Stam, 2003).

Therefore, behaviour becomes an issue in this theory. The insurance company can do much to promise rewards to their customers by improving conditions. This can influence human behaviour. At the same time government can come in to enforce a policy in order to prevent future problems. This as well can influence behaviour.

3.2.4 Rational Choice Theory

Lastly among many that can be used to illustrate low insurance uptake is the famous theory called the rational choice theory where decision-making is concerned. Smith (1776) a Scottish Economist was the first economists to come up with the ideas of rational choice theory through many of his studies of self-interest and the invisible theory from his famous book, entitled, “An inquiry into the nature and causes of the wealth of nations”. From Smith’s time to date, all the disciplines have almost adopted the theory viz economics, political, philosophy, among others. According to Lohmann (2008), rational choice theory is a theory where individuals use rational

calculations to make sound and judicious decisions to make rational choices and those choices each must achieve an outcome and those outcomes must be aligned with their own personal objectives. Burns and Roszkowska (2016) stated that rational choice theory makes an assumption that an actor assumed to know all available alternatives and chosen the best action or means to achieve ones ends based on expectations about future consequences or outcomes of one choice.

Using rational choice theory, one expects the result of the outcomes that can provide individual in society with the greatest benefit and satisfaction given the available choice. Blume and Easley (2008) postulate that:

The basic premise of rational choice theory is that aggregate social behaviour results from the behaviour of individual actors, each of whom is making their individual decisions.

And continues to state that:

The premise of rational choice theory as a social science methodology is that the aggregate behaviour in society reflects the sum of the choices made by individuals. Each individual, in turn, makes their choice based on their own preferences and the constraints (or choice set).

According to Hedström and Stern (2008) the theory focuses on:

The determinants of the individual choices (methodological individualism). Rational choice theory then assumes that an individual has preferences among the available choice alternatives that allow them to state which option they prefer. These preferences are assumed to be complete (the person can always say which of two alternatives they consider preferable or that neither is preferred to the other. The rational agent is assumed to take account of available information, probabilities of events, and potential costs and benefits in determining preferences, and to act consistently in choosing the self-determined best choice of action.

In summary, rational decision-making involves choosing possibilities among all available possibilities and those possibilities that the individual most prefers. Burns and Roszkowska states that:

The possibilities can be a set of actions to do? or a set of objects to choose/buy. In the case of actions, what the individual really cares about are the outcomes that results from each possible action. Actions, in this case, are only an instrument for obtaining a particular outcome.

Therefore, the main elements of all rational choice explanations are individual preferences, beliefs, and constraints.

In summary, on the use of theoretical framework, various theories have been used to explore these factors using the diffusion theory supplemented by customer perceived value (CPV) theory, social exchange theory (SET) and rational choice theory because of the study's holistic approach.

3.3 Conceptual Framework

According to Mugenda and Mugenda (2003), a conceptual framework is a construction of various concepts and theories together, mapping the study showing relationship of research variables. For this study, three specific objectives were detailed on the framework. These variables are: social economic, diffusion factors and customer perceived value factors and risk taking.

Independent Variables

Dependent Variable

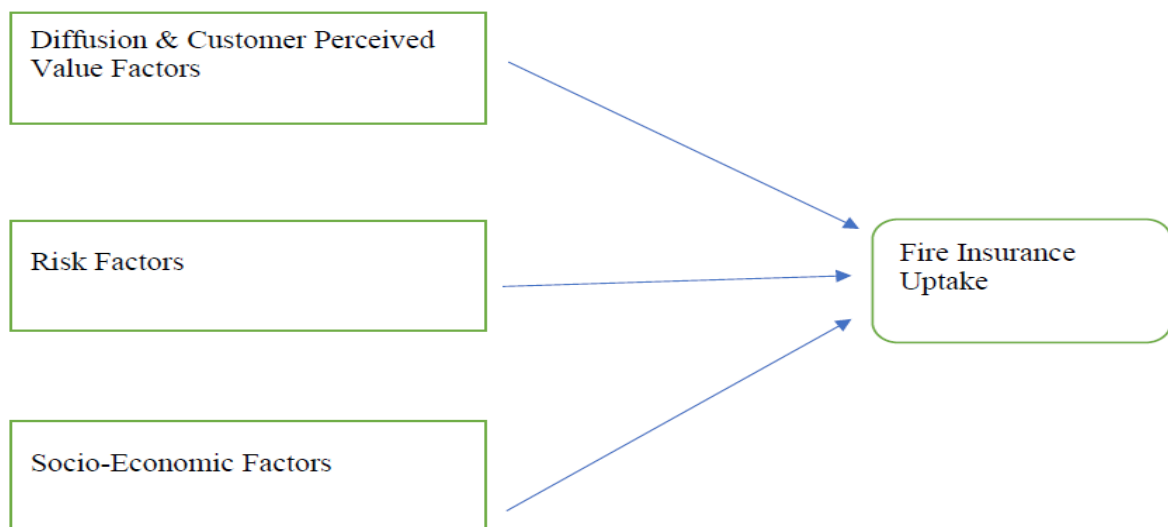


Figure 3.1: Showing factors affecting Fire Uptake Insurance

Therefore, the conceptual framework is constructed to explain various factors affecting fire uptake insurance. To measure fire insurance uptake means a land lord or tenant has to purchase the insurance or not. This means that the fire insurance uptake has two responses; that is yes or no suggesting a binary response model. This means that simple linear regression assumption is violated. This calls for a model with two responses such as logit or probit models. Logit model was used to measure the contribution of each factor identified. The Logit model is popular to many researchers analyzing a model with two choices (Maddala, 1988). Many empirical researchers have used the logit regression model to examine similar issues (Masangano, 2003; Haambiya, 2009). The main reason for the logit model is that it is easily computed than the probit model. In this current study, fire insurance uptake was the dependent variable defined as taking up fire insurance or not taking up fire insurance and independent variables came from socio-economic, diffusion and consumer perceived value and risk taking factors. A logit regression is specified as follows;

$$\ln (p_i/(1-p_i)) = \beta_0 + \beta X_i + \dots + \varepsilon_i \quad \text{where;}$$

$\ln$ = Probability of consuming fire insurance

P_i = Probability of a HH consuming fire insurance

$1-p_i$ = Probability of a HH not consuming fire insurance

β_0 = Intercept

β = Vector of coefficients of the predictors.

X_i = Vector of independent variables to be identified.

ε_i = Error Term

The HH Insurance fire uptake model is specified as follows;

$$Y = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{HHM} + \beta_3 \text{Occup} + \beta_4 \text{Edu} + \beta_5 \text{DFactors} + \beta_6 \text{HRT} + \beta_7 \text{CPV} + \dots + \varepsilon_i. \quad \text{where:}$$

Y = Insurance Fire Uptake

$\beta_1 \text{Age}$ = Age of household head

$\beta_2 \text{HHM}$ = Total number of household members

β_3 Occup = Occupational

β_4 Edu = Educational factor

β_5 DFactors = Diffusion factors

β_6 HRT = High Risk Factor

β_7 CPV = Customer Perceived Value

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

In chapter three above, theoretical and conceptual frameworks of the factors affecting fire insurance uptake at household level were discussed. The chapter discussed the main theories and models used in analyzing the various factors involved in determining insurance uptake on the market. This chapter discussed the methodology of the study. According to Kothari (2004), research methodology and defined as:

A way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them.

The various steps that were used and adopted by the researcher were: research setting, positivism research philosophy, research design, research matrix, research population such as size and sampling criteria, data collection and processing, data analysis and ethical considerations.

These various steps were generally adopted by a researcher as Kothari puts it, must have the logic behind them.

4.2 Research Setting

The research was conducted among the Makeni Resident in Lusaka, Zambia. Makeni was one of the oldest establishment in Zambia where many political leaders during Kaunda era established themselves. It is located to the western side of Kuo-mboka Town Ship, the suburb of Bonaventure Makeni which is between St Bonaventure University and Prince Charles Hotel. Makeni is one of the cosmopolitan residential area in Zambia with newer houses spaced and prone to many risks. It was therefore assumed that the residents would be objective as were not influenced to provide responses based on some recently experienced phenomena.

4.3 Positivism Research Philosophy

Research philosophy, according to Bajpai (2011) is just a researcher's belief in which data about a phenomenon should be collected, analysed and used. In every research that is carried out, either part or all in qualitative methods, Creswell (2012) reminds researchers the importance to consider the philosophical assumptions as well as the interpretive frameworks. According to Creswell, the philosophical assumptions ontology, epistemology, axiology and methodology are entrenched within interpretive frameworks (Post-positivism, Social Constructivism, Postmodernism Perspectives, Pragmatism, Feminist Theories, Critical Theory among others that researchers use.

This research proposes positivism research approach framework. The table below shows how positivism differs from other research philosophies.

Table 5: Positivism Research Philosophy

Research Philosophy	Research Approach	Ontology	Axiology	Research Strategy
<i>Pragmatism</i>	Deductive/Inductive	Objective / subjective	Value-free/biased	Qualitative and/or quantitative
Positivism	Deductive	Value-free	Quantitative	quantitative
<i>Interpretivism</i>	Inductive	Subjective	Biased	Qualitative

Source: Wilson, J. (2010) "Essentials of Business Research"

4.4 Research Design

According to Creswell (2009), research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. According to Creswell, the selection or choice of a research design is based on considering the three basic factors namely: philosophical assumptions, strategies of inquiry and specific research methods as well as the research problem in the study, the personal experiences of the

researcher, and the audiences for whom the research study was written. The researcher involved the use of quantitative research design. Creswell outlines quantitative research design as;

A need for an explanation of the relationship among variables; creating purpose statements, research questions, and hypotheses that are specific, narrow, measurable, and observable; collecting numeric data from a large number of people using instruments with pre-set questions and responses; analyzing trends, comparing groups, or relating variables using statistical analysis, and interpreting results by comparing them with prior predictions and past research, and taking an objective, unbiased approach.

The study involved a case of Makeni Residential Area in Zambia ascertained residents' choice to fire insurance uptake. Kothari (2004) qualifies a case study that involves a careful and complete observation of a social unit.

4.4.1 Research Matrix

According to Mwanza (2017), a matrix is just a set of rows and columns where different components of a research fits. Components such as research questions; objectives; sampling; data collection tools and data analysis are displayed among others. The research design matrix for this proposed research is shown below;

Table 6: Research Design Matrix

Research Question	Research Objective	Population and Sampling	Data Collection Tool	Data Analysis
What are the social economic characteristics of Makeni residents?	To profile the social economic determinants of Makeni residents .	Individuals households by probability Sampling	Survey questionnaire	Frequency tables and Multi variate analysis
To what extent do diffusion and customer perceived value theories affect fire insurance uptake among the household residents of Makeni?	To test the diffusion theory and the customer value perceived theory with a view to determine the compelling uptake factors of fire insurance policy	Individuals households by probability Sampling	Survey questionnaire	Frequency tables and Multi variate analysis
What are the risk behaviour among Makani residents?	To determine the risk behaviour among Makeni Residents	Individuals households by probability Sampling	Survey questionnaire	Frequency tables and Multi variate analysis

SOURCE: Researcher's Own

4.5 Research Population

The research focused its attention on the Bonaventure Makeni Residential Area (MRA) in Zambia. In Makeni area, there are three main distinct residential areas namely: Bonaventure Makeni, Makeni Konga and Makeni Villa. Out of the three Makeni Residential Area,

Bonaventure Makeni Residential Area was chosen due to many factors. Bonaventure Makeni is found to the west south of the central business district, off Kafue Road.

One main factor is that the area is cosmopolitan in nature in that it has diverse cultural norms due to different races in the area such as Moslems, Christians, Lebanise, Hindu among others. Due to low fire insurance uptake from many literature reviewed, it was necessary to target a cosmopolitan residential area with different exposures.

The area targeted has many old and upcoming housing units in the area, the frequency of crime rate, advent of lightening and fire incidents. Specifically, households were targeted as they owned the houses and their tenants. In most of the homes, owners or tenants occupy the homes. Whether owners or tenants they had an obligation to insure their homes or their properties from fire accidents in the landlords' homes. Therefore, owners or tenants were targeted in Makeni Residential Area for fire insurance uptake.

4.5.1 Sample size

Creswell (2012) in describing a sample as a subgroup of the target population that the researcher plans to study for generalizing about the target population. The researcher selected a sample from the target group of Makeni Residential Area (MRA). This means not every member in the target group was taken on board. From a target group, a sample was selected and the selection was justified to carry out this research. Since the design was quantitative in nature, the selection had to meet the criteria using linear systematic sampling. For quantitative data analysis, the researcher sampled one hundred and seventy (170) households.

The justification for the sample size is based on many quantitative researchers. For quantitative data, 170 respondents were chosen among the households, from the area. The number 170 is even more as 30 is the minimum number in quantitative. The minimum of 30 is justified by famous quantitative researchers such as Gujarati (2006) among others. According to Gujarati's remark, it is stated that a random sample from any population distribution, the sample mean tended to be normally distributed with mean and variance as the sample size increases indefinitely (technically infinitely). He further noted that, no matter what the underlying probability distribution is, the sample mean of a sample size of at least 30 observations will be approximately normal.

The minimum of 30 is justified by Gujarati (2006) from any population distribution, the sample mean tended to be normally distributed with mean and variance as the sample. Sample size below 30 reduces statistical power of the test to detect a real difference between even when it exists as well as residuals being problematic. Therefore, sample size should be sufficiently large for the test to be properly performed.

4.5.2 Sampling Criteria

In order to select a sample from a target group, a sampling criterion has to be chosen and justified. First and foremost, since this research is quantitatively approached in its data collection and analysis, probability sampling had to be used against non- probability sampling criteria. Under probability sampling, many methods are available to select a sample in quantitative approach studies. Kothari (2004) notes:

With probability samples each element has a known probability of being included in the sample but the non-probability samples do not allow the researcher to determine this probability. Probability samples are those based on simple random sampling, systematic sampling, stratified sampling, cluster/area sampling whereas non-probability samples are those based on convenience sampling, judgement sampling and quota sampling techniques.

This study used linear systematic sampling against other probability sampling techniques. The target population of Makeni Bonaventure is a cosmopolitan residential area with large and spaced houses found in Lusaka City of Zambia with well- linearly structured roads designed. Kothari (2004) confirms that systematic sampling is used for sampling houses along the same street. He notes:

In some instances, the most practical way of sampling is to select every 15th name on a list, every 10th house on one side of a street and so on.

He further explained that:

An element of randomness is usually introduced into this kind of sampling by using random numbers to pick up the unit with which to start. This procedure is useful when sampling frame is available in the form of a list. In such a design the selection process

starts by picking some random point in the list and then every nth element is selected until the desired number is secured.

Since the total population for Bonaventure Makeni is not known, major roads were chosen, every nth element along the street was selected randomly, for instance, 2 was selected on both side of every street. The 2nd house was the first to be a part of the linear systematic sample. After that, the 4th house was added into the sample, that was (2nd, 4th, 6th, 8th, 10th....340th). Therefore, for Bonaventure Makeni Residential Area with structured roads, 170 households were targeted from the population using linear systematic random sampling.

4.6 Data Collection and Processing

In order to answer research questions for the study, data was needed by the researcher. Since the research was quantitatively designed, quantitative data was collected with the use of a closed questionnaire. The quantitative data was primary data. The questionnaire was administered to the landlords and tenants in the houses.

4.6.1 Questionnaire

The researcher used a questionnaire to collect data. The researcher designed the questions according to the variables operationalized from socio-economic issues for landlords or tenants staying in landlords' houses, the diffusion and CPV factors, and risk taking behaviour. The questions were closed because the researcher was looking for quantitative data. Quantitative data was processed using a computer to generate the findings of the study. (Tromp and Kombo (2009) gave advantages of using a questionnaire in that respondents have adequate time to answer the questions and that respondents are not disturbed by the researchers as well as serving time.

4.7 Data Analysis

The data collected using a questionnaire was cleaned and organized. According to Kothari (2004), processing and analysis imply:

Editing, coding, classification and tabulation of collected data so that they are amenable to analysis. The term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data-groups.

Data analysis involves working with raw data collected from the field, organising it, breaking it into meaningful units, merging it, probing for patterns, determining what is important and knowledgeable and deciding what to tell others (Burnard et. al. 2008).

The data collected was analysed according to research questions and objectives. Quantitative data was analysed using the Statistical Package for Social Sciences (SPSS) and Microsoft excel. The data was presented in tables, graphs and figures to make it easy to understand. Finally, the data was imported and analysed using STATA. Furthermore, logit multivariate regression model was used to ascertain or determine the extent to which the factors identified affected fire insurance uptake among the household residents.

4.8 Ethical Considerations

In this study, the researcher had to understand that he was dealing with human beings and institutions. These human beings and institutions were involved in order to solicit for information. First and foremost, the researcher is a student from UNZA, therefore, he got permission from University of Zambia as well as introducing the researcher to the Institutions and landlords. Omari (2011), observed that research is supposed to be sophisticated business conducted with the highest standards of moral and ethical considerations. Therefore, the researcher had more responsibilities until completion. Omari notes:

Participants were free to participate rather than forcing them, respecting the privacy of individuals, anonymity of participants, confidentiality of information supplied by the participants and non-betrayal of the suppliers of information.

4.9 Hypothesis

The study involves quantitative analysis. For this reason, formulation of hypothesis is an important factor. The following are the null and alternative hypothesis of the study;

Ho: The social economic status is not associated with fire insurance uptake at household level.

Ha: The social economic status is associated with fire insurance uptake at household level.

Ho: The Institutional factors do not affect fire insurance uptake at a household level.

Ha: The Institutional factors do affect fire insurance uptake at a household level.

Ho: There is no association between perceived monetary value of the economic function and psychological benefits expected from a fire insurance policy uptake at household level

Ha: There is an association between perceived monetary value of the economic function and psychological benefits expected from fire insurance policy uptake at household level.

Ho: The risk behaviour among Makeni Residents do not affect fire insurance uptake.

Ha: The risk behaviour among Makeni Residents do affect fire insurance uptake.

4.9 Chapter Summary

This chapter detailed the steps necessary to collect data and the reasons why such methods have to be chosen. The various steps under this section covered were: research setting, positivism research philosophy, research design, research matrix, research population such as size and sampling criteria, data collection and processing, data analysis and ethical considerations were used in the study. Data collected provided information for the next chapter that looked at data findings.

CHAPTER FOUR

PRESANTATION OF FINDINGS /RESULTS

5.1 Introduction

The previous chapter dealt with key issues of methodology that dealt with methods used and the logic behind the methods in order to come up with the relevant data for the study. It included key issues like: the selection of respondents, data gathering techniques, data analysis among others. This chapter looks at the findings of the study. The data provided in this section allowed presentation and analysis. The chapter presents the findings on identifying the social economic factors affecting fire insurance uptake, testing the diffusion theory and the customer value perceived theory with a view to determine the compelling uptake factors of fire insurance policy and determine the extent to which the factors identified affected fire insurance uptake among the household residents. The study findings are from a survey that was conducted from August, 2020 to January 2021 in Makeni residential area in Lusaka.

5.2 Demographic Factors

A total of 170 respondents were sampled from Makeni Residential area of Lusaka. Out of 170 sampled, 91 were females representing 54% and males were 79 representing 46%. The youngest respondent was 22 years, the oldest respondent was 88 years and the average age was 46 years. Their age distribution was grouped: 21-30 years were n = 8 (5%); 30- 40 years were n = 12 (7%); 40-50 years were n = 67 (39%); 51-60 years were n = 29 (17%); 61-70 years were n = 34 (20%); 71-80 years were n = 15 (9%); and above 80 years were n = 5 (3%). Those married were n = 59 (35%); the singles were n = 36 (21%); the divorced were n = 28 (17%); and the widow/widowers were n = 47 (27%). The majority of the respondents were females (54%) whilst males (46%) were fewer. Find table 7 at the appendix.

5.2.1 Whether the Respondents had insured house/household properties

The respondents were asked to state whether their houses/households (HHs) properties were insured. The responses were profiled below.

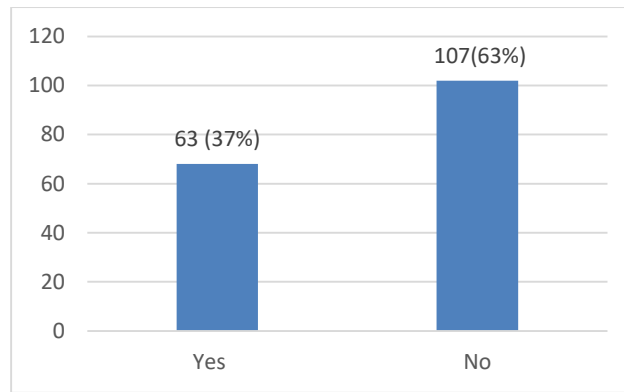


Figure 5.1: Whether HHs insured their Properties

Those who insured their houses /households (HH) properties were 63 representing 37%; and those who did not insure their houses /households properties were 107 representing 63%. The majority of the HHs did not insure their houses/households properties. Very few insured their houses/households properties.

5.2.4 Designation of Respondent to Occupation of house

This section categorised those who insured their houses and those who insured their properties. The responses were profiled below;

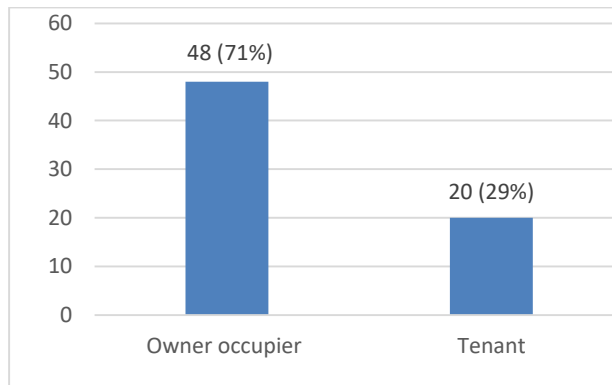


Figure 5.2: Designation of Respondents to House/Properties

Those who insured their houses (owner occupier) were 48 representing 71%; and those who insured their properties (tenants) were 20 representing 29%. The majority were owner occupiers who insured their houses.

5.3 Socio-Economic Factors

This section is addressing research question number one which is, ‘What are the socio-economic factors affecting fire uptake insurance among the household residents of Makeni?’ Under socio-economic factors, three issues were investigated: To state their educational level, occupation of the respondents and their religion. The responses were recorded according to each variable below.

Educational Level of the Respondents

The respondents were asked to state their educational level. Table 3 shows the educational levels of the respondents.

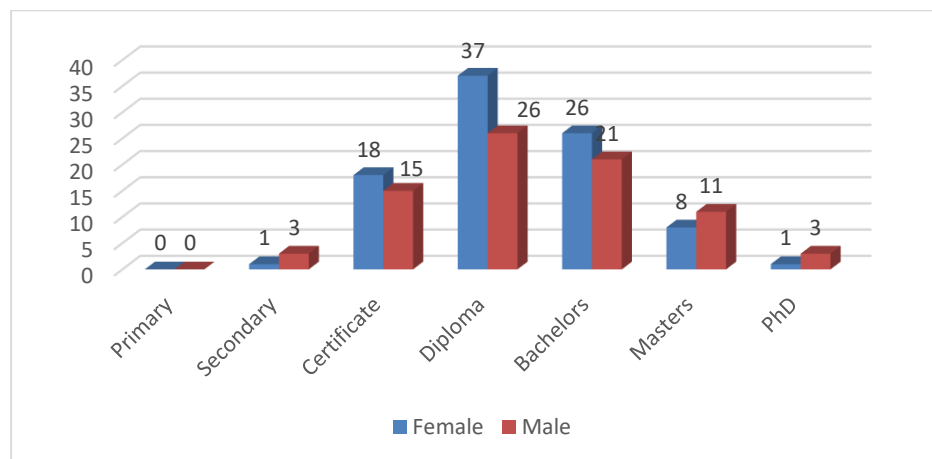


Figure 5.3: Educational Levels of Respondents. Source: Researcher (2021)

Results for the level of educational attainment shows that there was none with primary certificate; Secondary were 4 (Female 1 and Male 3) representing 2%; Certificate were 33 (Female 18 and Male 15) representing 19%; Diploma were 63 (Female 37 and Male 26) representing 37%; Bachelors were 47 (Female 26 and Male 21) representing 28%; Masters were 19 (Female 8 and Male 11) representing 12%; and PhD were 4 (Female 1 and Male 3) representing 2%.

Occupation of the Respondents

The respondents were asked to state their occupation. Table 3 shows the occupation of the respondents.

Table 8: Occupation of the Respondents

Occupation of the Respondents	No.	Percent
A Propertied Class (Upper Class)	52	31
White Collar Professionals ¹ (Upper Middle Class).	38	22
Petty Bourgeoisie ² (Lower Middle Class)	30	18
Working Class ³ - Craft and related Occupations	29	17
Other Working Class occupations	21	12
Total	170	100

Source: Researcher (2021)

The table above shows that those with a Propertied Class (Upper Class) were 52 representing 31%; White Collar Professionals were 38 representing 22%; Petty Bourgeoisie were 30 representing 18%; Working Class were 29 representing 17%; and Other Working Class occupations were 21 representing 12%.

Religion of the Respondents

The respondents were further tasked to state their religion. Table 3 shows the religions of the respondents.

Table 9: Religions of the Respondents

Religion of the Respondents	Frequency	Percent
Christianity	96	57
Islam	27	16
Others (Hindu, Buddhist, Bahai etc.	9	5
Indigenous Religion	21	12
No Religion	17	10
Total	170	100

Source: Researcher (2021)

Results for the religions of the respondents show that those who fall under Christianity were 96 representing 57%; Islam were 9 representing 5%; Other religions such as Hindu, Buddhist, Bahai were 27 representing 16%; Indigenous religion were 21 representing 12%; and those who did not fall under any religion were 17 representing 10%.

5.4 Diffusion Theory

The extent to which the diffusion theory influences fire uptake insurance among the household residents of Makeni was first descriptively done and then together with other variables were determined using multi-variate model. As earlier alluded to, the researcher measured to what extent the respondents perceived an opinion, perception or behaviour on communication, time and insurance social system with the insurance companies. A likert scale using strongly agreed (SA), agreed (A), not sure (NS), disagreed (DA) and finally strongly disagreed (SDA). Not sure (NS) is between agree and disagree as a moderate midpoint or neutral midpoint. The responses were recorded according to each variable.

Communication

The respondents were asked whether they were stimulated by the insurance industry and whether this was responsible for their insurance position. The table below shows the responses;

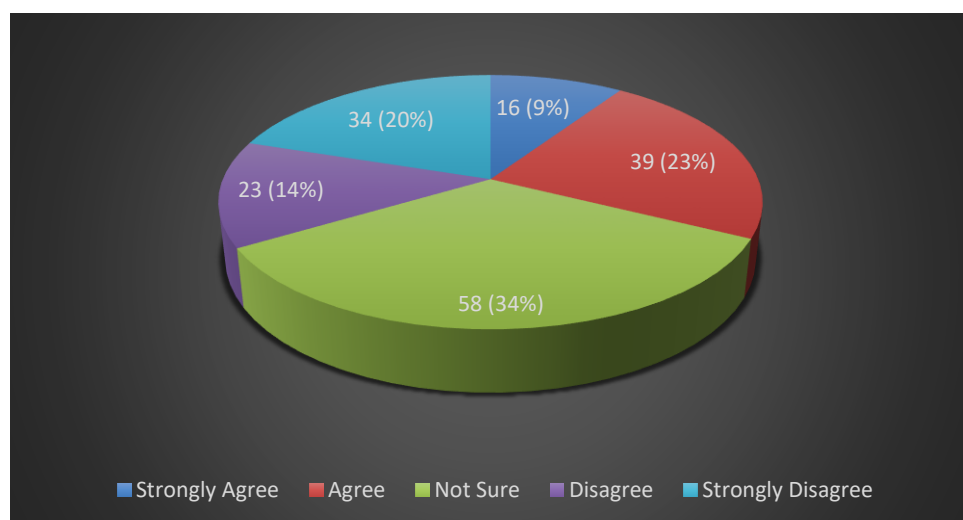


Figure 5.4: Whether the insurance industry firms stimulated the client

Source: Researcher (2021)

The table above shows that 9% of the respondents strongly agreed and 23% of the respondents only agreed that communication from the insurance providers stimulated them, 34 % of the respondents were not sure, 14% of the respondents disagreed and 20% of the respondents strongly disagreed that insurance industry firm stimulated them for their insurance position.

Time

The respondents were asked whether the insurance industry insurance firm was timely in selling its product to insure the houses. The table below shows the responses:

Table 10. Whether insurance firm was timely in selling its product to insure the houses

Responses	No. of Respondents	Percent
Strongly Agree	9	5
Agree	19	11
Not sure	23	14
Disagree	28	16
Strongly Disagree	91	54
TOTAL	170	100%

Source: Researcher (2021)

The table above shows that 5% of the respondents strongly agreed and 11% of the respondents only agreed that the insurance companies were timely in selling the products and that this was responsible for their insurance position 14 were not sure of their position, 16% of the respondents disagreed whereas 54% strongly disagreed that the insurance companies were timely in selling the products and that this was responsible for their insurance position.

Insurance Social System

The respondents were asked whether the insurance industry had made it very easy to buy the product (language, processing of claims, clarity, cost of premiums). The table below shows the responses:

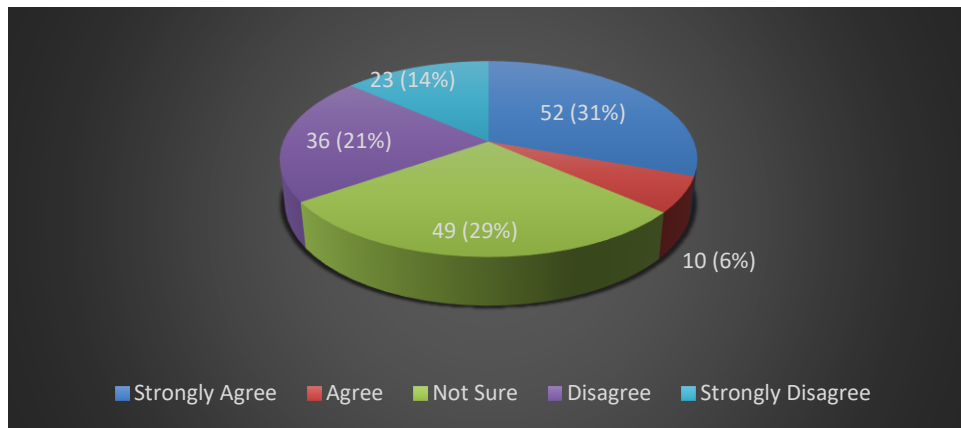


Figure 5.5: Whether insurance companies made it easy to buy the product.

Source: Researcher (2021)

The table shows whether the insurance industry had made it very easy to for the respondents to buy the product (language, processing of claims, clarity and cost of premiums). 31% of the respondents strongly agreed and 6% of the respondents only agreed, 29% of the respondents were not even sure, 36% of the respondents disagreed and 14% of the respondents strongly disagreed.

5.5 Customer Perceived Value

The extent to which the Customer Perceived Value theory influences fire uptake insurance among the household residents of Makeni was first descriptively done and then together with other variables were determined using multi-variate model. The researcher first measured to what extent the respondents perceived an opinion, perception or behaviour on functional, emotional, conditional, social and epistology factors of CPV are responsible for their insurance position. A likert scale using strongly agreed (SA), agreed (A), not sure (NS), disagreed (DA) and finally strongly disagreed (SDA). Not sure (NS) is between agree and disagree as a moderate midpoint or neutral midpoint. The responses were recorded according to each variable.

Functional Factor

Respondents were asked to state whether they saw total benefit acquired from household fire insurance and that was responsible for their insurance position. The table shows CPV functional factor responses.

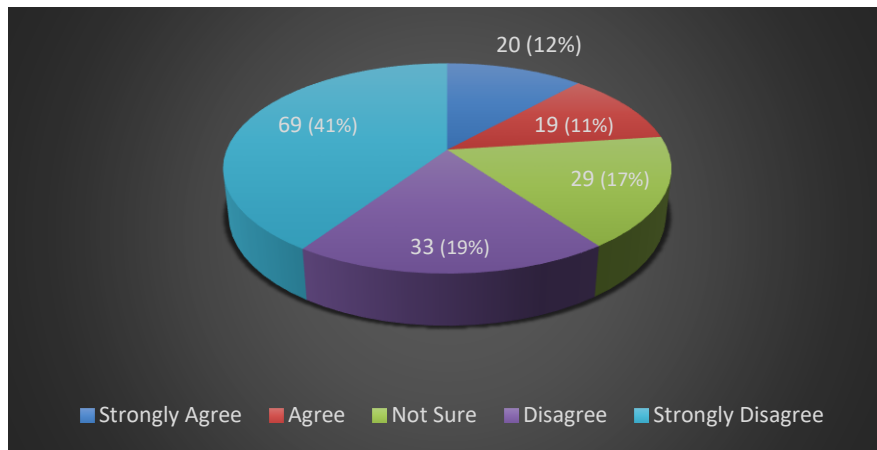


Figure 5.6: Whether they saw total benefit acquired from household fire insurance

Source: Researcher (2021)

The results are shown above. 12% of the respondents strongly agreed and 11% of the respondents only agreed, 29% were not sure, 33% of the respondents disagreed and 41% of the respondents strongly disagreed that they saw total economic value or monetary worth from household fire insurance and that was responsible for their insurance position.

Emotional Factor

Respondents were asked to state whether they saw total economic value or monetary worth from household fire insurance and whether that was responsible for their insurance position (Emot). The table shows CPV emotional factor responses.

Table 11: Whether they saw total economic value or monetary worth from household fire insurance

Responses	No. of Respondents	Percent
Strongly Agree	12	7
Agree	14	8
Not Sure	49	29
Disagree	43	25
Strongly Disagree	52	31
TOTAL	170	100%

Source: Researcher (2021)

The table shows the summary of the responses. 7% of the respondents strongly agreed and 8% of the respondents only agreed, 29% of the respondents were not sure, 25% of the respondents disagreed and 31% of the respondents strongly disagreed that they saw total economic value or monetary worth from household fire insurance and whether that was responsible for their insurance position.

Conditional Factor

Respondents were asked to state whether they saw total benefit acquired from household fire insurance as the risk and losses were in excess. The table shows the responses.

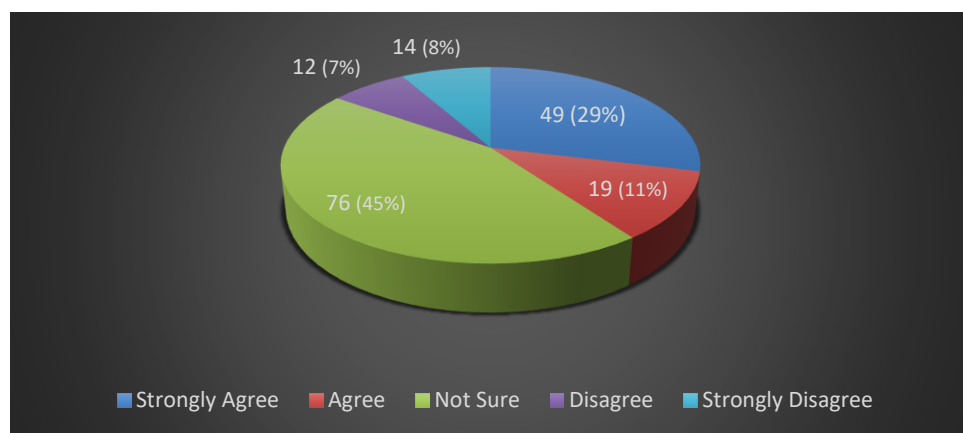


Figure 5.7: Whether they saw total benefit to be acquired from household fire insurance as the risk and losses are in excess.

Source: Researcher (2021)

The figure above shows the responses. 29% of the respondents strongly agreed, 11% of the respondents only agreed, 45% of the respondents were not sure, 7% of the respondents disagreed and 8% of the respondents strongly disagreed that they saw total benefit acquired from household fire insurance as the risk and losses were in excess.

Social Factor

Respondents were asked to state whether social factor was responsible for their insurance position. The table shows the responses.

Table 12. Whether they saw social factor to be responsible for their insurance position.

Responses	No. of Respondents	Percent
Strongly Agree	9	5
Agree	13	8
Not Sure	97	57
Disagree	21	12
Strongly Disagree	30	18
TOTAL	170	100%

Source: Researcher (2021)

The table above shows that 5% of the respondents strongly agreed and 8% of the respondents only agreed, 57% of the respondents were not sure, 12% of the respondents disagreed and 18% of the respondents strongly disagreed that they saw the importance of social factor to be responsible for their insurance position.

Epistology Factor

Respondents were asked to state whether epistology factor was responsible for their insurance position (Epistology). The table shows the responses.

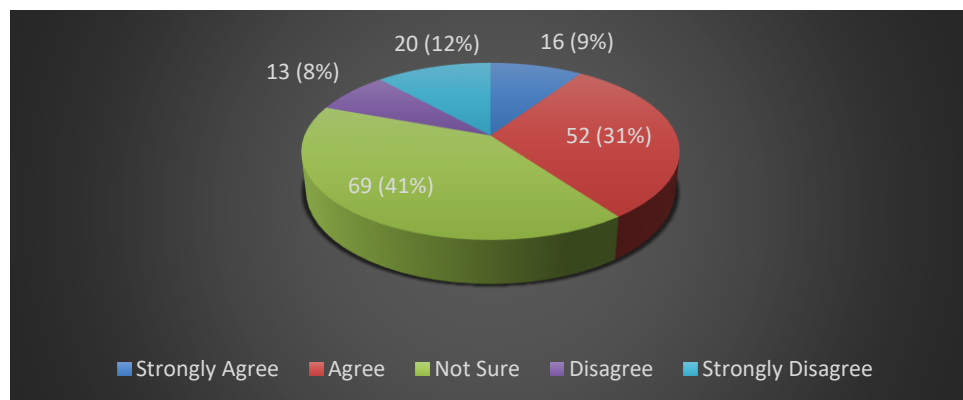


Figure 5.8: Whether they saw their personal as worthwhile to household fire insurance. Source: Researcher (2021)

The figure above shows that 9% of the respondents strongly agreed and 31% of the respondents only agreed, 41% of the respondents were not sure, 8% of the respondents disagreed and 12% of the respondents strongly disagreed.

5.6 Insurance Risks

Respondents were asked to identify their risky type as identified by a group of British psychologists, led by Geoff Trickey of PCL who agreed that risk factors fall into 1 of 8 types. The eight risk factors have been tabled below with responses from the respondents.

Table 13: Distribution of Risk Variables

Risk Factors	Frequency									
	SA		A		NS		DA		SDA	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Wary - Cautious, vigilant, and pessimistic with a very strong fear of failure and change and that they valued tradition and convention over innovation and change	54	34	34	20	11	6	49	29	19	11
Prudent - Prudent or favor predictability and continuity. Their approach was more careful and conservative, as was their overall outlook	48	29	38	22	16	9	38	22	30	18
Intense - Very passionate and generous, very involved, and oftentimes demonstrated high levels of enthusiasm. On the other hand, whether they could be very self-critical, making them less inclined towards risk	39	23	29	17	34	20	25	15	43	25
Deliberate - More tempered and well-prepared. High level of self-assuredness, approach towards risks	24	14	48	28	27	16	21	13	50	29

is governed more by heads than hearts. Very systematic and balanced in their approach, preferred to be systematic...										
Spontaneous - Having average risk tolerance. Tendency to be more reactive and expressive. ruled by their hearts made them more excitable, also more prone to the ups and downs of high hopes and disappointment.	28	16	42	25	25	15	50	29	25	15
Composed - Positive, resilient, and task-oriented, usually not very reckless, but could demonstrate quite a bit of “nerve” if the situation calls for it	22	13	46	27	8	5	26	15	68	40
Carefree - Free thinkers, Independence and autonomy valued, clear sense of direction, makes them well-suited for fast-moving situations. Enjoy challenging the status-quo, frequently seen breaking new ground.	17	10	51	30	8	5	23	13	71	42
Adventurous - More impulsive and excitable. Thrill-seekers by nature, more positive, upbeat, and generally acted more boldly. Not afraid to “boldly go where no man had gone before.”	14	8	54	32	7	4	17	10	78	46

5.7 Results of the Multi-Variate Regression with reference to Logit Model to determine fire uptake

The results of Multi-Variate logit regression model are shown on the table below to estimate HH Insurance fire uptake on HHs/properties. The HH Insurance fire uptake model is specified as follows:

$$\gamma = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{HHM} + \beta_3 \text{Occup} + \beta_4 \text{Edu} + \beta_5 \text{DFactors} + \beta_6 \text{HRT} + \beta_7 \text{CPV} \dots \varepsilon_i. \text{ where:}$$

Y = Insurance Fire Uptake

$\beta_1 \text{Age}$ = Age of household head

$\beta_2 \text{HHM}$ = Total number of household members

$\beta_3 \text{Occup}$ = Occupational

$\beta_4 \text{Edu}$ = Educational factor

$\beta_5 \text{DFactors}$ = Diffusion factors

$\beta_6 \text{HRT}$ = High Risk Factor

$\beta_7 \text{CPV}$ = Customer Perceived Value

Table 14: Results of the logit regression model for HH fire uptake participation in HHs/properties insurance

Variable	X _i	Coefficient	P> z
Constant		-1.130	
Age of HH Head*	X ₁	0.332	0.073
Occupational Factor**	X ₃	0.413	0.000
Educational**	X ₄	0.632	0.029
High Risk Taker*	X ₆	0.047	0.064
DiFactors**	X ₅	0.759	0.048
CPV Factors*	X ₇	0.077	0.081
Prob > chi-square		0.089	
Nagelkerke R ²		0.393	

** Statistically Significant at p-value $P < 0.05$, * Statistically Significant at p-value $P < 0.1$

The results of the Multi-Variate using Logit model have been presented above. Seven selected factors were tested for this study. Out of seven variables, occupational, educational and diffusion factors significantly affected house/properties insurance fire uptake in Makeni Residential at $p - \text{value } P < 0.05$. Risk taking, CPV and age had also found to be significant at $p - \text{value } P < 0.1$. Number of HH members did not affect house/properties insurance fire uptake.

CHAPTER SIX

DISCUSSION OF THE FINDINGS

6.1 Introduction

This chapter is meant to dialog over the findings from the previous chapter and make references to other scholarly or empirical studies. The general research objective of the study was to examine factors affecting fire insurance uptake among Makeni Residents at the household level. Specific objectives were to: To identify the social economic factors affecting fire insurance uptake; to test the diffusion theory and the customer value perceived theory with a view to determine the compelling uptake factors of fire insurance policy; to determine the extent to which the factors identified affected fire insurance uptake among the household residents. In arriving at a conclusion, quantitative data from a questionnaire was organised to make sense out of it and multi- variate model using logit models was used.

6.2 Discussion of Findings

The discussions are tailored according to specific objectives on the extent to which the factors identified affected fire insurance uptake among the household residents of Makeni in Lusaka. First and foremost, the whole model was evaluated and its results, looking at the chi-square which is the goodness-of-fit test and the R^2 . The chi-square has proved that the model was good based on the insignificant Chi-square of 0.089 at $P < 0.05$ and $P < 0.1$ of the variables that are significant respectively. Further, the logit regression model explained about 39% of the variation in the dependent variable (fire uptake insurance). The low R^2 is good for the researcher because it almost coincided with various descriptive statistics showing low level of fire uptake by the residents of Makeni. This means that the independent variables that were hypothesized to explain fire uptake would have qualified and well defined by the researcher at the proposal level. The total number of respondents were 170. Those who insured their houses /households (HH) properties were 63 representing 37%; and those who did not insure their houses /households properties were 107 representing 63%.

The key factors that have been found affecting fire uptake at $P < 0.05$ and $P < 0.1$ in the study area are: Occupational, educational and diffusion factors significantly affected house/properties insurance fire uptake in Makeni Residential at p – value $P < 0.05$. Risk taking, CPV and age had also found to be significant at p – value $P < 0.1$.

Discussion of Findings on Objective number 1: To identify the social economic factors affecting fire insurance uptake.

Under this objective two variables which were significant were occupation and educational factors and are below discussed.

a) Extent of Occupational Factor and house/properties insurance fire uptake

Occupational Factors significantly affected house/properties insurance fire uptake in Makeni Residential at $p - \text{value } P < 0.05$. This could also be traced from the descriptive statistics on the results of occupation of the respondents showing that Propertied Class (Upper Class) were 31%; White Collar Professionals were 22%; Petty Bourgeoisie were 18%; Working Class were 17%; and other Working Class occupations were 12%.

That means that the majority of the respondents in Makeni were well up with their properties and mostly working class. It is often assumed that there is substantial income coming from those with properties, as properties do not depreciate, but appreciate. Most citizens that own properties or fixed assets do get income from renting or leasing their properties to others. In renting or leasing their properties, they would rather insure such properties to mitigate losses. Professionals are able to get more income from their professions and be able to insure their properties when they come across issues of fire insurance.

Failure to raise income means one could not insure the house. This is true according to Olaleye and Adegoke (2009), who studied homeowners' perception of insurance of real estate development in Lagos, Nigeria, who concluded that the lower the level of income the more the likelihood that they would not insure their properties. Cheng Yuan and Yu Jiang (2015) in China also found the level of income to have affected overall insurance in China that included life insurance and nonlife insurance. Park et al. (2002), in determining the impact of socio-cultural variables on the degree of insurance pervasiveness in 37 countries across the globe, found aggregate income having statistically significant effect on insurance.

The findings above agree with other empirical researchers in the literature reviewed. Petkovski and Jordan (2014) who studied or examined the determinant of non-life insurance consumption in 16 countries in Central and South-Eastern Europe (CSEE) during the period 1992-2011 using an econometric model called cointegration test and the dynamic ordinary least squares found association between GDP per capita and non-life insurance consumption. Petkovski and Jordan

(2014) further revealed that GDP per capita had a positive impact on non-life insurance consumption during the period under investigation and concluded that increased income allowed for higher consumption in general, making insurance more affordable, and created a greater non-life insurance to safeguard acquired property.

b) Educational Factor and house/properties insurance fire uptake

Educational factor significantly affected house/properties insurance fire uptake in Makeni Residential at $p - \text{value } P < 0.05$. This could also be traced from the descriptive statistics on the results of educational level of the respondents showing the majority were in the range of diploma to masters with a total of 77% and the minority holding certificate and Doctor of Philosophy's (PhDs). It is often assumed that, though education is not a panacea to everything, those that have it are able to process data and use it to search for appropriate technologies to alleviate their constraints. There is a belief that those that have gone to school have the ability to perceive, interpret and respond to new information faster than their counterparts without it. Those with lower education status are assumed to be more tied to traditional value and that assurance and insurance from their extended family. Such do not take risks when an innovation comes. According to British psychologists, led by Geoff Trickey of PCL, such fall under wary type of risk factor and are cautious, have a strong fear of failure and change, value tradition and are responsible for their failure to insurance.

Churchill (2006) acknowledged other scholars who argued that a common usage of informal types of insurance visa vie local safety nets based on transfers from relatives and friends rather than services of regulated and supervised formal insurance contributed to the low penetration in other countries. Therefore, the results of this study revealed that education status of the respondents was positively associated to fire uptake by the residents of Makeni.

The finding on the significance of education on fire uptake agrees with a number of scholars. Cheng Yuan and Yu Jiang (2015) in China found a positive relationship between the level of education and life insurance and nonlife insurance. Petkovski and Jordan (2014) in 16 countries in Central and South-Eastern Europe (CSEE) during the period 1992-2011 found the level of education to have a positive effect on the life and non-life insurance. They argued that elevating the education level of population would be useful to enhance the understanding of financial products presented on the market and possible benefits from using them by potential

consumers. Olaleye and Adegoke (2009) in Nigeria, revealed that homeowners' lack of insurance culture was significantly associated with educational qualifications.

Discussion of findings on the diffusion theory with a view to determine the compelling uptake factors of fire insurance policy

Diffusion factor significantly affected house/properties insurance fire uptake in Makeni Residential at 0.413 p – value $P < 0.05$. With regard to communication, descriptive statistics showed that thirty-two percent strongly agreed; sixteen percent of the respondents agreed that insurance industry firm stimulated their insurance position; and 37% of the respondents agreed that the insurance industry had made it very easy to buy the product (language, processing of claims, clarity, cost of premiums).

The three factors on diffusion are important to insurance company. The slow growth in fire insurance in Zambia can be explained by the diffusion theory, because insurance is a new concept among the citizens of Zambia especially to do with house/household insurance uptake. Rogers (1983, 3rd Ed.) calls them, “Change Agent” referring to Insurance Companies that have to play a big role for people to understand the importance of fire insurance or insurance as a whole. A new phenomenon needs an agent to stimulate them for their insurance position. The new idea has to be communicated so that the customers are aware of the new product. According to Rogers (1983, an innovation has to be communicated through certain channels overtime among the members of a social system and that communication must be a process in which participants create and share new information with one another in order to reach a mutual understanding. A process in which participants create and share new information with one another require the insurance companies to create awareness in the product language, processing of claims, clarity, cost of premiums among many.

The findings on diffusion factors visa vie communication, timing and insurance social system agree with other researchers. Langat, Naibei, and Getare (2017) found that product awareness greatly influences the uptake of insurance services in developing countries. Price Waterhouse Coopers (PwC, 2019) also found lack of consumer awareness or lack of understanding the role/benefits of insurance among the Zambian population. The consumers have to be communicated on time and provide the necessary product language, processing of claims, clarity, cost of premiums. In the absence of product awareness, customers find it hard to go into an innovation that has never been promoted. Finscope (2015) agrees with this claim on

lack of awareness. Finscope found lack of awareness having the most significant barrier to insurance penetration and uptake among the Zambian population. It was further indicated that out of 100% adults, 88.3% adults had never heard of insurance in their lives. This means that about 11.7% of the population had heard about insurance in their lives. Olaleye and Adegoke (2009) in Nigeria, revealed that the lower the level of awareness on the part of homeowners, the more the likelihood that they would not insure their properties.

Discussion of Findings on the customer value perceived theory with a view to determine the compelling uptake factors of fire insurance policy

Customer Perceived Value was also found to be significant at $p - \text{value } P < 0.1$. The result of the model was derived from the descriptive statistics that revealed that functional factor of CPV had 15% agreed that they saw total economic value or monetary worth from household fire insurance; Emotional factor, 15% agreed; that they saw total economic value or monetary worth from household fire insurance; Conditional factor, 40% agreed that they saw total benefit to be acquired from household fire insurance as the risk and losses are in excess; Social factor: 13% agreed saw the importance that they placed on household fire insurance; epistology factor was at 40% agreed that they saw their personal as worthwhile to household fire insurance and that was responsible for their insurance position.

Oliver (2010) supported this latter explanation in that a customer must be able to define what satisfaction was in his/her own perspective rather than the parameters set by the seller of goods and services. That satisfaction must be the difference between the cost incurred and the benefits. Kotler and Armstrong's (2010) definition agrees with these findings that customer benefit is a perceived monetary value of the bundle of economic, functional and psychological benefits customers expected from a given market offering, because of the products, services, personnel, and image involved, and customer cost as a perceived bundle of costs customers expected to incur in evaluating, obtaining, using, and disposing of the given market offering, including monetary, time, energy, and psychological costs.

Discussion of Findings on the Risk-taking factors with a view to determine the compelling uptake factors of fire insurance policy

Insurance risk factor was found to be significant at $p - \text{value } P < 0.1$. Descriptively, the findings on these eight types of risk-takers namely: wary, prudent, intense, deliberate, spontaneous,

compose, carefree and adventurous were similar in that the majority are more inclined to fear of failure and change, value tradition and convention over innovation and change and the minority were further apart found to be thrill-seekers by nature, tended to be more positive, upbeat, and generally acted more boldly, “boldly go where no man has gone before”. These, combined with situational, cultural, and social factors, all contributed to the development of a “risky type”.

Discussion of Findings on the Age of the respondents with a view to determine the compelling uptake factors of fire insurance policy.

Age was found to be significant at p – value $P < 0.1$. The results from Table 8 shows age distribution of seven classes. Results show that the majority were in the range of 41 to 70 years; the minority are in the range of 21- 40, and above 71 years. It is assumed that more years reflect more experiences in the things of life. Therefore, such respondents could have witnessed many losses resulting from the impact of fire either from personal experience or outside their homes. It must be assumed as well that more years more accumulation of materials or income from various sources.

Therefore, the model of fire uptake can be estimated as follows:

$$Y = -1.130 + 0.232X_1 + 0.959X_3 + 0.632X_4 + 0.413X_5 + 0.047X_6 + 0.077X_7$$

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATION

7.1 Overview

The chapter provided the conclusion, recommendations, and suggested areas for further studies. The general research objective of the study was to address factors affecting fire insurance uptake among Makeni Residents at the household level. The specific objectives were: To identify the social economic factors affecting fire insurance uptake among the household residents; to test the diffusion theory and the customer perceived value theory with a view to determine the compelling uptake factors of fire insurance policy; to determine the risk behaviour among Makeni residents to enhance fire insurance uptake and penetration in Zambia.

The study used quantitative data from 170 respondents from Makeni Residents at the household level with the view to generate findings leading to the conclusion of the study.

7.2 Conclusions of the study

The research concludes that there were various factors affecting fire insurance uptake among Makeni Residents differently at household level, though the fire uptake has been found to be very low at 39% visa vie less than 5% and less than 10% respectively.

Conclusion related to objective one (1)

Objective one of the studies was to identify social economic factors affecting fire insurance uptake among the household residents. The study concludes that occupation of the respondent had effect on insurance uptake as those that were own occupier to the house largely insured their houses. Those that had secured jobs and earned more income either own occupier or tenants more likely insured their house or household properties.

Conclusion related to objective two (2)

Objective two (2) of the study was to test the diffusion theory and the customer perceived value theory with a view to determine the compelling uptake factors of fire insurance policy. The study concluded that diffusion theory and customer value perceived theory matter to fire uptake at a household level at different rates.

Conclusion related to objective three (3)

Objective three (3) of the study was to determine the extent to which the factors identified affect fire insurance uptake among the household residents. The study concluded socio-economic factors such as occupational and educational, diffusion factors were significantly at $p - \text{value } P < 0.05$, risk taking, CPV and age were significant at $p - \text{value } P < 0.1$.

7.3 Recommendations

The findings have revealed several issues which required the researcher to make specific recommendations. The following recommendations are made which may be helpful to the Insurance regulator, government, insurance companies and house/property consumers in improving individual risk financing in day-to-day life and enhancing uptake to fire insurance at a household level.

Recommendation related to objective one (1)

The government should continuously improve the country's GDP and per capita and improve disposal income among citizens so that fire insurance uptake increases. Furthermore, Government should take deliberate measure by way of regulation to introduce compulsory household fire insurance.

Recommendation related to objective two (2)

Insurance firms still have a big role to market their various products to the consumers through modern innovation technics to reach out many consumers at household level so that uptake of fire insurance increase.

Recommendation related to objective three (3)

Consumers must seriously embrace the idea of insurance as a financing instrument to mitigate their risks in day to today life.

7.4 Areas for Further Study

- 1) Residents which are a specific area. In order to cover a wide area, more studies are needed in many of the residential areas in Zambia so that generalisation will be possible. Exploratory studies are required to strengthen the findings for this current study.

- 2) Studies are needed to establish the magnitude of questionable residential areas not meeting housing standards as these are the major hindrances to adherence.
- 3) More studies are needed on how socio-economic issues affect gender to residential areas with regard to factors affecting fire uptake at household.
- 4) This study used quantitative model. More similar studies to be undertaken using qualitative model. The current study focused on factors affecting fire uptake at household level among Makeni methods to get in depth information that will help to build theories.

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APPENDIX

Appendix 1: Questionnaire

UNIVERSITY OF ZAMBIA

SCHOOL OF GRADUATE STUDIES

RESEARCH TOPIC: ADDRESSING FACTORS AFFECTING FIRE INSURANCE UPTAKE

(A case of **MAKENI RESIDENTS IN Zambia at the household level**)

To my dear participants: Please note that your information will be confidentially kept.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Instruction: Please, tick () or writewhere appropriate.

- 1) **Age of the** Head of the household:
- 2) **Designation of respondent to house**
 - a) Owner occupier
 - b) Tennant
- 3) **Gender of the** Head of the household: Male () Female ()
- 4) **Marital Status:** Married () Single () Divorced () Co- Habiting ()
Others ()
- 5) **Number of Children** and dependants ...2.....
- 6) Have you insured your household properties?

Yes () No ()

Section B Insurance risks

You may be one type of a person below. What characterises you and indicate as follows:
1 for very like me, 2 like me, 3 somewhat like me, 4 not like me and 5 not very like me.

Wary: I am cautious. I have a strong fear of failure and change. I value tradition and this is responsible for my insurance position	
Prudent: I favor predictability and continuity. My approach is more careful and conservative and this is responsible for my insurance position.	
Intense: I am very self-critical, which makes me less inclined towards risk and this is responsible for my insurance position	
Deliberate: I am well-prepared for eventualities. I am systematic not moved by proposals and this is responsible for my insurance position	
Spontaneous: I am ruled by my heart. This makes me more excitable, which makes me more prone disappointments and this is responsible for my insurance position	
Composed: I am that person who has a bit of “nerve” if the situation calls for it and this is responsible for my insurance position	
Carefree: I am a free thinker. I do not need to be advised to take up insurance and this is responsible for my insurance position.	
Adventurous: I am one person who tries out new things. I am not afraid to boldly go where no man has gone before and this is responsible for my insurance position	

SECTION B: Socio-Economic factors

Tick where applicable

1. Educational Level? Primary Level () Secondary Level () Certificate ()

Diploma () Bachelor () Masters () PhD ()

What is your occupation? (Tick one only)

a) A Propertied Class (Upper Class) ⁴	Examples includes: farmers, Landlords and firm owners	
b) White Collar Professionals ⁵ (Upper Middle Class).	This includes: doctors, engineers, lawyers, Economists	
c) White Collar Professionals (Upper Middle Class).	This includes: Nurses, teachers, bankers	
d) Petty Bourgeoisie ⁶ (Lower Middle Class)	This includes: Secretaries, Accounts Clerks,	
e) Working Class ⁷ - Craft and related Occupations	This includes: Laboratory attendants, office assistants, mechanics,	
f) Other Working Class occupations	Cleaner, Messenger, drivers, general workers	

⁴ A propertied class is placed at the top because of their economic power, social status and political influence.

⁵ A "professional class" was placed next because of their high position in the labour market and ownership of lesser forms of property (stocks and shares, for example), in addition to their relatively high social status and some political influence.

⁶ A petty bourgeoisie was placed third because of their less property ownership, lesser social status and lesser ability to exert political influence.

⁷ Finally comes the working class, so placed because of their relative lack of property ownership and lower position in the labour market, their low social status and lack of political influence.

6. Your Religion? Christianity () Islam () Other Religions (Hindu, Buddhist, Bahai, Judaism etc) () Indigenous Religion () No religion ()

SECTION C: DIFFUSION FACTORS

People are influenced to do things by many factors. Which ones below relate to you? What characterises you and indicate as follows: 1 for Strongly Disagree , 2 for Disagree 3 for Not Sure 4 for Agree and 5 for Strongly Agree.

Communication: The insurance firm was there to stimulate me and this is responsible for my insurance position	
Time: The insurance firm was timely in selling its product to insure the house and its and this is responsible for my insurance position	
Insurance Social System. The insurance industry has made it very easy to buy the product (language, processing of claims, clarity , cost of premiums)	

SECTION D: CUSTOMER PERCEIVED VALUE FACTORS

People are influenced to do things by many values which they hold. Please indicate your opinion as to what extent this is characteristic of you by indicating as follows: **1** for Strongly Disagree, **2** for Disagree **3** for Not Sure **4** for Agree and **5** for Strongly Agree.

CPV	Customer Perceived Value factors	
Func	I do see total benefit to be acquired from household fire insurance and this is responsible for my insurance position	
Emot	I do see total economic value or monetary worth from household fire insurance and this is responsible for my insurance position	

Cond	I do see total benefit to be acquired from household fire insurance as the risk and losses are in excess	
Soci	I do see the importance that I place on household fire insurance and this is responsible for my insurance position	
Epis	I do see my personal as worthwhile to household fire insurance and this is responsible for my insurance position.	

Thank you for sharing your experiences with me

Appendix 2: Demographic Profile

Table 7: Demographic profile

<i>Social demographic Characteristic</i>	<i>F</i>	<i>%</i>
Sex		
Male	79	46
Female	91	54
Age Distribution		
21- 30	8	5
31- 40	12	7
41 – 50	67	39
51 – 60	29	17
61-70	34	20

71-80	15	9
Above 80	5	3
21- 30	8	5
<i>Marital Status</i>		
Married	59	35
Single	36	21
Divorced	28	17
Widow/widowers	47	27
Number of Children and Dependants		
0	15	9
1-2	32	18
3- 5	81	48
6 and above	42	25

Source: Researcher's Own Compilation (2021)