A MIXED METHODS SEQUENTIAL EXPLANATORY STUDY OF THE DETERMINANTS OF THE INSURANCE PURCHASE DECISION-MAKING IN ZAMBIA

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ABSTRACT

Zambia has low insurance consumption and penetration. The particularities around the insurance purchase decision-making have not been researched. Financial decision-making has been a topic of interest as increased financial services uptake is one method of increasing financial inclusion. This thesis defines and compares the Insurance Purchase Decision-making (IPD) of the Workers in the Pensions and Insurance Industry (WPII) and the Urban Poor (UP) using a mixed methods sequential explanatory design.

In the quantitative phase, data was collected using a questionnaire and analysed using IBM SPSS and IBM AMOS for Structural Equation Modelling. Significant differences emerged in the two populations regarding their IPD: the risk coping mechanisms, the extent of loss aversion, and education attained. The qualitative phase delved into detail on the areas that were not clear in the quantitative phase and used structured interviews to collect data. The thesis has confirmed that the decision-making of the two populations and their perceptions on insurance differ. The thematic analysis in the qualitative phase of the thesis highlight three major themes from both populations that insurance practice and management and the government need to undertake to enhance insurance consumption: financial literacy, service quality and regulation.

This thesis has contributed to the literature on the IPD in Zambia; towards a detailed understanding of the IPD in Zambia through the integration of an interdisciplinary mixed methods approach; and highlights how the WPII and the UP make their IPD. The thesis highlights the potential consumers' needs and inclination towards insurance and how insurance practice could take advantage of the consumers' needs in undertaking market segmentation and penetration. The thesis optimises the insurance needs of the two populations: their expectations, their experiences, their understanding of and perceptions on insurance. The activities that insurance practice and management should do to enhance insurance consumption in Zambia have been highlighted.

DECLARATION

I declare that this thesis is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements of the degree of Doctor of Philosophy in the University of the Witwatersrand, Johannesburg. To the best of my knowledge and belief, it does not contain any material previously published or written by another person where due reference is not made in the text. It has not been submitted before for any degree or examination in any other University.

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LIST OF ABBREVIATIONS

AMOS	Analysis of a Moments Structures
ANOVA	Analysis of Variance
BE	Behavioural Economics
BFs	Beliefs
BR	Bounded Rationality
CA	Content Analysis
CDD	Customer Due Diligence
CFI	Comparative Fit Index
EFA	Exploratory Factor Analysis
EFs	Economic Factors
EoIns	Experiences on Insurance
EUT	Expected Utility Theory
FA	Factor Analysis
FSDZ	Financial Sector Deepening Zambia
FSDP	Financial Sector Development Programme
GDP	Gross Domestic Product
GWP	Gross Written Premiums
IAIS	International Association of Insurance Supervisors
IBM	International Business Machines
ICPs	Insurance Core Principles
IFSB	Islamic Financial Services Board
ILO	International Labour Office
IPD	Insurance Purchase Decision
KMO	Kaiser-Meyer-Olkin
LA	Loss Aversion
LISREL	Linear Structural Relation Model
MENA	Middle East and North Africa
MI	Micro insurance
NCD	No Claim Discount

ORCMs	Other Risk Coping Mechanisms
PA	Path Analysis
PCA	Principal Component Analysis
PIA	Pensions and Insurance Authority
PT	Prospect Theory
RMSEA	Root Mean Square Error of Approximation
RNI	Relative Noncentrality Index
SEM	Structural Equation Modelling
SPSS	Statistical Package for Social Sciences
SRMR	Standardised Root Mean Square Residual
TA	Thematic Analysis
TLI	Tucker Lewis Index
TUoIns	Trust and Understanding of Insurance
UNCTAD	United Nations Conference on Trade and Development
USAID	United States Agency for International Development
USD	United States Dollar
WII	Weather Index Insurance

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Chapter 1 – Introduction

1.1 Introduction

The determinants of the insurance purchase decision-making and eventual uptake and penetration has been receiving attention in research (Akotey et al., 2011; Chikova et al., 2015; Dzaja, 2013; Elango & Jones, 2011; Ofoghi & Farsangi, 2013; Ulbinaite et al., 2013). Insurance consumption is viewed as one of the ways to increase financial inclusion. Microinsurance products have been tailored towards the needs of the low income people, enabling them participate in the financial sector of their countries (Sarva, 2014), leading to enhanced risk management abilities and abating poverty (at individual level), contributing towards sustainable economic growth (Refera et al., 2016, p. 9) and towards the soundness of the financial system (Mundy & Musoke, 2011). Research has been informed by varying theoretical orientations and quantitative techniques all aimed at giving insight into what influences insurance consumption decision-making. Insurance consumer behaviour has received less explanation in research compared to other financial services in the financial sector (Ulbinaite et al., 2013). This research looks at insurance penetration in Zambia using behavioural economics to understand the factors that affect and influence insurance consumption decision-making. The study uses mixed methods to provide duality in explaining results that emanated from the two phases of the research, a move away from the traditional quantitative analysis of insurance consumption studies, thus providing more insight into understanding the peculiarities of the insurance purchase decision-making in Zambia.

The role that insurance plays in economic development has been a subject of concern in most economies (Han et al., 2010; Kugler & Ofoghi, 2005), as it does not only contribute to economic development through the investment of premiums (Ching et al., 2010; Kugler & Ofoghi, 2005; J Francois Outreville, 1990; J François Outreville, 2013; Ward & Zurbruegg, 2000); but it is also a mechanism by which people guard against day-to-day risks that they face.

The insurance industry is one of the largest and least understood (Cather, 2010). Confirming the magnitude of the industry, Browne, Chung, and Frees (2000) elucidate that the global insurance

premiums in 1993 accounted for about 8% of the world's Gross Domestic Product (GDP). As at 2018, the world total insurance written premiums amounted to US$5,371,501.91 million (AXCO, 2019) . Insurance has become a widely used financial service since its initial introduction[1]. However, the benefits of insurance are yet to be enjoyed by majority of the people in the developing world (USAID, 2006). The developed world has dominated in terms of the numbers of their nationals who are insured and as a result, their insurance industries are big (79.32% of the total premiums are written by 10 countries as at 2018). Research has been done in Europe, Asia, and the Americas, aimed at understanding the decision-making process in insurance consumption.

Zambia has low insurance development, an indicator of low economic development. National surveys that have been done have shown varying levels of financial inclusion. The Zambian insurance industry has recorded significant growth both in terms of the number of insurance companies (insurance companies have increased from 8 in 2001 to 32 in 2020) and in the amount of Gross Written Premiums (GWP)[2] and insurance penetration (see the table that follow).

Table 1: Insurance GWP and Insurance Penetration

Year	**2018**	**2017**	**2016**	**2015**	**2014**
Gross Written Premium (ZMW Million)	3,183	2,455	2,107	1,792	1,523
GDP[3] (Constant) (ZMW Millions)	139,203.40	134,270.60	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: Pensions and Insurance Authority Annual Report (2018)

[1] Developed by the Babylonians, insurance traces its roots to the year 2250 BC and it started as a form of loan insurance for marine related business (David et al., 2010, p. 2)
[2] Statistics provided by PIA.
[3] The 2018 figures are an estimate provided by the Central Statistics Office of Zambia.

Despite the increase in the number of insurance companies and written premiums, the uptake of insurance in Zambia remains low: only 5.5% of the adult population in Zambia has any form of Insurance as at the end of 2014[4], with penetration at 2.29% as at end of 2018. Government has shown commitment to improve the financial sector through reforms under the Financial Sector Development Program (FSDP) (covering the period January 2010 to December 2014). One of the pillars of the FSDP was the enhancement of financial inclusion. Increased uptake of insurance, among other financial products, would be a panacea towards increasing financial inclusion in the country and would contribute towards people's risk management capabilities. Ultimately, insurance would also contribute to GDP growth and diversification of Zambia's copper dependent economy through retention of premiums that can be pooled and invested in the local economy.

1.2 The Insurance industry in Zambia

Insurance in Zambia has undergone several changes in terms of regulation and methods of operation. Before independence in 1964, the country had insurance companies operating and these were nationalised into one single state-owned insurance company after independence. The insurance market was liberalised in 1991 and private companies entered the market. Companies trade as general insurance companies[5] or life insurance companies[6] depending on their license.

This research seeks to evaluate the decision-making criteria in the consumption of insurance with an aim of understanding the factors that promote or inhibit insurance consumption taking into account behavioural aspects. The research evaluates the decision-making process to get insight into what could be the causes of low insurance uptake. This research was undertaken in the Lusaka

[4] Statistics reported in the 2015 national survey but data was collected in 2014.
[5] General insurance companies are those that trade in short-term products (products that have policies that lapse within a year).
[6] Life Insurance Companies are those that trade in products that may have policies going beyond one year.

district of Zambia situated in the Lusaka province. Lusaka is the capital city of Zambia and it is the commercial hub of the country.

1.3 Importance of topic and development of Research Questions

The Zambian economy has been recording a positive GDP growth rate above 2.9% in the last five years[7] with an estimated growth rate of 3.7% in the year 2018[8], leading to the attainment of the lower middle income status, but with low financial inclusion. Whilst the number of insurance companies in Zambia and the GWP has been on the rise, this has not been accompanied by any significant growth in the uptake of insurance. The question on what risk coping mechanisms people use remain unanswered. Government is concerned with the methods that the population adopts in managing the risks they face, due to the strain on the national treasury caused by people not having means of coping with risks and they have to be assisted by the government when disasters befall them. Moreover, as long as people fail to manage the life risks they face, it becomes impossible for government to fight abject poverty because people will always be falling below the poverty line every time they face risks in life. Due to budgetary constraints and the agenda to reduce poverty, Government is concerned about the low levels of insurance uptake and the overall financial inclusion of the populace. Risk management is important for individuals in that the way they cope with risks will help them accumulate some assets that could be used as a buffer in situations of life risks without them having to depend on the government and or the extended family. As a result, individuals should also be concerned with matters of risk management.

Other parameters of financial services have recorded improvement in uptake from the baseline survey in 2005 to the recent survey in 2015. For instance, usage of banking services in 2015 increased to 24% of the adult population from 13.9% in 2009; micro finance services from 2.2% in 2009 to 3.8% in 2015; mobile money services usage stands at 14% of the adult population in

[7] Data found at www.worldbank.data/countries/zambia
[8] The estimate has been provided for by the Central Statistical Office.

2015 (this parameter was not measured in 2009). Finmark Trust (2015) reports that insurance uptake was 3.9% in 2009 rising to 5.5% in 2015 and it is the financial service that has moved the least in the last five years[9]. The situation of low insurance uptake in Zambia is raising concern among the practitioners and the policy makers: why is there low uptake of insurance; what risk-coping mechanisms do people employ; what affects their decision-making, among others. There have been surveys[10] done to measure the level of insurance uptake, and/or usage, in Zambia. One reason advanced for the law uptake of insurance is the high cost of providing financial services in rural areas and to poorer populations. This research sought to compare the non-poor and the poor's decision-making process (the informed and the uninformed) and has highlighted the reasons for non-uptake of insurance in urban areas and the factors that affect decision-making.

The surveys done in Zambia did not address the reasons why there is low insurance uptake, making it difficult for government to make informed remedial policies and interventions that would reverse the situation. Before this research, there has been no research that has addressed the "why" of low insurance uptake among the Zambians. The situation of low insurance uptake has been posing several challenges that need to be answered to inform policy-making and insurance practice and management. For instance, government is unaware of how people cope with the day-to-day risks that they face: the less the insurance people take the more government will have to cushion these people as and when they face life risks. This increases the social budget of the government and deprives other expenditure lines of the resources required for development. Insurance management needs to be aware of why there is low insurance uptake: this will allow them come up with interventions that are needed by the consumers. Ulbinaite (2013, p. 145) highlight deficiencies in explaining consumer behaviour in insurance consumption:

> In most research papers, the aggregated insurance consumer behaviour as a particular object, on which one would specifically concentrate, is not analysed. The research literature

[9] Insurance and MicroFinance recorded the same movement in the uptake percentage.
[10] Three Surveys (Finmark Trust, 2005, 2010, 2015) assessed the general financial inclusion in the country and the surveys also segmented the results on different services in the financial sector.

(i.e., theoretical studies and empirical research) shows that there exist some aspects which explain insurance service consumer behaviour fragmentarily.

Studies have been done in the Americas, Europe and Asia to address insurance consumption (be it long-term or short-term insurance), testing different variables in different localities and these studies are country specific or have been done on a cluster of countries in one region. There has been little effort in undertaking specific location studies to highlight whether there are location and regional unique traits that affect insurance consumption (Lim et al., 2013). Studies undertaken have used quantitative methods and as such have not been able to get in-depth information regarding the factors that go into and affect insurance consumption decision-making.

The aim of this sequential explanatory mixed methods study was to evaluate the determinants of the insurance purchase decision-making aimed at understanding how the behavioural attributes affect decision-making in insurance consumption. The study employed a mixed methods sequential design and collected qualitative data after a quantitative phase in order to explain and build upon the initial quantitative data in more depth.

The study had one primary objective and four sub-objectives. The primary objective of the study was **to examine and understand the individual decision-making process in relation to insurance consumption in Zambia taking into account behavioural economics**. Behavioural Economics (BE) was chosen because of its ability to explain individual behaviour attributes (via incorporating psychological traits into economic decision-making), an aspect that is lacking in other research papers. Attributes around framing, preferences, risk aversion and bounded rationality of consumers were evaluated. The secondary objectives of the study were:

i. To assess the decision-making process in the consumption of insurance;
ii. To understand the effect of economic factors, social and cultural factors, structural factors and personal and demographic factors in the process of decision-making in the consumption of insurance;
iii. To assess whether people have sufficient information with which to make insurance consumption choices; and

iv. To assess the (potential) contribution of insurance practice in promoting insurance consumption.

1.4 Research Questions

A "strong mixed methods study should start with a mixed methods research question so as to shape the methods and overall design of a study" (J. W. Creswell & Creswell, 2017, p. 138) and there are several methods of writing research questions in mixed methods research: "writing only quantitative questions or hypothesis and qualitative questions, or writing both quantitative questions or hypothesis and qualitative questions followed by a mixed methods question, or writing only a mixed methods question" (J. W. Creswell & Creswell, 2017, p. 142). Several research support usage of one mixed methods research question (J. W. Creswell & Creswell, 2017; J. W. Creswell & Tashakkori, 2007), a practice that is called "a hybrid or integrated question" (Tashakkori & Teddlie, 1998, p. 208). A phenomenon of interest is better understood if the research questions emerge during the research process than being defined at the start of the research (Hopper & Powell, 1985); even though this is applicable to this inquiry, a mixed methods research question that directly address the research objectives follow:

> *To what extent and in what ways do qualitative interviews with the urban poor and workers in the pensions and insurance industry explain in detail the causal relationship between insurance consumption decision-making and economic, social, demographic factors and information availability, via a complimentary mixed methods analysis?*

In order to answer the above research question, the following sub-research questions had to be answered.

1.4.1 Quantitative Research Questions.

The following were the quantitative research questions.

i. What is the effect of economic, social, structural factors and demographic factors on the decision-making in the purchase of insurance in Zambia?
ii. Do people have sufficient information with which to make insurance consumption decisions?

1.4.2 Qualitative Research Questions.

The qualitative research questions were developed from the analysis of the quantitative data. The following questions were used as a guide in the qualitative inquiry.

i. How do the economic, social and demographic factors affect decision-making in the purchase of insurance?
ii. What other risk coping strategies do employees in the pensions and insurance industry and the urban poor use?
iii. What role can insurance practice and management play in promoting insurance consumption?

1.5 Structure of the Thesis

This thesis has six chapters. Chapter one is the introduction and explains the background to the study and the development of the research questions; the Literature Review which surveys the relevant prior research on insurance consumption; a Methodological Chapter highlighting the philosophical orientation of the thesis and elucidates on the design and methods used in the thesis; two chapters (chapter four and five) that discuss the analysis and findings of the research under the Quantitative and Qualitative phases of the study; and a Reflections and Recommendations Chapter which concludes the thesis and makes recommendations thereto.

Chapter 2 – Literature Review

2.1 Introduction

In attempting to understand the determinants of insurance penetration in Zambia, and further how insurance uptake can be increased, it is first necessary to discuss what insurance is, and the recent theory and evidence that has defined recent trends and issues in the sector, and how these developments influence the Zambian insurance market. Insurance is an important part of the financial sector as a key risk management tool. Globally the insurance industry is estimated to have contributed USD 5,371,501.91 million to GDP in the world in 2018[11], whereas in Zambia penetration is comparatively low at 2.29% as at end of 2018 due to several economic constraints, particularly, poor financial sector development.

The literature outlined in this review will survey, first, how insurance is theoretically defined within financial economics; second, set out how the financial sector supports regulatory frameworks required for the insurance industry to promote insurance consumption; third, map out the global issues and trends that are pertinent to contemporary insurance markets and how they contribute to growth and economic development in particular setting out the distinctions between developed and developing markets; and fourth discuss how the preceding factors apply to the Zambian context, specifically with regard to insurance penetration determinants. The concepts that were investigated in the research have been discussed in this chapter. Finally, the gaps in the literature have been set out and synthesised to articulate the potential contributions of the thesis: which include an exhaustive comprehension of the insurance consumption decision-making through highlighting how the determinants of the insurance purchase decision-making are affected

[11]Data compiled by Axco (2019)

by behavioural characteristics of the consumers; and highlighting what could be the causes of varying results from insurance consumption studies. A summary wraps up this chapter.

2.2 The Economics of Insurance

The insurance industry is of tremendous economic importance globally and the study of insurance is prevalent in nearly all fields of economics (Al-Nowaihi & Dhami, 2010). Understanding the economics of insurance is critical in comprehending the functioning of insurance markets (Klein, 2014). Borch (1967) argues that "the interest in the economics of insurance emerges from the theory of the economics of uncertainty", and he cites Arrow's paper[12] of 1971, suggesting that "behavioural assumptions in the market affect and rule out free bargaining and negotiations over the exchange of goods and services" (Borch, 1967, p. 2).

2.1.1 Definitions.

"One of the largest and least understood industries in the world is the insurance industry" (Cather, 2010, p. 127). The development and categorisation of insurance has been slow for a long time. Insurance has been defined as "a device for the reduction of risk of one party, called the insured, through the transfer of particular risks to another party, called the insurer, who offers a restoration, at least in part, of economic losses suffered by the insured" (Pfeffer, 1956, p. 56). Churchill (2002) clarifies that, "for insurance to be insurance, it needs to involve a risk pooling mechanism that combines the resources of the many to compensate for the losses of the few" (Churchill, 2002, p. 4). The definitions of insurance have embedded in them the aspect of risk. Risk is the "variability or volatility in unexpected outcomes" (Jorion & Khoury, 1995, p. 2); it is an element which

[12]In his paper on essays of risk bearing, Arrow (1971) asserts that pricing insurance in a reasonable manner would sway a risk averse person to pay a small premium against the probability of facing a big loss.

attaches uncertainty to the occurrence of an event (W. G. Johnson, 1983). In discussing risk, Weston (1954) and Stigler (1987) propose that risk alludes to insurable outcomes, whereas uncertainty to non-insurable outcomes (G. Stigler, 1987; J. F. Weston, 1954).

2.1.2 Knightian Uncertainty.

Frank Knight developed the Knightian Theory of Uncertainty describing that the main function of an entrepreneur is to act in anticipation of future events. An entrepreneur faces non-insurable risks and such an entrepreneur would earn his profit for bearing the non-insurable risks (Knight, 1957). Frank Knight made two distinct definitions of uncertainty: between 'risk' (for which probability distributions are known) and 'true uncertainty' (for which probability distributions are not known and as such is unmeasurable). Uncertainty is a situation where an event is uncertain or ambiguous if it has unknown probability (Ellsberg, 1961). On the other hand, Ben-Heim and Maria (2015) propose, that Knightian Uncertainty reflects ignorance of underlying processes, functional relationships, strategies or intentions of relevant actors, on future events (Ben-Haim & Demertzis, 2015). Ignorance of insurance and its tenets affects decision-making in insurance consumption.

Weston (1954, p. 155) and Stigler (1987) describe how "Knight divides the future outcomes into three categories: first are outcomes to which mathematical" probabilities apply; "second are outcomes that can be grouped and the expected outcome for the group as a whole can be determined with certainty"; and thirdly are outcomes "that cannot be grouped and cannot be estimated from historical data". This implies that outcomes subject to risk are insurable, whereas those that are not subject to risk are uninsurable (Brooke, 2010). An implication of this is that there will always be risks that are insurable and those that are uninsurable, rendering decision-making difficult. Situations that face the urban poor and the workers in the pensions and insurance industry differ and as such the degree of uninsurable risks facing each group are different. Info-gaps affect insurance consumption too: "an info-gap is not ignorance per se, but rather aspects of one's Knightian uncertainty that bear on a pending decision and the quality of its outcome" (Ben-Haim & Demertzis, 2015, p. 2). Employees in the pensions and insurance industry may understand some

aspects of uncertainty whereas the urban poor in the high-density areas may not and this may greatly affect their decision-making.

The concept of uncertainty is important as it shapes the attitudes of consumers' in decision-making (Luo & Ma, 1999). As uncertainty increases, people start delaying making decisions on key fundamentals, including what to consume. The non-insurable risks pose a situation of ambiguity to a consumer of insurance and as such, uncertainty would affect the insurance purchase decision-making.

2.3 Theoretical Views

Whilst no unitary theory has emerged in consumption studies, certain theoretical approaches can be discerned from the literature on insurance consumption investigations. These theoretical studies are cited among others as having "assimilated the developments in the field of economics of risk and uncertainty" (Sen & Madheswaran, 2013, p. 87). The central question is always: what influences and/ or determines what a consumer will consume? Outreville (2014, p.159) asserts that "differences in the behaviour of individuals facing similar risky situations could be partially explained by the individual's family background, education, position, prior experience, and geographical location". "Determinants of risk attitudes of individuals are of great interest in the growing area of behavioural finance that focuses on the individual attributes, psychological or otherwise, that shape common financial and investment practices"(J François Outreville, 2014, p. 159).

2.3.1 Behavioural Economics (BE) and Insurance Markets.

The field of behavioural economics was anchored by the work of Daniel Kahneman and Amos Tversky who not only challenged the normal use of the economic man paradigm but also identified elements to do with the psychology of individuals, which are systematically used by individuals in making decisions. Behavioural Economics has been loosely defined as "the application of

methods and evidence from other social sciences like psychology to economics, has increased enormously in significance in the last two decades, transforming the ways in which economists view individual behaviour" (Alm, 2010, p. 635). BE has been defined and discussed as an orientation that utilises methods and available body of information from other disciplines, with applications from psychology being in the majority, to inform the analysis of individual and group decision-making (Angner & Lowenstein, 2010; Colin Camerer et al., 2005; Congdon et al., 2011; Rabin, 1998).

Describing the perceptions on human behaviour, it has been asserted that human beings may have personal biases in their decision-making:

> The "standard neoclassical economic model of human behaviour is based on several main assumptions including: that individuals are rational, that they have unlimited will power, and that they are purely self-interested. However, according to standard economics there is limited scope to improve financial decision-making: the theory supposes that individuals rationally[13] process available information to make optimal saving, borrowing and insurance choices" (De Meza et al., 2008, p. 20).

The assumptions under economics principles remain "a useful starting point for analysing individual behaviour: there is increasing evidence that they are inaccurate and unrealistic depictions of many, perhaps most, individuals"(Alm & Bourdeaux, 2014, p. 2).

Literature in behavioural economics suggests that "people make systematic errors with respect to their decisions, leading ultimately to reductions in economic welfare; and people do not follow the traditional assumptions about rational economic decision-making" (Tapia & Yermo, 2007, p. 5). Various factors would seem to affect individual decision-making. It has been concluded by

[13] David et al., (2008) propose two reasons that make people appear to take decisions that are irrational: firstly, they state that this happens when it is perceived that the cost of being rational is high; secondly, they assert this happens when there is false or inadequate information to use in decision-making.

Schilirò (2012) that "the critical part of the behavioural theory seems more convincing than the positive and proactive part of the same theory, leaving some degree of indeterminacy in defining solutions" (Schilirò, 2012, p. 109). The tenets of behavioural economics can be summarised in words that incorporate info-gaps and Knightian uncertainty alluding that, "human beings make less than perfect decisions because of inherent biases built into our brains and bodies" (Gordon, 2011, p. 173).

The demand and supply of insurance is not without problems. Many problems in insurance markets can be explained through theories in behavioural economics, Expected Utility Theory (EUT) and Prospect Theory (PT), which incorporates psychology and socialisation to explain the behaviour of agents. These theories include two closely related theories of moral hazard and adverse selection. Many of these theories facilitate an understanding of how human beings make decisions under conditions of risk and information overload. These theories depict the realities that individuals face when making economic decisions.

2.3.1.2 History of BE.

BE is not new in economics. "Most of the ideas in behavioural economics are not new; indeed, they return to the roots of neoclassical economics after a century-long detour" (CF Camerer, 2002, p. 3), implying that behavioural insights have been part of economics for a long time. For instance, prominent economists, from Adam Smith's *The Theory of Moral Sentiments* (1759), to Francis Edgeworth's *Mathematical Psychics* (1881), to Amilcare Puviani's *Teoria Della Illusione* (or *The theory of Fiscal Illusion)* (1903), to Irving Fisher's *The Money Illusion* (1928), and to John Maynard Keynes' *The General Theory of Employment, Interest, and Money* (1936) have all embedded in them behavioural tenets that depict how human behaviour affect the economic decision being made. In the twentieth century, prominent economists including Herbert Simon's *Administrative Behaviour* (1947), George Katona's *Psychological Analysis of Economic Behavior* (1951), Tibor Scitovisky's *The Joyless Economy: The Psychology of Human Satisfaction* (1976) have all incorporated and emphasised the importance of psychology in decision-making.

With such a history, the origin of the name "behavioural economics" is somewhat obscure (Alm & Bourdeaux, 2014, p. 4), and "one of the first uses was by Boulding (1958) who asserted that there will be movement" towards "…study of those aspects of men's images, or cognitive and affective structures that are more relevant to economic decisions". Some authors (for instance James and Carolyn, 2014) propose that perhaps the more descriptive name for the field is *"cognitive economics"* as coined by Boulding (1979). BE is not a new field but has been in existence and only became popular after the Kahneman and Tversky experiments in 1979.

2.3.1.2 Agreements among Economists.

Economists have generally agreed that expected utility and discounted utility models are normative and descriptive models of decision-making under uncertainty and intertemporal choice; the assumptions and implications of generic utility analysis are flexible, making them tricky to refute whereas the expected utility and discounted utility models have numerous precise and testable implications: providing "hard targets" for critics of the standard theory (CF Camerer, 2002).

Tapia and Yermo (2007) point out that "conventional economic theory suggests that informed economic agents act rationally to maximise their self-interest. However, a growing research literature in behavioural economics suggests that people make systematic errors with respect to their decisions, leading ultimately to reductions in economic welfare" (Tapia & Yermo, 2007, p. 5). Literature has indicated that people's decision-making is suboptimal (Mitchell & Utkus, 2004), and people deviate away from the traditional assumptions about rational economic decision-making (Tapia & Yermo, 2007). Various factors would seem to affect individual decision-making. However, Tapia and Yermo (2007, p.5) suggest that:

> …people can and do try to maximise their self-interest,…such decisions are often sub-optimal, given available information. These outcomes have been attributed to various factors including choice and information overload, unstable or undefined preferences, heuristic decision-making, 'framing effects' and investment menu design, procrastination and inertia, and over confidence.

The notions of behaviour would thus affect any decisions that individuals want to make, be it financial in nature or otherwise.

2.3.1.3 Methods of Behavioural Economics.

The methods used in behavioural economics are the same as those in other areas of economics (CF Camerer, 2002). BE at inception, relied heavily on evidence generated by experiments[14]; later on moving onto field experiments (Gneezy & Rustichini, 2000); computer simulations (Angeletos et al., 2001), and even brain scans (McCabe et al., 2001).

However, BE has mainly focused on empirical investigation, mainly through laboratory experiments on the assumptions of rationality. These assumptions (even though they are a useful starting point), often derived from laboratory experiments, are inaccurate and unrealistic depictions of many, perhaps most, individuals (Alm, 2010). In his argument, Alm (2010) raises a number of factors discounting the full rationality of people including: that individuals face limits on their ability to compute (bounded rationality); that individuals systematically misperceive, or do not perceive at all, the true costs of actions; that individuals face limits on their self-control; that individuals are affected by the social context in which, and the process by which, decisions are made; and that individuals are motivated not simply by self-interest, but also by notions of fairness, altruism, reciprocity, trust, guilt, shame, morality, alienation, patriotism, social customs, social norms and many other objectives, inter alia, and he concludes that individuals are not always the rational, outcome-oriented, self-controlled, selfish, and egoistic consumers envisioned by much of our standard theory. The approach of behavioural economics is that psychology also matters and

[14] Laboratory experiments are cited as being useful in the studies of behavior and psychology for they enable simultaneous observation of individual and market level data (C. F. Camerer & Thaler, 1995; CF Camerer, 2002; Ganguly et al., 2000).

even if people know and understand the facts they may still take poor decisions due to lack of self-control and other personality characteristics (De Meza et al., 2008).

CF Camerer (2002, p. 8) conclude, "the focus on psychological realism and economic applicability of research promoted by the behavioural-economics perspective suggests the immense usefulness of both empirical research outside the lab and of a broader range of approaches to laboratory research". The combination of psychology and economics tenets in BE is critical in understanding and explaining consumer behaviour. This made BE a theory of reference in this research. The concepts under BE have helped explain consumer behaviour under insurance consumption decision-making.

2.3.1.4 Assumptions under Behavioural Economics.

The "core assumption of behavioural economics is based on the bounded (limited) rationality of individuals in general and of markets in particular" (Paula-Elena et al., 2013, p. 29). BE regards individuals as not always rational, outcome-oriented, self-controlled beings, an aspect, which is in contrast to standard economic theories. Supporting the irrationalness of individuals, Alm & Bourdeaux (2014, p. 3) agree that, contrally to the standard neoclassical approach, individuals:

> …are affected by ways in which choices are framed; face limits on their ability to compute; systematically misperceive, or do not perceive at all, the true costs of actions; face limits on their self-control; are motivated not simply by self-interest, but also by notions of fairness, altruism, reciprocity, empathy, sympathy, trust, guilt, shame, morality, alienation, patriotism, social customs, social norms, and many other objectives; and are influenced by the social context in which, and the process by which decisions are made.

Individuals are not always rational as envisioned by standard economic theory and as such, they always get to make consumption decisions taking into account, and influenced by, many factors surrounding them and the contextual environment they find themselves in when making the decision.

2.3.1.5 Criticisms of Behavioural Economics.

The use of behavioural methods is not without criticism. Researchers have raised three major criticisms of BE.

The first criticism is on the singularity of theory. There is no single unified "theory" of individual behaviour that applies across the various individual behaviour; the focus is often on individual behaviour (as well as on tests of the underlying assumptions of individual behaviour), rather than on the broader dimension of aggregate, group or market behaviour (Alm, 2010).

The second criticism is on the principle of market aggregation. Although individuals may not always behave rationally, individual bias may well "wash out" in the aggregate, and it is the aggregate behaviour that is most relevant for economics; BE has also been accused of stripping human beings naked of their social relations and connections by subjecting them to laboratory experiments thereby contaminating conditions of the real world (Alm & Bourdeaux, 2014; Streeck, 2010). The focus on individual behaviour has been criticised by economists citing that economics, as a field, thrives in the broader aspects of aggregation, groups or markets which tend to '*wash out'* individual behaviour (Glaeser, 2004).

The third problem has to do with paternalistic aspects. Alm & Bourdeaux (2014) highlight the paternalistic implications of many behavioural insights. The paternalistic approach is cited as one lacking the generality that is associated with the neoclassical paradigm (Glaeser, 2004; Alm & Bourdeaux, 2014).

Despite the raised criticisms, markets are an aggregation of individuals and understanding individual behaviour would help in understanding the market as a whole. In confirming the principle of aggregation, "the real issue for socio-economists is not individual but collective choice", Streeck writes, "in particular, the social mechanisms by which individual action is aggregated into collective conditions and social structures" (Streeck, 2010, pp. 387–388). This point to the aspect of individual behaviour being moulded by the dictates of their society at large and understanding these individual traits is a big step towards understanding the market as a whole.

Recently, BE has increased its presence as a distinct research area, its study being animated by the technological advances of the last decade (Paula-Elena et al., 2013). It has been concluded that the "critical part of the behavioural theory seems more convincing than the positive and proactive part of the same theory, leaving some degree of indeterminacy in defining solutions" (Schilirò, 2012, p. 109). BE has been applied widely in the field of finance. However, its application on insurance consumer behaviour has been limited, as aspect that Ulbinaite et al., (2013, p. 144) support in their conclusion that:

> Despite the fact that consumer behaviour in a broad sense has been widely analysed for more than 50 years and that consumer behaviour in the financial services sector is increasingly getting the focus of researchers, the attention on the analysis of the particularities of insurance consumer behaviour as a specific object is rather limited.

2.3.1.6 Behavioural Economics Concepts.

Behavioural economics has a number of concepts spanning years of research and testing, both in the laboratory and in the field. This research will explore four concepts of BE to establish how they affect insurance consumption decision-making. This thesis investigated the concepts of Preferences, Loss Aversion, Bounded Rationality and Framing. A discussion of the concepts follow.

2.3.1.6.1 Preferences.

Behavioural economists advocate the need to endow the model of the utility function by taking into account preferences. Preferences also imply an ordering of different options in terms of expected levels of happiness, gratification, utility etc. (Kenneth J Arrow, 1958). Preferences can be analysed through questions about risk taking, social preferences, and time discounting (Falk et al., 2013). Available preferences are important in that they may affect insurance consumption.

When people have alternatives to choose from, including other risk coping mechanisms, they may decide in a different manner, which may be suboptimal taking into account bounded rationality traits.

The preferences that people have in relation to insurance consumption was investigated in this research with an aim of understanding whether or not people have other ways of coping with the day-to-day life-risks that they encounter, which would lead them not to consume insurance.

2.3.1.6.2 Loss Aversion.

In economics and decision theory, loss aversion refers to people's tendency to strongly prefer avoiding losses to acquiring gains (Kahneman & Tversky, 1979). Loss aversion is one of the BE concepts associated with the PT and is encapsulated in the expression "losses loom larger than gains"(Kahneman & Tversky, 1979). "The underlying feature of loss aversion is that psychologically, the pain of a loss is about as twice powerful as the pleasure of gaining and since people are more willing to take risks to avoid losses, loss aversion can explain differences in risk seeking versus aversion" (A. Samson, 2016, p. 111). Loss aversion has been applied in behavioural change programs using penalty frames that have proved to be more effective than reward frames in eliciting the desired change in a particular behaviour (Gächter et al., 2009).

People are loss-averse and as such, they would go out of their way to avoid losses. Gatchter et al., (2009, p. 443-446) highlight that, "loss aversion is sometimes applied in behavioural change strategies, and it can explain why penalty frames are more effective than reward frames in motivating people".

Loss aversion is important in insurance decision-making because the loss tolerance of an individual would play a role in whether or not they would consume insurance. The degree of loss aversion of people was investigated in this research. People who are loss averse should ideally consume insurance so as to avoid the loss they would incur if they suffered risks in life.

2.3.1.6.3 Bounded Rationality.

Simon (1985) advocated that the rationality of people is limited by given factors like the access to information, their finite amount of time, and the cognitive limitations of their minds. Bounded Rationality challenges the notion of human rationality as implied by the concept of *homo economicus*[15] (A. Samson, 2017). However, there is acceptance that there are restrictions to human information processing, as a result of limitations in available information and the ability to compute (Kahneman, 2003; Simon, 1985). Bounded rationality is similar to the social-psychological concept that describes people as "cognitive misers" (Fiske & Taylor, 1991). 'Bounded rationality is not irrationality', Simon writes, 'on the contrary, I think there is plenty of evidence that people are generally quite rational; that is to say, they usually have reasons for what they do' (Simon, 1985, p. 297).

Research in cognitive psychology has indicated that the active processing of information is a serial process that occurs in a memory of limited capacity, duration, and ability to place information in more permanent storage. Consequently, people are forced to utilize heuristics to keep the information-processing demands of complex problem-solving tasks within the bounds of their limited capacity. A heuristic allows for efficient problem solving at the cost of some possibility of making a mistake.

The processing of information in human beings is a serial process and it occurs in a memory of limited capacity, duration, and ability to place the information in a more permanent storage, forcing people to utilise heuristics[16] so as to keep the information-processing demands of a complex problem solving tasks within the bounds of individuals' limited capacity (E. Johnson & Payne, 1975, p. 175). People's resilience to thinking hard has been questioned with a conclusion being

[15] This is an economics term used to refer to humans as self-interested agents who always look for results that give them satisfaction.

[16] E. Johnson and Payne (1975) assert that heuristics provide for efficient solving of problems with chances of making errors.

made that, "people are not accustomed to thinking hard, and are often content to trust a plausible judgement that quickly comes to mind" (Kahneman, 2003, p. 1450). Due to the embedded laziness in humans, decisions made may not always be rational and as such, humans are perceived to have bounded (limited) rationality.

Individuals suffer from narrow framing and as such end up making errors in their judgement, an aspect that illustrate effortless associative thinking (Fredrickson & Kahneman, 1993). This is an aspect that point to the limitation in the cognitive abilities of people, an aspect of bounded rationality. Bounded rationality pushes decision makers into being satisficers as opposed to optimal decision makers. Human beings make decisions under situations that make their computational skills limited. The rationality of individuals affects decision-making on insurance consumption. Samson (2017, p.109) summarises that:

> …we may make decisions with insufficient knowledge, feedback, and processing capability (bounded rationality); we overlook and are constrained by uncertainty; and our preferences change, often in response to changes in context and to noting others' preferences.

Kinds of Bounded Rationality

Literature highlights two kinds of bounded rationality: "behaviour that looks like merely satisficing is actually optimal, once one takes into account the information costs; and a person acted rationally – if he intended to act rationally" (Etzioni, 2010, p. 379). What Etzioni (2010) highlights seem to simplify the actions by individuals too much: It would be a subject of many debates to say that individuals choose to act irrationally. However, the instances that would make one act irrationally are difficult to define. Acting irrationally on insurance decisions could cause problems of adverse selection and moral hazard.

2.3.1.6.4 Framing.

This concept originates from the Prospect Theory (PT). Empirical evidence has indicated that people's views of decisions and outcomes are in many instances characterised by narrow framing (Kahneman, 2003; Kahneman & Lovallo, 1993), and by notions of mental accounting (RH Thaler, 1985, 1999) and in some instances decision bracketing. Alm and Bourdeaux (2014, p.6) explain that "many of the individual behaviours that diverge from neoclassical predictions involve some form of 'frame dependence' in which an individual's decision depends upon how the choice is presented".

Tversky and Kahneman (1979) conclude that subjects prefer the sure thing when options are given, a conclusion that is in agreement with Levin and Gaeth (1988) who elucidated that labels that are positive may evoke positive associations while negative labels tend to evoke negative associations (Levin & Gaeth, 1988). Framing thus evokes different associations and evaluation of things: outcomes that are certain weigh more compared to outcomes that are of a high or intermediate probability (Kahneman & Tversky, 1979).

Different types of framing have been identified: risky choice framing, attribute framing, and goal framing (Levin et al., 1998, pp. 152–164). According to Samson (2016), choices can be worded in a way that highlights the positive or negative aspects of the same decision, leading to changes in their relative attractiveness. Kahneman and Tversky (1979) employed this technique in PT using gambles framed in terms of losses or gains. The way a scenario is framed can influence the way an individual makes a decision (Tversky & Kahneman, 1981). Framing is important in decision-making because people would react differently depending on how the information to be used in making the decision has been packaged. Insurance consumption is no exception to framing effects (Mishra et al., 2012).

2.3.2 Other BE Theories.

There are other theories that are part of behavioural economics. In this thesis I discuss two of such theories: Prospect Theory (PT) and Expected Utility Theory (EUT)

2.3.2.1 Prospect Theory (PT).

Kahneman and Tversky (1979) developed the Prospect Theory after violating the axioms of the Expected Utility Theory (EUT) and argued that EUT is not an adequate descriptive model to describe decisions under risk. BE has made headways into how people make decisions in risky situations and it can be concluded that demand for insurance is more closely associated with loss aversion (the concavity of Kahneman and Tversky's value function) than the conventional measure for risk aversion (Desrosiers, 2012; I. D. Hwang, 2016). The PT casts doubt over the long standing, normative view of economic decision-making by suggesting that people tend to make decisions on the basis of deviations (gains or losses) from a reference point (value function), as opposed to their final wealth (utility function)(Brighetti et al., 2014).

PT has four features: reference point dependence, loss aversion, diminishing sensitivity, and probability weighting. PT predicts that the value of a prospect or an insurance policy is negatively correlated with the degree of loss aversion (I. D. Hwang, 2016). Under the loss aversion framework, insurance would be made less attractive compared to instances when consumers would employ a utility function. This would be the case because the decision involves comparisons in the loss domain, where a person is assumed to be risk-prone (Brighetti et al., 2014). In the process, hedging or diversification effects brought about by a prospect are often neglected due to reference point dependence and the closely associated notion of "narrow framing" (Kahneman & Lovallo, 1993). Hwang (2015, p. 22) concludes that, "loss aversion of PT significantly distorts insurance purchasing decisions and shows that the effect of loss aversion on insurance demand is amplified by the degree of narrow framing". Consumers of insurance may not fully understand aspects of insurance, and, if they do understand, they may be affected by narrow framing in their decision-making.

2.3.2.2 Expected Utility Theory (EUT).

The theoretical foundation of insurance demand is based on the Expected Utility Theory (EUT) (Neumann & Morgenstern, 1944). From a theoretical perspective, the assumption that the demand for insurance follows a rational cognitive model has been prevailing for a long time (Brighetti et al., 2014). The EUT "was formulated in the 18th Century by Daniel Bernoulli in 1738, it was first axiomatized by Von Neuman and Morgenstern in 1944, was merged with the Weber – Fechner Law to refine the utility function" (G. J. Stigler, 1950, p. 373); and was further developed by Savage in 1954 who integrated the notion of subjective probability into the theory (Tversky, 1975). Bernoulli (as cited in Just and Petorson, 2010) arrived at the idea that people might choose among gambles based not only on the expected values of outcomes but on the expected values of utility associated with those outcomes. This theory suggests that individuals will consume goods and service that are bound to give them more utility.

Utility has been defined in economics as the "benefits (satisfaction or happiness) consumers derive from a good, and it can be measured based on an individuals' choices between alternatives or preferences evident in their willingness to pay or accept" (A. Samson, 2017, p. 124). This implies that an individual will not purchase, nor accept, anything of economic value if they will not derive any satisfaction (or happiness) from consuming such a product. Instances where consumers have had bad experiences about a product would impinge on their decision-making, insurance consumption is no exception to this phenomenon.

According to Tversky (1975), the theory (EUT) has been used in economics as a descriptive theory to explain various phenomena such as the purchase of insurance and the relation between saving and spending; and it has also been employed as a normative theory, in decision analysis, to determine optimal decisions and policies. Utility theory has four axioms: completeness, transitivity, independence and continuity. Under the EUT, decision-making involves rational Bayesian maximisation of expected utility where human beings are supposed to possess unlimited knowledge, time and information processing power. Consequently, a risk-averse individual will purchase full-insurance when the insurance contract is fairly priced and less-than-full-insurance when the premium includes additional costs (Mossin, 1968). Hwang (2016) asserts that a classical

EUT predicts that risk-averse agents should fully insure themselves against bad events if actuarially fair insurance is provided. This phenomenon does not hold in many countries[17] where insurance uptake is extremely low, Zambia inclusive.

Support and Criticisms of EUT

The EUT has been tested to assess its stance in the economic realm. Some experimental studies have supported utility theory (Davidson et al., 1957; Mosteller & Nogee, 1951); while others have not: the axiom of transitivity was violated in the works of Tversky (1969) and Raifa (1968). Equally, the theory faces problems in elucidating on certain kinds of empirical evidence (Watt, 2002). Just and Peterson (2010, p. 26) conclude in their research "that many of the common applications of UT have imposed absurd degrees of risk aversion and are not accurate portrayals of actual risk" behaviour of the consumers.

Tversky (1975) also affirms that it remains unclear whether EUT provides a reasonable approximation to the behaviour of individuals under conditions of uncertainty and he concludes that the EUT is grossly inadequate as a descriptive model of individual choice behaviour. What may be called a 'final blow' to EUT came in 1979 when Kahneman and Tversky (1979) developed the Prospect Theory after violating the axioms[18] of EUT and argued that EUT is not an adequate descriptive model to describe decisions under risk. Anomalies were raised on discounted utility in the standard utility theorem (Loewenstein & Prelec, 1992; Richard Thaler, 1981); Anomalies of expected and subjective expected utility were highlighted in the seminal papers (Allais, 1953; Ellsberg, 1961; Markowitz, 1952) whereas exponential discounting was also questioned (Strotz, 1955).

[17] Hwang (2016) mentions of low insurance uptake in the Americas at only 14% of Americans aged 60 and over.
[18]Kahneman and Tversky (1979) undertook experiments whose outcomes violated the outcomes of the UT. The experiments used prospects which had objective or standard probabilities. The experiments were also applied on probabilistic insurance.

Hwang (2016) concludes in his research that demand for insurance is more closely associated with loss aversion (the concavity of Kahneman and Tversky's value function) than the conventional measure for risk aversion an aspect in tandem with Desrosiers (2012, p. 5) when he concludes that:

> …over the last few decades, behavioural economists, both theorists and empirical researchers, have made significant headway into the problem of explaining how individuals make purchasing decisions in insurance and, more generally, in risky situations. Their theories take us beyond EUT and move us into a realm of theories that better reflect the context of our daily lives and of psychology."

The statement by Desrosiers (2015) points us to behavioural economics as an important theory to explain individual consumption decision-making. In conclusion, it has been asserted that "the expected utility theory, with the associated decreasing marginal utility of wealth, cannot provide a good explanation for why individuals purchase moderate insurance and in fact, it can explain even less why insureds purchase small scale insurance" (Desrosiers, 2012, p. 5).

2.3.3 Adverse Selection.

The phenomenon of adverse selection was introduced by Rothschild and Stiglitz (1976) during their work on competitive equilibrium in the insurance markets (Rothschild & Stiglitz, 1978). Adverse selection has been defined as a situation where "heterogeneous individuals have more information about their risk type than the insurer does" (Soika, 2018, p. 5) making it impossible for the insurer to charge higher premiums for high-risk persons and vice-versa. Adverse selection occurs when high-risk individuals are more likely to purchase insurance than low-risk individuals (Rejda, 2011), a situation which could lead to collapse of insurance companies and eventual market failure.

Adverse selection has been found, inter alia, in annuities markets (Finkelstein & Poterba, 2002, 2004), automobile insurance (A. Cohen, 2005; Spindler et al., 2014) and health insurance (Browne,

1992; D. M. Cutler & Reber, 1998). Rothschild and Stiglitz (1976) illustrate that efficient or risk based insurance pricing would discourage adverse selection and insurers may face constraints in obtaining adequate information and assessing an individual's risk due to instances of information asymmetry. Market failure occurs as a result of adverse selection because of information constraints that insurers face causing the market to provide an amount of insurance that is not optimal leading to market failure.

Adverse selection may "lead to a positive coverage-risk correlation whereas advantageous selection leads to the opposite"(Soika, 2018, p. 6). It is thus imperative that insurers try as much as possible to reduce adverse selection and at the same time devise mechanisms of avoiding situations of advantageous selection in order to avoid their effects that affect insurance business.

2.3.4 Moral Hazard.

Klein (2014) defines moral hazard as a situation when having been insured causes individuals to become careless and as such fail to avoid losses and may in some circumstances intentionally cause losses. "Moral Hazard in insurance markets refers to changed behaviour under insurance coverage"(Soika, 2018, p. 4), and it can be split into two categories: *ex ante* and *ex post* moral hazard. *Ex ante* moral hazard defines a situation where there is a change in the precaution of the insured as a result of insurance (Hölmstrom, 1979; Shavell, 1979) whereas *ex post* moral hazard defines a situation where there is an insurance-induced change in loss claiming behaviour aimed at keeping the costs of the loss low (Kenneth Joseph Arrow, 2001; Pauly, 1968).

Ex ante moral hazard plays a remote role in health insurance because an individual would not wish to suffer reduced health as a result of moral hazard (D. Cutler & Zeckhauser, 2000). However, conflicting results on *ex ante* moral hazard in health insurance are not uncommon (Dave & Kaestner, 2009; Klick & Stratmann, 2007), but empirical evidence support the notion of people not wishing to lose health due to moral hazard (Courbage & De Coulon, 2004; Joseph P. Newhouse & Rand Corporation. Insurance Experiment Group, 1993). Evidence for *Ex post* moral hazard has

been found in insurance markets with health insurance and workers' compensation suffering the most (Butler et al., 1996; Manning et al., 1987).

Moral hazard can be combated through policy limits, imposing deductibles and co-insurance characteristics that may force the insured to bear a portion of their loss. In some instances, the loss of the accumulated No Claim Discount (NCD) when one makes a claim can work towards reducing moral hazard.

Severe moral hazard can make insurance policies impossible and in its worst case scenario can lead to market failure.

Behavioural Economics (BE) is concerned with patterns of behaviour that depart from rational actor models (McAuley, 2010). The low levels of financial inclusion and particularly low insurance consumption in Zambia may be because of behavioural related elements that are better explained using behavioural economics as opposed to the traditional economic theories. McAuley (2010, p. 23) conclude that, "Behavioural economics brings more explanatory power" to an existing phenomenon and as such, "gives more robust guidance for public policy" and other areas of decision-making. Understanding how consumers behave and perceive is vital in designing policies that can relate to what the consumers want and comprehend (Dumm et al., 2017). Individual behaviour is influenced by several factors including what an individual encounters, their characteristic and the environment under which they have to perform a task of interest (Punj & Stewart, 1983; Wiener et al., 1986). BE enhanced our understanding on how consumers make their decisions regarding insurance consumption. The research has highlighted that the behaviour of the urban poor differs from that of the employees in the pensions and insurance industry and the tenets of BE have been critical in highlighting such a phenomenon.

2.4 Financial Sector and Regulatory Frameworks that Stimulate Insurance Consumption

The contemporary global financial architecture is a direct outcome of the assumptions underlying post-war reform of the financial and economic architecture adopted in Bretton Woods, New

Hampshire, back in 1944 (Monkiewicz, 2012). The IAIS (International Association of Insurance Supervisors), founded in 1994, sets regulatory standards that should be implemented in all member countries. The association has two major objectives: to promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders; and to contribute to global financial stability.

Ernst and Young (2015, p. 4) assert that, "Regulation is one of the major headwinds shaping the global insurance industry", highlighting that, "as international rules and guidelines continue to evolve, insurers face higher levels of uncertainty and exposure to more complex risks". The insurance markets in the developed world follow a risk-based solvency regime and the markets are liberalised with minimal government intervention. Most of the markets in the developed countries have implemented solvency regimes and comply with some Insurance Core Principles (ICPs). Many Sub-Saharan African nations are moving from a compliance based to a risk-based model of supervision, which is largely driven by membership in the IAIS (Ernst and Young, 2015). Ernst Young (2015) concludes that most countries in the African region are improving, or intending to improve, their governance and risk management regulations, with some countries opting for requirements resembling a simplified form of Solvency II. Aside from South Africa, which has already started implementing risk-based capital, Kenya has made great strides in introducing risk-based capital. Nigeria has also recently introduced risk-based capital for market risk. Zambia has equally put a framework in the draft insurance law that will introduce a solvency capital regime. A robust regulatory framework is thus essential for the development of the insurance market, as it would create a situation of operational certainty among the players in the market at any given time.

2.4.1 Consumer Awareness and Education in the Insurance Industry.

The knowledge that consumers have on insurance (products and concepts) coupled with knowledge on financial risks is a factor that would enable consumers make the appropriate choices on insurance consumption (El Monayery, 2013). Emphasising the importance of education on insurance consumption, Ioncică, Petrescu, Ioncică, & Constantinescu (2012, p. 4157) echo that,

"the rather low interest in purchasing insurance is mainly due to misunderstanding the role and necessity of insurance… and they elucidate that education can change the behaviour and mentality of potential insured". Speaking during the financial literacy week in Lusaka, Zambia, the Bank of Zambia governor highlighted that consumer education is vital if overall financial inclusion is to improve in the country (D. Kalyalya, personal communication, 2016). Literature has indicated in many instances that education plays a critical role in insurance consumption and as such it would enable many consumers become aware of insurance and the attendant rights as and when they purchase insurance (Liu et al., 2013; Mashingaidze et al., 2015; J Francois Outreville, 1996; Sapelli & Vial, 2003; Treerattanapun, 2011). Consumer awareness and education would be a big step in increasing overall financial inclusion and insurance uptake. Consumer awareness and Education is an agenda that can be driven by the Regulator and the insurance market. The state can help turn the low levels of insurance consumption through education (Blanchard-Boehm et al., 2001; Ioncică et al., 2012).

2.5 Global Trends in Insurance and Economic Development

The International Association of Insurance Supervisors (IAIS), (2016) reports that Global Life insurance premiums increased by 3.3% in 2015, down from an increase of 4.7% in 2014; while the non-life insurance premiums increased by 2.5% in 2015, down from an increase of 2.8% in 2014 (International Association of Insurance Supervisors, 2016). The underperformance against nominal GDP is driven by mature markets, which in 2013 still accounted for 84 percent of premiums, but less than half (45 percent) of the global premium growth (McKinsey and Company, 2014). Axco (2016) reports that world insurance written premiums were USD 5,189,854.64 million in 2014 of which 78% are made up of 10 developed countries (United States, Japan, China, United Kingdom, France, Germany, Italy, Republic of Korea, Canada and Australia). The insurance premiums in Africa slumped by 2% from US$71.35 billion in 2012 to US$70 billion in 2013 (KPMG, 2015). According to Axco (2016), the African share in the global insurance market is a meagre 1.413 % (USD 73, 317.13 million) of which South Africa accounts for 80.030%. Zambia ranks number 112 in the world and number 17 in Africa with a contribution to the African written premiums of 0.407%. According to KPMG (2015), the total insurance penetration in Africa

was 2.9% in the year 2013 with South Africa leading at 14.1% penetration followed by Morocco at 3.1% in the year 2014, the penetration rate for 2016 in respect of Zambia was at 1.90%, a drop[19] from 1.34% in 2012 as per the PIA statistics.

2.5.1 Role of Insurance in Economic Growth and Development.

Akinlo and Apanisile (2014, p. 120) report that, "the importance of insurance in trade and development was recognized in the first conference of UNCTAD in 1964 where a statement that 'a sound national insurance and reinsurance market is an essential characteristic of economic growth'" was made. Not only does insurance contribute to economic development through the investment of premiums (Akinlo & Apanisile, 2014; Boon, 2005; Ching et al., 2010; Kugler & Ofoghi, 2005; C.-C. Lee et al., 2013; J Francois Outreville, 1990; Ward & Zurbruegg, 2000), it is also a mechanism by which people and corporations guard against day-to-day risks that they face through risk transfer and indemnification. Insurance companies contribute to economic growth through financial intermediation in the economy. This critical function of financial intermediation helps in injecting the needed liquidity in an economy making funds available for developmental investments (O'Sullivan & Sheffrin, 2006).

2.5.1.2 Potential Contribution of Insurance to GDP.

Insurance markets contributes positively to the GDP of any particular country. Chien-Chiang et al., (2013, p. 406) highlight that, "the importance of the insurance-growth relationships has been on the rise in the past years mainly due to the big contribution of insurance within the financial sector". Literature has indicated that the global insurance industry has seen an annual growth rate of over 10% since 1950, which exceeds that of global economic development (Dowling, 1982;

[19] The GDP figure at constant prices grew by 3.6% in the year 2016 while the GWP grew by 17%.

Swiss Reinsurance Company, 1990). Sound insurance markets, together with other financial parameters, positively contribute to GDP growth (C.-C. Lee et al., 2013; Pradhan et al., 2016).

Insurance contributes to national economies through promoting financial stability and reducing volatility; substituting government programmes; facilitating trade and commerce; mobilising savings; makes it possible for efficient risk management; encourages loss mitigation; and fosters efficient capital allocation (Han et al., 2010; Pradhan et al., 2016). Pradhan et al., (2016) assert that insurance contribute in sustaining high economic growth. Chien-Chiang et al., (2013, p. 421) conclude that, "a high level of economic growth leads to a high insurance premium level and vice versa".

As evidenced in other jurisdictions, growth in insurance contributes positively to GDP growth. With a penetration rate of 2.29% in 2018, growth in insurance in Zambia would contribute positively to GDP especially via pooling of premiums for investment in infrastructure and other production areas. Insurance would also contribute towards diversifying the Zambian economy from being fully dependent on copper to other sectors of the economy. The economic diversification would ensure economic stability in times of volatility in the copper prices on the world market.

2.5.2 Comparative Determinants of Insurance Consumption.

Studies analysing the demand for insurance have been conducted in many jurisdictions using different methodologies. Economic, social and demographic variables have been tested. Variables determining insurance consumption have been grouped into four categories: economic factors; social and cultural factors; structural factors and personal and demographic factors (J François Outreville, 2013). A discussion on some of the variables follow.

2.5.2.1 Income and Wealth.

Income and wealth are cited to have a positive impact on insurance consumption: as income increases, insurance consumption increases (Beck & Webb, 2003; Browne, 1992; Enz, 2000; Feyen et al., 2011; Harrington & Niehaus, 1992; T. Hwang & Gao, 2003; Li et al., 2007; Mashingaidze et al., 2015; Park & Lemaire, 2012; Rani, 2007; Szablicki, 2002; Treerattanapun, 2011; Vadlamannati, 2008). Akotey et al., (2011) in Ghana confirm the positive relationship between income and insurance consumption. Other things being constant, income affects how an individual makes decisions on anything that they wish to consume (which require money as a means of purchase).

2.5.2.2 Loss Aversion.

Loss aversion increases with education (Dzaja, 2013), due to people being able to comprehend and appreciate the risks they face and the mitigating measures. Education is important in insurance consumption (J Francois Outreville, 1996; Szablicki, 2002; Treerattanapun, 2011), as it has potential to increase the awareness of risks and their impact on financial stability and in turn rekindles interest in insurance. A positive relationship exists between loss aversion and insurance knowledge (Elango & Jones, 2011; Ofoghi & Farsangi, 2013; Ulbinaite et al., 2013).

2.5.2.3 Marital Status and Age of a Consumer.

Akotey et al., (2011) show that marriage influences demand for micro-insurance, while Dzaja (2013) find no relationship between marital status and insurance consumption in Croatia. Mashingaidze et al., (2015) explain that unmarried individuals buy more insurance as they have more of their income available in comparison to married ones who spend more of their income on their families. The age of a consumer and their age group affects insurance consumption (Dzaja, 2013; Jappelli, 1999; Mashingaidze et al., 2015).

2.5.2.4 Cultural, Social and Personal Factors.

Consumer behaviour is affected by cultural, social, physical and personal factors because culture is embodied in a people's attitudes, beliefs values, language and religion (Armstrong et al., 2014; Beck & Webb, 2003; Lancaster & Reynolds, 2005; Park & Lemaire, 2012; Yakup & JablonskÄ, 2012). Social class affects consumer behaviour and people may buy insurance because it is fashionable to do so (Lancaster & Reynolds, 2005; J. Weston & Gilligan, 2005).

The results on the determinants of insurance consumption have not been consistent in all instances. Literature has shown the variables that could have a bearing on insurance consumption decision-making as being income; wealth; education; marital status; age; and cultural, social, physical and personal factors. Personal factors may include behavioural insights as explained by Brighetti (2014).

2.5.3 Developed Countries: Europe, North America and Asia Pacific.

Demand for insurance is affected by the dependency ratio, the national income, government spending on social security, inflation, the price of insurance, and whether Islam is the predominant religion in a country (T. Hwang & Gao, 2003; Li et al., 2007) and life insurance demand is better explained when the product market and socioeconomic factors are jointly considered. Ulbinaite et al., (2013) and Dzaja (2013) find a positive relationship in Lithuania on the determinants of insurance consumption and gender, age, income, education, living place, civil status, and the size of the family. "The willingness to pay for insurance is marginally higher than the actuarially fair value under the expected utility theory" (Hansen et al., 2016, p. 25).

Brighetti et al., (2014) report that emotional and psychological traits exist when people are making decisions on insurance policies. Factors of an economic and financial nature strongly stimulate the demand for life insurance while education levels and social benefits were found not to have an effect on the consumption of insurance altogether (Sliwinski et al., 2013, pp. 83–84).

In the Americas, a conclusion is made that there is "a higher income elasticity of demand for life insurance at lower income levels than at much higher income levels" (Truett & Truett, 1990, p. 327). It is reported in the United States that "there is little difference between blacks and whites in whether or not to purchase life insurance, but a significant difference in how much life insurance one purchases" (Gutter & Hatcher, 2008, pp. 685–686). The level of education may play a critical role in insurance consumption in some jurisdictions. However, the finding by Sliwinski et al., (2013) questions such an assertion, raising a need to test the different variables on a context-by-context basis. Chui & Kwok (2008, pp. 97–100) show that "individualism has a significant, positive effect on life insurance consumption, whereas power distance and masculinity/femininity have significant negative effects". Burnett & Palmer, (1984) investigated the psychographic and demographic factors and concluded that work ethic, religion and education are significant factors in determining life insurance ownership.

2.5.4 Developing Economies: South America, South Asia, China and Africa.

Sen and Madheswaran (2013) in a study of 12 Asian countries[20] concluded that income, financial depth, inflation, the real interest rate, and the youth dependency ratio are significant determinants of life insurance consumption.

In a study undertaken in the Middle East and North Africa (MENA) region, Zerriaa & Noubbigh (2016) suggests that life insurance consumption increases with income, inflation and interest rates whereas life expectancy and educational attainment had a positive effect on Life Insurance (LI) demand.

[20]The countries were India, Hong Kong, Bangladesh, Pakistan, Sri Lanka, Philippines,China, Indonesia, Malaysia, Singapore, Thailand and Vietnam.

In Nigeria, Ibiwoye, Ideji, & Oke, (2010) concluded that there was proof of the existence of a long run relationship and a short run dynamics among the variables that they considered while Ejye Omar & Owusu-Frimpong (2007) conclude that increased levels of consumer consciousness and lack of welfare benefits were encouraging growth for the insurance industry. Institutional performance of the insurance companies affect the individual purchase decision-making (Tom et al., 2014). People would not renew their policies with companies that are failing to pay their claims.

In Ethiopia, Alvi and Dendir (2009) concluded that there was no full insurance among the poor urban dwellers. This is in agreement with what Lloyds (2013) mention when they talk of insurance not ranking high on poor people's budgets due to having many competing needs. The UP were assessed in this study to establish their perception on insurance consumption. In Zimbabwe, Mashingaidze et al., (2015) conclude that demographic factors (age, sex, education and income) have a statistically significant influence on the demand for non-life insurance. However, they find that marital status does not show a significant relationship with the demand for non-life insurance even after controlling for the gender of the respondent. Cultural and institutional factors did not impact the demand for non-life insurance together with two social factors (social class and family). Studying weather index insurance in rural Zambia, Miura & Sakurai (2015) point out that the provision of insurance leads to a positive behaviour change among the farmers.

The studies discussed above have tried to explain the why of insurance consumption in different localities using different theories and variables. Variables that have been advanced as those affecting insurance consumption have been proved significant in some jurisdictions while they have been proved insignificant or showing unknown relationships in other jurisdictions. The table that follow highlights some of the studies and their findings.

Table 2: Summary of research and their results

Independent Variable	Relationship to insurance consumption	Research Studies
Income	**Positive**	Akotey et al., 2011; Beenstock et al., 1998; Truett and Truett, 1990; Browne and Kim, 1993; Outreville, 1996; Enz, 2000; Ward and Zurbruegg (2000, 2002); Sliwinski, 2013; Chikova et al., 2015; Rani, 2007; Feyern et al., 2011; Treerattanapun, 2011.
Education	**Positive**	Truett and Truett, 1990; Treerattanapun, 2011; Outreville, 1996; Szablick, 2002.
	Unknown	Browne and Kim, 1993.
	Insignificant	Outreville, 1996; Sliwinski, 2013; Ward and Zurbruegg, 2002.
Social Structure	**Insignificant**	Outreville, 1996; Lancaster and Reynolds; Yakup and Jablonsk, 2012; Park and Jean, 2011.
Dependency Ratio	**Positive**	Beenstock, Dickinson, and Khajuria, 1998; Truett and Truett (1990), Browne and Kim (1993), Outreville, 1996; Ward and Zurbruegg (2000, 2002).
	Negative	Ward and Zurbruegg (2002).
Price of Insurance	**Positive**	Beenstock et al., 1998; Outreville, 1996; Ward and Zurbruegg, 2002.
	Negative	Browne and Kim, 1993.
Economic Development	**Positive**	Ward and Zurbruegg, 2000; Sliwinski, 2013.
	Negative	Ward and Zurbruegg, 2000.

Source: compiled by author

The studies cited above pose a need for further research in an African context to establish whether the variables that have been used elsewhere affect insurance consumption in an African set-up and Zambia in particular.

2.5.4.1 Uses of Insurance in Developing Countries.

Insurance in developing countries can be used for many purposes including: savings (Melzer, 2007); guarding against climate related risks (Black et al., 2016); and as a way of mobilising resources for economic development (Ching et al., 2010). In a research done in the Sahel, Sakurai & Reardon (1997) conclude that there is demand for formal insurance although there are many informal risk management mechanisms; they, however, mention that these mechanisms may not be sufficient. A number of informal risk coping mechanisms have been cited including income diversification (Reardon et al., 1992), crop diversification (Matlon, 1991; Norman, 1973), livestock holdings (Christensen, 1990), crop storage and informal credit (Udry, 1994). Informal savings mechanism are prevalent in Zambia (Finmark Trust, 2010) and people use informal savings schemes called "chilimba" which is a revolving fund among a group of people.

2.5.5 Microinsurance (MI) and Takaful.

Microinsurance plays a critical role in covering communities that would not be covered under conventional insurance and it has been an option for the working poor to insure themselves (Churchill, 2002). Microinsurance has provided a way by which the vulnerable can manage the day-to-day life risks that they face (Bendig & Arun, 2016). MI success stories have been reported in Uganda, Kenya, Tanzania, and Zambia (Churchill & Matul, 2012). MI provides low-income people with means of risk management, an aspect that helps in the building of social capital. The risks covered by MI have increased (International Labour Office, 2016; Mosley, 2009). Takaful has contributed to the increase in insurance consumption via provision of insurance acceptable to people of the Moslem faith. In Africa, Takaful generally takes the form of MI, but has a fundamental difference in that Takaful is Islamic finance as discussed below. MI and Takaful are important in this research due to the positive contribution towards the enhancement of financial inclusion, risk management as well as expanding the insurance industry.

2.5.5.1 Microinsurance (MI).

MI is regarded as one of the risk-managing financial products (Churchill, 2002), and an option for the working poor to manage risks (Spindler et al., 2014). Spindler et al., (2014, p. 782-788) explain, "microinsurance is more than simply downscaled formal insurance; it is formal insurance tailored to a clientele with vastly different income and risk profiles than those of traditional insurance schemes". Poor households need financial services that can enable them manage risks that they face (Churchill, 2002; International Labour Office, 2016).

The ideas of Tilman and Bhargav (both cited in International Labour Office, 2012) point to one critical aspect: MI is different from conventional insurance and require different channels of distribution and structuring of products. Requiring upfront savings can limit insurance uptake and liquidity constraints can reduce insurance participation (Giné et al., 2008; Liu & Myers, 2016). Making access to an asset conditional on one having insurance and bundling insurance with savings can yield positive effects towards insurance consumption (Cole et al., 2013; Karaivanov & Martin, 2013). However, it has been refuted that bundling of insurance with savings requirements as it poses an opportunity cost in terms of forgone consumption and would affect insurance consumption negatively (Liu & Myers, 2016). Thus, the packaging of insurance products may affect the demand for insurance.

MI success stories have been reported in Uganda (Churchill, 2002). Cohen et al., (2005) established that there was demand for MI in Kenya, Tanzania and Uganda even though the impact of life shocks on people differed depending on the gender and they discover that self-insurance was the common mode of responding to life shocks. Sakurai and Reardon (1997) report the presence of demand for insurance in the Sahel region of West Africa and they highlighted the inadequacies of the informal self-insurance strategies that people use. Moral hazard and adverse selection has been reported as factors that may affect sharing mechanisms in informal set-ups including decreasing demand for drought insurance (Sakurai & Reardon, 1997; Townsend, 1995). Agricultural decisions have been investigated by Karlan *et al*., (2014) in Ghana and they report that there is demand for index insurance; and they conclude that, "the binding constraint to farmer investment is uninsured risk" (Karlan et al., 2014, pp. 648–650).

2.5.5.1.1 Determinants of Microinsurance (MI) Demand.

MI is a viable way of managing risk for the poor (Biener & Eling, 2012; Dror & Jacquier, 1999; Giesbert et al., 2011; Mudurch, 2006). However, the demand for MI is low (Cole et al., 2013; Eling et al., 2014; Giné et al., 2008). The determinants of demand are the same for both traditional insurance and MI. This maybe because of the fact that MI is developed following the tenets of traditional insurance.

Economic factors (price and wealth/income), Social and Cultural factors (risk aversion, non-performance and basis risk, trust and peer effects, religion and financial literacy), structural factors (informal risk sharing, Quality of service, Risk Exposure) and personal and demographic factors (Age and Gender) have been cited as factors that affect insurance consumption (Martin et al., 2014; Outreville, 2013). Conflicting results have been recorded on the variable price: with a negative sign of determination (Bauchet, 2014; Cole et al., 2013; Dercon et al., 2012); and a non-significant sign (Gaurav et al., 2011). Income and wealth have a positive effect on the demand for MI (Cole et al., 2013; Giné et al., 2008; Liu et al., 2013) despite being categorised as non-significant in other reports (Ito & Kono, 2010; Karlan et al., 2014).

Loss aversion has shown positive impact on MI demand (Ito & Kono, 2010), a negative impact on demand (Cole et al., 2013; Giné et al., 2008) while Dercon et al., (2012) records a non-significant impact on MI demand. Non-performance and basis risk has a negative effect on the demand for MI (Mobarak & Rosenzweig, 2012); while trust has a positive impact (Cole et al., 2013; Dercon et al., 2011) with peer effects being insignificant in affecting demand (Cai et al., 2011; Giné et al., 2008). Religion is reported to have a positive effect on MI demand (Cole et al., 2013).

Financial literacy has shown varying results: a positive effect on MI demand (Cole et al., 2013; Giné et al., 2008) and an insignificant effect (D. Clarke & Kalani, 2011). Financial training has both a positive impact (Cai et al., 2011; Dercon et al., 2012) and an insignificant impact (Cai et al., 2011; Dercon et al., 2012) on MI consumption. Education has a positive impact (Chen et al., 2013; Jehu-Appiah et al., 2011) while an insignificant impact is also recorded (Cole et al., 2013; Giné et al., 2008).

Informal risk sharing mechanisms have shown varying results: positive impact (Cai et al., 2011; Dercon et al., 2012); negative impact (Jowett, 2003; Landmann et al., 2012). Quality of service has an overall positive impact on MI demand (Dong et al., 2009; Jehu-Appiah et al., 2011); while exposure to risk has varying results: positive impact (Arun & Bendig, 2010; Ito & Kono, 2010); negative impact (Arun & Bendig, 2010; Giesbert et al., 2011); and an insignificant effect (Cole et al., 2013) on insurance consumption. In India, trust was a key factor in the demand for Weather Insurance consumption (Hill et al., 2016).

Personal and demographic factors have indicated varying results. Age has varying effects on insurance consumption: positive impact (Chen et al., 2013; Giesbert et al., 2011); negative impact (Giné et al., 2008); and an insignificant effect (Cole et al., 2013). Gender has equally recorded varying results: positive impact (Nguyen & Knowles, 2010); negative impact (Bonan et al., 2011); and an insignificant impact (Thornton et al., 2010). Trust, product understanding, financial literacy, informal risk sharing and risk attitudes of consumers have been cited as factors that can increase micro insurance demand (Eling et al., 2014).

Empirical research has shown varying and conflicting results on MI demand as well as conventional insurance demand. Context specific research is needed to get results that can be applied to a particular contextual environment.

2.5.5.1.2 Contribution of MI to the Growth of the Broader Insurance Industry.

MI has contributed to insurance industry growth. The number of risks covered by MI has grown (International Labour Office, 2016) despite billions of low-income persons remaining excluded from quality insurance services. Microinsurance grew by 200% between 2008 and 2012 with more than 44.4 million low income lives and properties covered in 39 countries (International Labour Office, 2016), and the concentration of cover is in Southern and East Africa. According to Mosley (2009) MI contributes to the enhancement of social capital that leads to better risk coping abilities, can enhance financial inclusion and may be a powerful tool to use in alleviating poverty overtime

(Mosley, 2009). MI can complement conventional insurance in reaching out to the low-income groups in society.

2.5.5.1.3 Challenges in increasing MI coverage among the poor.

Covering the poor is an unavoidable exercise in any jurisdiction that aims at increasing financial coverage. Financial services have been cited as being special in comparison to other consumer goods and Cole (2015) highlights four major barriers, besides adverse selection and moral hazard, as factors that affect the spread of financial services: transaction costs, financial literacy, behavioural biases and trust. (Cole, 2015).

Transaction Costs – these arise because of the domicile of the majority poor who are clustered in far-flung areas, which are difficult and costly to access. Accessibility of these areas become critical in the rainy season due to impassable roads (the case with Zambia) and in some jurisdictions winter brings its own challenges in accessing remote areas (the case of the mountain kingdom of Lesotho). Lack of availability of mobile financial services increases these challenges in the rural setting. The cost of selling and underwriting insurance in developing countries pose another challenge, which affects the transaction costs (Cole, 2015; Téllez, 2012).

Financial Literacy – financial literacy affects uptake of financial products due to people not being able to comprehend and appreciate what is being sold to them. Insurance uptake is affected by this factor especially that insurance as a subject is difficult to understand, let alone appreciate how one would benefit by taking-up insurance. Novel products maybe more affected by financial literacy, i.e. weather index insurance (Cole et al., 2011). Gaurav et al., (2011)[21] provide empirical evidence

[21] They undertook a study in partnership with a local NGO which included an education programme and a simulation exercise on insurance purchase.

that financial education boosts demand for insurance. Evidence suggests that financial education can have a positive impact on financial behaviour (Cole, 2015).

Behavioural Biases – embedded in human beings are behavioural biases that have been explained by Behavioural Economics (BE). Some of the biases have to do with the loss aversion of an individual (Kahneman & Tversky, 1979); difficulties in evaluating low probability events (Barseghyan et al., 2013); difficulties in understanding compound interest, making savings less attractive (Anagol et al., 2013; Stango & Zinman, 2009); and self-control (Angeletos et al., 2001). These would have an impact in the uptake of financial products.

Trust – trust is a critical factor in both microinsurance and traditional insurance. The perceptions that people have towards an insurance product and company can affect their willingness to purchase insurance. It is difficult to create trust and most private insurance companies do not enjoy much trust among the consumers (Cole, 2015).

2.5.5.2 Takaful (Islamic Insurance).

The Islamic Financial Services Board (IFSB) defines Takaful as the Islamic counterpart of conventional insurance which exists in both family (or 'life') and General forms (IFSB, 2009). Takaful means "guaranteeing each other" and that in the Islamic interpretation, it "is a pact among a group of members or participants that agree to always give mutual assistance to one another" (Matsawali et al., 2012, p. 164). The origin of Islamic Insurance dates before the era of the Holy Prophet Muhammad (Klingmuller, 1969), and it is based on "Aquilah" mutual co-operation and the first person to come up with the meaning and concept and legal entity of an insurance contract was a Hanafi Lawyer, Ibn Abdin. The first Islamic insurance company (called the Islamic Insurance Company Limited) was established in Sudan in 1978 (Hussain & Pasha, 2011; Jaffer et al., 2010). The main purpose of Takaful is to bring equity to all parties involved and the objective of the contract is to help the policyholder through bad times (Hussain & Pasha, 2011). "Takaful is based on social solidarity, cooperation and joint indemnification of losses of the members" (Matsawali et al., 2012, p. 164). Takaful is no longer a new phenomenon as Takaful businesses

are spread out in the world in Muslim and non-Muslim countries. The growth in Takaful has varied significantly from USD 1,383 millions of premiums in 2004 to USD 3, 364 million in 2007 (America, 2011).

2.5.5.2.1 Concepts, Prohibitions and Challenges of Takaful.

Chua (2000) assets that the characteristic of sharia compliant insurance are that both parties be sincere and the policy is for the sake of the hereafter and that there is nothing illegal in its aim and operations. Jaffer *et al* (2010) highlight that Riba, or usury (interest); Gharar or uncertainty; Maisir, or gambling; haram, or forbidden designs are concepts found in conventional insurance that are not permissible in Islamic insurance as defined under Islamic law. It has been concluded that "Takaful is not a type of insurance, but rather an alternative to insurance" (Jaffer et al., 2010, p. 6).

Challenges for takaful include low levels of public awareness (Ernst and Young, 2015; S. Hidayat, 2013); low levels of education among the consumers (Al-Ajmi, 2005; S. E. Hidayat, 2015; Ismail et al., 2012; Manab et al., 2004); lack of consumer awareness, scarcity of human resources with both insurance and Shariah expertise, solvency and capital requirements, diverging regulatory approaches and lack of centralised regulations (Jaffer et al., 2010).

2.5.5.2.2 Determinants of Takaful Demand and Contribution of Takaful to Insurance uptake.

Research on determinants of Takaful insurance has been limited as compared to Islamic finance and Islamic banking. Demand determinants with positive influence include religious factors; compliance to Islamic systems; reputation and image of the operator; and conformity of the products to shariah and the truthfulness of marketing and advertising (Bashir et al., 2011; Gilaninia & Ghashlagh, 2012; Haron et al., 1994; Hashim, 2006; Isa & Deni, 2009; Mansor, 2004; Naser et al., 1999, 1999; Rustam et al., 2011; Saleem & Abideen, 2011).

Takaful would complement the efforts of conventional insurance in enhancing insurance coverage. In conclusion. Jaffer *et al* (2010, p. 4) cite that, "Takaful provides access to a large, relatively untapped market, in which insurance penetration hovers somewhere well below 2% of GDP, and its growth in the world is expected to continue in the long term".

2.5.5.3 Differences between Conventional Insurance and Takaful.

The conceptual difference between Takaful and conventional insurance is that risk in Takaful is not exchanged by way of a premium but rather via a contribution made to a Takaful operator (implying that the operator is not selling and the participant is not buying any risk coverage (Al-Ajmi, 2005; Matsawali et al., 2012; Yusof, 1996). Under such an arrangement, the Takaful operator plays the role of asset manager and the risk is distributed among all the participants. Hussain and Pasha (2011) explain that insurance business under conventional system is based on uncertainty, which is not allowed in Islamic society under Islamic principles; they also point to differences in conceptual and operational frameworks. Three main operational frameworks of Takaful are reported: Mudarabah, Wakala and the Wakala Waqf models (Hussain & Pasha, 2011).

2.6 The Zambian Insurance Industry: An Overview

The insurance industry in Zambia has been recording growth in terms of the Aggregate Gross Written Premiums (GWP). As at end of 2014, the Zambian insurance market ranked 112 in the world (in terms of the written premiums) while the country ranked 17 in Africa. Zambia contributed 0.407% of the premiums written in Africa in the year 2014. This is against the top contributor who is South Africa with a contribution of 80.030% of the written premiums in Africa. There has been growth in the insurance market, both the number of entities licensed and the GWPs. The penetration of insurance has been slowly increasing from 1.34% in 2012 to 2.29% in 2018. The GWP grew by 16% whereas the GDP grew by 3.7%.

2.6.1 The Regulatory Framework.

The Insurance industry in Zambia is regulated by the Pensions and Insurance Authority (PIA). The PIA is governed by a Board of Directors that oversees the strategic direction of the Authority. The members of the Board are appointed by the Minister responsible for Finance and they come from different constituents that they represent on the Board. The Insurance Act number 28 of 1997 as amended in 2005 is the Act that governs the entire Insurance sector in the Country. The PIA is independent and reports into the Ministry of Finance and it is a body corporate able to sue and be sued in its own name. The PIA follows a risk-based supervision model, which is in tandem with international best practice and the direction of the International Association of Insurance Supervisors (IAIS). All the operational processes of the authority from licensing to enforcement are transparent.

2.6.2 Determinants of Insurance Penetration in Zambia.

In the Zambian scenario, general financial inclusion is still low, at 59.3% of the adult population as at 2015, representing a significant increase from 2009 (37.3%) and 2005 (33.7%) (Finmark Trust, 2015). The Finscope report alludes to high costs of providing financial services, particularly in rural areas and to the poorer populations and the fact that serving poorer communities is a cost on other investment opportunities and there are small transaction among poor households (Finmark Trust, 2015). Finmark Trust (2005) reports limited use of insurance products by the adult population in Zambia. The survey identifies a number of determinants of savings in Zambia including the level of education; the prevalence of informal savings products; the family situation of the person saving; pricing (affordability of the products); physical access to sales and servicing channels (proximity to institutions of savings); and awareness.

The barriers to insurance uptake include affordability; people not knowing about insurance's existence and how it works; people not knowing the benefit of insurance; and people not knowing where to and how to get insurance (Finmark Trust, 2015). As highlighted by Finmark Trust (2015) the determinants of insurance penetration in Zambia would be factors bordering around economic,

social and demographic characteristics. As noted by Churchill (2002), behavioural traits cannot be distanced from people's buying decisions. Providing transparent information related to the rationale for insurance would go a long way in helping the general public better understand insurance and this would enable insurance fulfil the roles it is designed to play: reducing future losses and financially protecting those at risk (Kunreuther & Pauly, 2014).

2.6.3 Microinsurance (MI) and Takaful in Zambia.

2.6.3.1 Microinsurance in Zambia.

Zambia has recorded increases in MI take-up. FSD Zambia (2016) reports that in 2014 MI coverage had reached three million people, an increase of over 200% from 2009; leading to an increase in the percentage of the adult population consuming insurance and pensions products. The introduction of mobile payment platforms led to the introduction of bundled products where subscribers to the Airtel network participated into life insurance products automatically. This accounted for 64% of life and funeral coverage in 2014 (FSD Zambia, 2016).

Zambia is currently developing MI regulations that will govern the operation of MI in the country. Madison insurance company (a company operating in Zambia) has been offering MI products since 2005. Weather index insurance (WII) has been investigated in Zambia by (Black et al., 2016) and they conclude that WII is one of the instruments that can be used for reducing vulnerability to drought.

2.6.3.2 Takaful in Zambia.

The Takaful phenomenon in Zambia is relatively new. Takaful was only introduced in Zambia by Phoenix of Zambia Assurance Company (2009) Limited in the year 2014. The Takaful window in the Zambian industry commenced in May 2014 and growth has been recorded in the Takaful window with GWP of ZMW3, 090,532 in 2015 (from a figure of ZMW543, 436 in 2014) (Pensions

and Insurance Authority, 2016). Phoenix Assurance Group - Zambia (2016) reports that the success factors in the growth of the Takaful business include among other things the concept of profit sharing which appeals to prospective clients; being the pioneers of Takaful on the market has also given them goodwill from the clients; and the company has requisite technical competence to structure and implement the Takaful model that they use.

Takaful in Zambia faces challenges. Phoenix Assurance Group - Zambia (2016) mention a number of challenges including that Takaful is perceived to be driven by Islamic concepts, an aspect that makes it less attractive to those who are not Muslims; clients find it difficult to understand the model being used; advice of the Sharia Advisory Board at times causes delays in implementing some of the profitable lines under Islamic insurance.

2.6.4 Framing Zambian Insurance Penetration in the Global Context.

The development of insurance in the developing world has been at a very slow pace. The situation in Africa is no different and it is compounded by few researches undertaken to understand the causes of the low development of the sector. It has been reported by Swiss Re that the group of 7 alone accounts for 57% of the world's insurance premiums as at end of 2018 (Swiss Re Institute, 2019). The growth of insurance consumption, Webb explains, follows what is called an "S-Curve" (Webb, 2006). It is slower at lower levels of development, it accelerates as the insurance market and as the economy expand, and then slows down as the market matures". This phenomenon is not true for, Zambia. For instance, Zambia has had positive growth in GDP and insurance premiums while the penetration has stayed low. Developing the insurance sector is a big challenge and calls for an informed policy making process to make targeted policies that will be efficient and effective for the country. The challenge of low insurance penetration is not unique to Zambia. For instance, in Kenya, it is reported that developing the insurance sector is a key challenge as penetration is very low, at about 2.6% of the adult population (Insurance Regulatory Authority, 2011, p. 1). The IRA report is in agreement with the findings of the FinScope Survey in Zambia and the USAID report on the uptake of financial services in the developing world.

Insurance uptake in Zambia has been extremely low and it is a major concern to the government's plan for economic diversification (Hon. Chikwanda, 2015): it raises a pertinent question on what risk coping mechanisms people use. Surveys have been done to measure the level of insurance uptake, financial inclusion and/or usage in Zambia (Finmark Trust, 2005, 2010, 2015). The reasons for non-uptake of insurance in urban areas and the factors that affect decision-making have not been researched on in Zambia. Other types of financial services such as mobile money have recorded better improvements in uptake than insurance from the baseline survey in 2005 to the recent survey in 2015. The surveys done have not gone into detail beyond costs to look at the reasons for low insurance uptake among the populace.

2.7 Gaps in the Literature

Quantitative methodologies have dominated studies on the consumption of insurance, be it long term or short term. The methods employed have delved in the statistical realm of regression analyses and lately more advanced analyses including Structural Equation Modelling and Path Analysis. Sen and Madheswaran (2013) report that the identification of the determinants of the demand and supply of financial services is an on-going subject of research. Ulbinaite et al., (2013) indicate that the aggregated insurance consumer behaviour is not analysed in research papers. Brighetti et al., (2014) report that extant empirical studies on insurance demand appear, in a sense, coherent with prevailing economic theoretical foundations; they further assert that most literature have a common feature of primarily focusing on demographic and economic factors as being the ones which underpin insurance demand.

Empirical results are not always consistent across studies and the influence of socioeconomic variables on insurance demand has been found to be positive, negative or not significant (T. Hwang & Greenford, 2005; Zietz, 2003). The causes of low insurance uptake have not been subject of an in-depth investigation. All that has been done are quantitative studies aimed at establishing cause-and-effect relationships. Most of these studies refer to choices under risk and little attention has been addressed to decisions under ambiguity (Brighetti et al., 2014). Most of the research has been

done in the developed countries and Asia and their findings may not be applicable to other countries, Zambia inclusive, due to differences in cultural, economic, and demographic factors.

A knowledge gap exists where an in-depth understanding of the insurance consumption decision-making process is concerned. There is limited analysis of the particularities of insurance consumer behaviour as a specific subject (Ulbinaite et al., 2013), calling for more research to analyse behavioural aspects in insurance consumption decision-making. There has been no research done that has used the mixed methods approach and behavioural analysis while focussing on two different groups with different access to insurance information.

The aim of this thesis was to fill the gap between the growing literature on the role that behavioural traits play in decision-making and understanding the effect of behaviours (as moulded by the societies in which individuals live in) under conditions of ambiguity, with specific attention on real-life insurance choices. The thesis has contributed to knowledge via highlighting how decision-making may differ between two groups that are not homogenous.

2.8 Chapter Summary

This chapter has discussed the economics of insurance highlighting how it is vital in understanding the principles underlying the insurance markets. The world insurance industry has been on the rise. Insurance in developing countries is growing and people are using insurance to mitigate the risks they face. The developed countries still dominate insurance consumption. MI has become topical and it is a tool that could be utilised to increase insurance penetration and to cover the low-income communities. The determinants of microinsurance demand and conventional insurance demand are uniform. Similar determinants are found under Islamic insurance. Behavioural traits alongside economic and socio-demographic factors affect the decision-making of consumers on insurance consumption. However, inconsistencies in empirical results are not uncommon. MI has contributed positively towards the growth of the insurance industry in Africa and the world at large. However, in the Zambian context more efforts are required to increase people's access to the insurance services.

The usage of behavioural economics has potential to provide insight into the determinants of the insurance purchase decision-making away from the traditional economic theories.

Chapter 3 – Theoretical Framework, Design and Methods

3.1 Introduction

The research philosophy is critical in research and it has been discussed in this chapter. The chapter elucidates on the theoretical framework and the methodology used to explore and elucidate on the phenomenon of insurance purchase decision-making. The chapter gives a background to pragmatism and how it informs this inquiry. The chapter also discusses the underlying theoretical framework and further explains the theoretical lens of choice: *Outreville's Determinants of Insurance Consumption Framework*. This chapter further discusses the selection of the research design of choice: a mixed methods sequential explanatory design and the importance of this approach, emphasising the validity and usefulness of the design to the research and the data collection process.

3.2 Philosophical Assumptions

The research philosophy is most important when deciding a research design for it reflects the way the researcher thinks about the development of knowledge, which consequently affects the way one goes about doing research (Saunders, 2011). The choice of any particular method of research depends on the research philosophy or paradigm that researchers follow to conduct their research (J. W. Creswell & Creswell, 2017). There are three reasons why an understanding of philosophical issues is very useful (Easterby-Smith et al., 2002, p. 27):

> First, since it can help to clarify research designs. Second, knowledge of philosophy can help the researcher to recognise which designs will work and which will not. It should enable a researcher to avoid going up too many blind alleys and should indicate the limitations of particular approaches. Third, knowledge of philosophy can help the

researcher identify, and even create, designs that may be outside his or her past experience. And it may also suggest how to adapt research designs according to the constraints of different subject of knowledge structures.

The Burrell and Morgan's (1979) framework provides a useful framework for sensitising researchers to the dynamics of theory development and how one can address and locate a phenomenon in a particular socio-political and economic context (Chua, 1986; Hopper & Powell, 1985; Laughlin, 1995). While there has been much criticism of Burrell and Morgan's framework (Laughlin, 1995; Willmott, 1990), they "have done most to help design an abstracted classification schema for understanding broad streams of social science approaches to empirical research"(Laughlin, 1995, p. 65).

Approaching the social world to understand how and why things happen involves adopting (explicitly or implicitly) certain assumptions as regards the nature of social sciences and the nature of society at large (G Burrell & Morgan, 1979; Chua, 1986; Laughlin, 1995). These assumptions are related to ontology, epistemology, human nature and methodology (G Burrell & Morgan, 1979). The nature of science and the nature of society have direct implications for the research methodology adopted, the method of carrying out the investigations and how knowledge pertaining to the social world is acquired (G Burrell & Morgan, 1979). This emphasises the importance of paradigm issues. Writing about paradigms, Guba and Lincoln (1994) points out that "paradigm issues are crucial; no inquirer, we maintain, ought to go about the business of inquiry without being clear about just what paradigm informs and guides his or her approach" (Guba & Lincoln, 1994, p. 116).

Different ontologies, epistemologies and models of human nature are likely to incline social scientists towards different methodologies (Gibson Burrell & Morgan, 2017).

3.2.1 Ontology.

Ontology is concerned with the nature of reality (Hopper & Powell, 1985), it is "the study of being; it is concerned with 'what is', with the nature of existence, with the structure of reality as such" (Crotty, 2005). Social scientists are faced with the basic ontological question of whether the 'reality' to be explored is external to the individual imposing itself on individual-consciousness from without - or the product of individual consciousness; whether 'reality' is of an 'objective' nature, or the product of individual cognition; whether 'reality' is given 'out there' in the world, or the creation of one's mind (Gibson Burrell & Morgan, 2017). According to Crotty, the ontological argument revolves around the structure of reality: is it composed of hard, tangible and relatively immutable structure (realism) or is it the product of individual consciousness (nominalism) (Crotty, 2005). Burrell and Morgan (2005) argue that, "for the realist, the social world has an existence which is hard and concrete as the natural world". Nominalists, however, perceive reality as a projection of human imagination (Morgan & Smircich, 1980).

3.2.2 Epistemology.

Epistemology is the branch of philosophy that deals with the theory of knowledge (Cruise, 1997); it is "the theory of knowledge embedded in the theoretical perspective and thereby in the methodology" (Crotty, 2005). It is concerned with "the nature of knowledge, its possibility, scope and general basis" (Hamlyn, 1995). Epistemology answers questions about how one can be a 'knower'; what tests beliefs must pass in order to be legitimated as knowledge; and what kind of things can be known (Harding, 1987). Crotty (2005) asserts that the choice of research methodology and methods relies to some extent on the epistemological stance adopted.

3.2.3 Human Nature.

Burrell and Morgan (2005) assert that assumptions concerning human nature are conceptually separate but are associated with the ontological and epistemological issues. Burrell and Morgan

further write that determinism and voluntarism are the two major assumptions concerning human nature (Gibson Burrell & Morgan, 2017). The determinist view considers human beings and their activities as being completely determined by the situation in which they are located; human beings and their experience are perceived as product of their environment; whereas the Voluntarism views human beings as being completely autonomous and free-willed; the view that the human being creates and controls his environment.

Human nature is critical in this inquiry as the tenets of human nature specified above affect how humans make decisions around insurance consumption. Regardless of the view one takes, determinist or voluntarist, the decision an individual makes would still be affected in one way or another.

3.2.4 Methodology and Method.

Methodology refers to the comprehensive approach to the research process, from the theoretical underpinning to the collection and analysis of the data (Collis & Hussey, 2013). 'Methodology' and 'method' are terms that have been used interchangeably (Collis & Hussey, 2013; Crotty, 2005). Methods are "the techniques or procedures used to gather and analyse data related to some research question or hypothesis", Crotty (2005) writes, while the methodology refers to "the strategy, plan of action, process, or design lying behind the choice and use of methods to the desired outcomes". On the other hand, it has been argued that methodology is not just about data collection and the rules for evidence; in its larger conception it is about the nature of explanation and the means by which explanations are produced (Berry, 1983).

Methodologies employed in social sciences will thus approach the social world[22] differently. In the words of Burrell and Morgan (1979, p. 3):

> The methodological debate is, therefore, whether the social research adopts an ideographic approach which focuses on "getting inside" a subject and exploring their detailed background and life history, involving themselves with people's normal lives, and look at diaries, biographies, observations or the alternative nomothetic approach which relies more on the scientific method and hypothesis testing using quantitative tests like surveys, personality tests, and standardised research tools.

Healy and Perry (2000) summarise the connection between ontology, epistemology and methodology that "ontology is the 'reality' that researchers investigates, epistemology is the relationship between that reality and the researcher and methodology is the technique employed by the researcher in order to investigate that reality" (Healy & Perry, 2000, p. 119).

The subjective-objective dimension of Burrell and Morgan's (1979) Framework gives a useful starting point to understand and appreciate the philosophical approaches available.

[22] According to Burrell and Morgan (2005), methodologies employed in research could be those treating the social world by comparing it to the natural world as being hard, real and external to the individual; this perspective expresses itself most forcefully in a search for universal laws, which explain and govern the reality, which is observed.
The other perspective of social reality stresses the importance of the subjective experience of individuals in the creation of the social world, then the search for understanding focuses upon different issues and approaches them in different ways.

The Subjective-Objective dimension

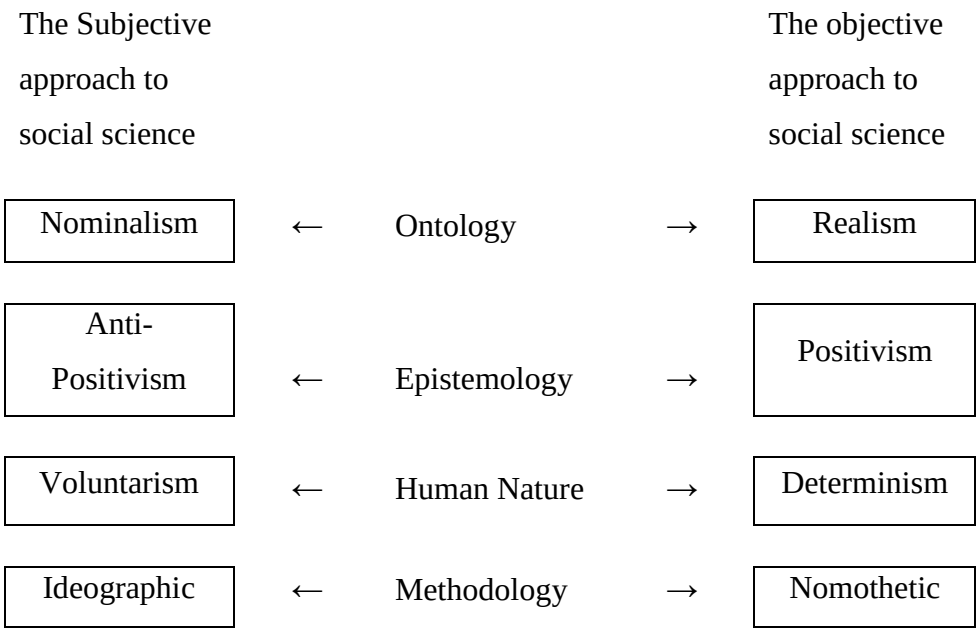

Figure 1: Morgan's Subjective Objective Dimension.

Adapted from 'Sociological paradigms and organisational analysis' by G Burrell and Morgan, 1979, Heinemann, p.4

"Each paradigm offers a series of shared philosophical assumptions which underpin the frame of reference, mode of theorising and *modus operandi* of the social theorist who operates within them" (G Burrell & Morgan, 1979, p. 23).

The paradigm of choice for this research is Pragmatism, which mixes elements from the subjective and objective dimensions. The mixing of the elements has enriched this research through enhancing the understanding of the insurance purchase decision-making process. A discussion on pragmatism follows.

3.3 Theoretical Framework

3.3.1 Theoretical Framework: Pragmatism.

Different philosophical approaches of research from positivism to interpretivism restrict themselves to the qualitative and quantitative domains. Pragmatism as a research philosophy has arisen though with much debate surrounding maintaining of 'scientific methods' of 'formalism' leading to paradigm wars whose stalemate led to the acceptance of pragmatism as a philosophical orientation (Teddlie & Tashakkori, 2003; West, 2012).

Pragmatism is the theoretical framework that has been adopted for this research as it focusses on analysing concepts such as 'truth' and 'reality' while focusing on what will work to meet the research needs (Teddlie & Tashakkori, 2003, p. 713). It offers an alternative worldview to those of (post)positivism and construction while focusing on the research and the consequences of the research and what works taking into account the research questions under investigation (Brewer & Hunter, 1989; J. W. Creswell & Clark, 2007; Miller, 2006). Philosophically, the theory of pragmatism is looked at as a means of reducing the gap between the empirical singular scientific approach to research and the newer "freewheeling" inquiry of qualitative research theories (Teddlie & Tashakkori, 2003, p. 52). Pragmatism as a theoretical framework can be pivotal in any inquiry due to its focus on the logical link between two paradigms of inquiry: quantitative and qualitative.

Pragmatism is derived from the Greek word 'Pragma' which means action. Pragmatism is a philosophical movement whose roots date in the 19th Century and was founded by an American Philosopher Charles Sanders Pierce (1839 – 1914). Pierce's work was expanded upon, by among others, William James, John Dewey, George Mead and Arthur Bently, who rejected traditional assumptions regarding truth, the nature of knowledge and inquiry (Gale, 2005; Shields, 1998; C. P. West, 2012), and these pragmatists were of the view that the real world could not be explained by a singular scientific method (Gale, 2005). Their belief was that ordinary experience and a desire for a better world was critical in successful comprehension of the world (A. Wolfe, 1998).

Pierce's work of 1857 – 1866 on the 'tragic scheme' explained how science interacted with the world at three levels: the observed object, the working scientist and the signs the scientist used to describe and explain the world (Fisch, 1982). Under Pierce's work, emphasis was placed on the social context and testing (Godfrey-Smith, 2001). George Mead[23] made what may be considered as the first major influence in the movement of pragmatism and his contribution influenced psychologists and social scientists through 'social behaviourism'. The notion of the 'act' or 'presentism', meaning what is read is happening now, was developed by Mead (Teddlie & Tashakkori, 2003). Making the most significant contributions to scientific research and the debates surrounding pragmatism, Dewey was a proponent of liberal views on topics including education, politics, women's suffrage and world peace (Richard Bernstein & Menand, 1997; Hickman & Alexander, 1998; McDermid, 2008). Dewey (1859 – 1952) has been ranked as one of the greatest thinkers of the 20th Century due to his contributions on empiricism, contextualism, and process philosophy and his contributions have remained influential especially those on the pragmatic approach to ethics, aesthetics and religion (Richard Bernstein & Menand, 1997; Hickman & Alexander, 1998; McDermid, 2008). Dewey emphasised the importance of social interaction in human life and he defended a social theory of mind (Godfrey-Smith, 2001). Dewey's ideas and pragmatism in general subsided after his death and pragmatism was only revived by Richard Rorty (1931 – 2007) who has been cited as having taken the arguments of pragmatism from philosophy into other disciplines (Rorty, 1982).

Pragmatism has undergone two historical periods: the first period being 1860 – 1830 and the second period being in the late twentieth century around early 1960's (Teddlie & Tashakkori, 2003b). The second historical period, known as neo-pragmatism, has impacted greatly on social science methods and the philosophy of science (McDermid, 2008; Teddlie & Tashakkori, 2003b). The resurgence of pragmatism in the 1960's has led to a new way of thinking about pragmatism in terms of its place in philosophy, science, and life (C. P. West, 2012). Tashakkori and Teddlie

[23] George Mead was a colleague of Dewey at Chicago University.

(2003) conclude that pragmatism is as much a philosophy and method of research as it is a political, religious and aesthetic statement.

The later periods of pragmatism has been defined as contemporary pragmatism and shares some fundamentals with older pragmatism despite being "deeply rooted in common sense and dedicated to the transformation of culture and the conflicts that divide us" (Sleeper, 1986, pp. 8–9). Pragmatists believe that human thought is linked with action and as a result can be used to understand how thoughts are transformed into action under insurance consumption decision-making. Tashakkori and Teddlie (2003) mention that humans are capable of shaping experiences as opposed to external forces shaping the thoughts of human beings.

All research require a foundation which is located in the theoretical framework[24] chosen by the researcher and there are common philosophical elements in world views and these elements are not static (J. W. Creswell & Clark, 2007). Researchers tend to categorise worldviews by what they have in common rather than considering them as rigid classification, they should be viewed as organisational frameworks that offer different stances (J. W. Creswell & Clark, 2007).

The focus of pragmatism as a worldview is on the consequences of the research, the importance of the research question over the methods employed, and multiple data collection methods inform the research (J. W. Creswell & Clark, 2007). Creswell and Plano Clark (2007) highlight that the nature of reality can be singular or multiple realities under pragmatism as the researcher is able to combine both deductive and inductive thinking in order to present multiple perspectives of reality. The multiple perspectives of reality would enable a deeper and complete understanding of a phenomenon under investigation. Epistemologically, pragmatism looks at what works, what is practical and what can give a better understanding of particular reality. In this regard, pragmatism gave this inquiry a deeper understanding of the insurance purchase decision-making through the

[24] The theoretical framework has been termed as the "worldview" by researchers and there is no standards of what worldviews should be.

mixing of methods and looking at the data through a double lens. The review of the literature did not indicate any research into insurance consumption, which used a mixed methods approach to attain a deep understanding. Axiology considers the role of values in research. A researcher can include both biased and unbiased perspectives under pragmatism, accepting the fact that both objective and subjective knowledge add value to the research process (J. W. Creswell & Clark, 2007). Under pragmatism methodology, both quantitative and qualitative data are collected and mixed, an aspect that not only enriches the research but make it complete, allowing for formal and informal rhetoric by the researcher (J. W. Creswell & Clark, 2007; Teddlie & Tashakkori, 2003b; C. P. West, 2012). Pragmatism thus allows the literally and scientific story to be told (C. P. West, 2012).

Pragmatism has been considered as an escape from the narrow bindings of empiricism (Kaplan, 1964), and according to Bernstein (1983) what is needed in any inquiry is a multiple method approach to social science inquiry that speaks to the real problems that human beings find themselves with (RJ Bernstein, 1983). Shields (1998) assert that pragmatism is viewed as a philosophy of common sense, which uses purposeful human inquiry as its focal point. Pragmatism is the approach most commonly associated with mixed methods research (Tashakkori & Teddlie, 1998, p. 7). In conclusion, "pragmatism does not require a particular method or methods mix and does not exclude others; it does not expect unvarying causal links or truths but aims to interrogate a particular question, theory, or phenomenon with the most appropriate research method" (Yvonne Feilzer, 2010, p. 13). Taking into account the many aspects that affect people in the insurance consumption decision-making process, a pragmatic theoretical framework is an appropriate means of inquiry for this research, and this was achieved through use of the mixed methods sequential explanatory research.

3.3.2 Theoretical Lens: Outreville Determinants of Insurance Demand Framework.

Chapter Two has discussed the intricacies of insurance consumption decision-making. Chapter Two also highlighted that in order to fully understand the insurance consumption decision-making

process, it is critical that the researcher's theoretical standpoint is understood. Throughout this study, the *Outreville Determinants of Insurance Demand Framework* (2013) has been used as a lens through which the analysis of data was viewed (J François Outreville, 2013). The Outreville Framework has been chosen for a number of reasons: firstly, the framework resonates with my understanding of insurance consumption decision-making; secondly, the framework was congruent with individuals who wish to make a decision on insurance consumption; thirdly, insurance consumption continues to be viewed in an aggregate manner, which leaves little scope for understanding individual decision-making on insurance consumption. Outreville (2013) highlights four thematic areas that shape individual demand for insurance: economic factors, social and cultural factors, structural factors, and personal and demographic factors.

Table 3: Outreville's (2013) Determinants of Insurance Demand Framework

FACTOR	CHARACTERISTICS
Economic Factors	i. Price ii. Wealth/income[25]
Social and Cultural factors	i. Risk aversion ii. Non-performance and basis risk iii. Trust and peer effects iv. Religion and financial literacy
Structural factors	i. Informal risk sharing ii. Quality of service iii. Risk exposure
Personal and demographic factors	i. Age ii. Gender

Source: Adapted from Outreville (2013)

[25] However, caution should be taken in that, "most studies include either income or wealth in the analysis, rather than both simultaneously" (Eling et al., 2014, p. 236). Including both parameters may affect the results of the responses unless strong explanations are given to the respondents.

Outreville's framework recognises that social and cultural factors contribute towards decision-making in insurance consumption and together with the other factors allow for a better understanding of the decision-making process. Central to this framework is the fact that various factors interplay in shaping the decisions that individuals will make on the aspect of insurance consumption.

3.4 Methodology

3.4.1 Research Design/ Strategy: A Mixed Methods Sequential Explanatory Study.

Different ontologies, epistemologies and models of human nature are likely to incline social scientists towards different methodologies (Gibson Burrell & Morgan, 2017). The connection between ontology, epistemology and methodology is the 'reality' that researchers investigate (Healy & Perry, 2000), implying that methodologies applied in social sciences will approach the social world differently.

Research strategy is how the researcher intends to carry out the work (Saunders, 2011), and the nature of the unit of analysis dictates one particular choice of technique and rules out another (Mouton, 1996). Creswell and Clarke (2007) affirms that the research problems and questions influence the choice of approach. The review of literature highlighted that all research on insurance consumption employ quantitative techniques and regression analysis to analyse data (Dzaja, 2013; Ibiwoye et al., 2010; Kaur & Kaur, 2014; Li et al., 2007; Sen & Madheswaran, 2013; Ulbinaite et al., 2013). Mixed methods was employed in this research and a mixed method sequential explanatory design addressed the inquiry better.

The explanatory design is a two-phase design where the qualitative data helps explain or build on the initial quantitative results (J. W. Creswell & Clark, 2007); and this design is suited to studies where qualitative results are used to explain significant, non-significant or surprising quantitative results (Tashakkori & Teddlie, 1998). This approach is more useful when the research problem is

more quantitatively oriented as is the case in this study (Morse & Niehaus, 2009; C. P. West, 2012). Creswell and Plano Clark (2007) further add that this design is purposeful in identifying quantitative participant characteristics to guide sampling for the qualitative phase of the study.

A sequential explanatory design has advantages that include its quantitative orientation, the two-phase structure and the link to emergent approaches where the second phase can be designed as a result of the outcomes of the first phase (J. W. Creswell & Clark, 2007). In this research, quantitative data was collected and analysed first after which leads that required further follow-ups were identified and traced under the qualitative phase. The sequential method was selected due to the bias in the literature where all studies interrogating insurance consumption have been done quantitatively.

Deductive and Inductive Reasoning

Scholars have argued on the diversions of the inductive and deductive reasoning in research approaches. Two major methods of reasoning as being inductive and deductive have been highlighted (Trochim, 2006, p. 1). Induction has been described as an approach that moves from the specific to the general while deduction begins with the general and ends with the specific (Burney & Mahmood, 2006, pp. 61–71; Trochim, 2006). The two methods view the nature of reality differently with quantitative theorists believing in the singularity of reality while their qualitative counterparts believe in the multiplicity of constructed realities (Onwuegbuzie & Leech, 2005, p. 270).

The two methods of reasoning, inductive and deductive, are woven around qualitative and quantitative methodologies with one aim of generating knowledge. The mixing of quantitative and qualitative methodologies in this research adds value to the findings of the research through looking at the insurance purchase decision-making phenomenon from a two-sided view point (Trochim, 2006). Concluding the debate on methodological orientations, Kamil (2004, p. 102) writes that:

> The most important notion is that quantitative research can answer some questions and not others. There are times when it is crucial to use observational techniques [qualitative], and there are other times when experimentation [quantitative] is important to determine or verify the locus of effects observed in more naturalistic settings.

Evans & Over (2013, p. 268) support Kamil (2004) asserting that "in classical logic and philosophy, a conclusion is made that deductive and inductive inferences both concern truth that research seek to find and the former is truth preserving and the latter truth seeking".

This research will use both deductive and inductive reasoning in the quantitative and qualitative phases of the study. This is premised on the realisation that some questions on insurance purchase decision-making can be deduced mathematically whereas the behavioural aspects cannot. The diagram that follow illustrates how the methods will be undertaken.

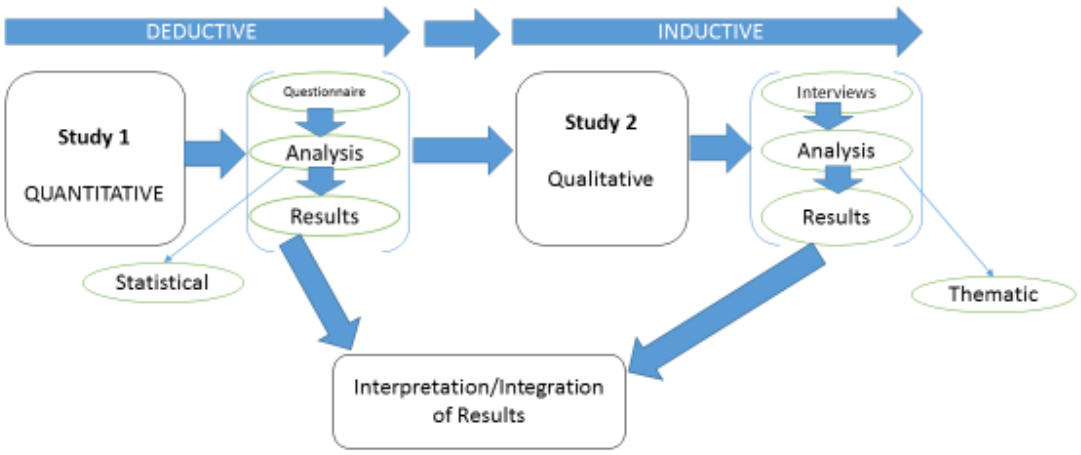

Figure 2: Diagrammatic Illustration of Methods.

3.4.2 Data Collection and Data Collection Methods.

3.4.2.1 Survey Questionnaire – Quantitative Phase.

In the quantitative phase, data was collected through a survey questionnaire from a selected sample at a point in time as opposed to multiple observations over a period (Blaxter et al., 2003; J. W. Creswell, 2009; Hwindingwi, 2015). Cross-sectional research is a research approach in which the researcher investigate the state of affairs in a population at a certain point in time (Bethlehem, 1999; Neuman, 2013); and questionnaire surveys are frequently used by researchers in diverse fields under cross-sectional research (Prentice et al., 2011; M. Zheng, 2015). A self-administered questionnaire was distributed to the respondents (Blaxter et al., 2003; J. W. Creswell & Tashakkori, 2007), and some of the questions were on a five-point Likert scale so as to enhance validity and reliability (Onwuegbuzie & Leech, 2006; Ramchander, 2004). The Likert scale was employed in this study as it has been tried and tested in measuring constructs and their impact (J. W. Creswell & Creswell, 2017; Dawes, 2008). The questionnaire was pretested to ensure the success of the final instrument in attaining the desired results (J. W. Creswell & Creswell, 2017; Blaxter et al., 2003) and components requiring adjustments were adjusted accordingly.

3.4.2.2 Semi-structured interviews – Qualitative Phase.

Qualitative data was collected using semi – structured interviews. West (2012, p. 106) explains that "semi structured in-depth interviews have been cited as being ones that allow for an open approach to interviewing" and they are a means of gathering information that has a focus yet is less structured and intimidating than formal structured approaches of interviewing (Glesne & Peshkin, 1992; Louise Barriball & While, 1994; C. P. West, 2012). A matrix was developed from the quantitative data identifying areas that needed further investigation and these were the basis for more in-depth inquiry (Louise Barriball & While, 1994; Teddlie & Tashakkori, 2003b). In-depth interviews allowed for a deeper understanding of the decision-making process on insurance purchase and consumption by the urban poor and the workers in the Pensions and Insurance industry.

Individuals who participated in the quantitative phase of the research were approached to participate in the qualitative phase interviews to explore the decision-making on insurance consumption. Creswell and Clark (2007) support the process of interviews citing that they give the researcher an opportunity to inquire into areas that a researcher would not observe under normal circumstances.

Conducting face-to-face interviews gives the researcher an opportunity to capture rich and in-depth answers that can be recorded there and then (Yin, 2009). The narrative face-to-face interview data collection process was ethically used to collect data in the qualitative phase of the study. Structured interviews with open-ended questions were the main data collection technique. Interviews with guided and unbiased conversation in the inquiry are considered the most important sources of information (Yin, 2009). The questions that were used in the interviews were structured following the findings that emanated from the quantitative phase of the study.

3.4.3 Recruitment and Sample Size.

Sampling has been defined as the set of source materials from which the sample is selected and involves any procedure using a small number of items or parts of the whole population to make conclusions regarding the whole population (Durrheim, 2002; Zikmund et al., 2013). Sampling plays an important role in mixed methods research and it is linked to the study design (J. W. Creswell & Clark, 2007; C. P. West, 2012) and the size of the quantitative sample would be larger than that of the smaller qualitative sample (Teddlie & Tashakkori, 2003b). The respondents in the qualitative phase were drawn from the respondents in the quantitative phase (J. W. Creswell & Clark, 2007).

In this study, the target population composed of employees of companies in the pensions and insurance industry while the other half was composed of the urban poor in the high-density area of Mandevu in the Lusaka district of Zambia. The differentiation in the sample was aimed at having two-clusters assessed on the same aspects to establish how decision-making is affected by access to information and other variables.

3.4.3.1 Determination of Minimum Sample Size.

The sample size was calculated using the formula proposed by Tabachnick and Fidell (2013) which takes into account the number of variables of interest (Tabachnick & Fidell, 2007, p. 123):

$$N > 50+8m$$

Where m = the number of independent variables.

The research has five variables of interest: Economic Factors, Trust and Understanding of Insurance, Insurance Experiences, Beliefs (cultural), and other risk management methods. Using the formula proposed by Tabachnick and Fidell (2013) the minimum number of cases required would be:

$$N > 50 + 8 (5) = 90.$$

A minimum of 90 cases are required in this particular instance. However, the general rule of the thumb under any statistical analysis is that the higher the number of cases being considered, the better the results obtained (Pallant, 2016).

In the quantitative phase, a random sample of 400 respondents was drawn from the employees in the pensions and insurance industry (N = 200) and the urban poor (N= 200). The number of the respondents is above the minimum number of cases we need as per formula specified above and thus meets the requirements of any statistical analysis. The database of employees in the pensions and insurance industry was accessed from the insurance association of Zambia from which a random sample was gotten and these were traced to their respective companies. The urban poor were randomly sampled from the database maintained at the constituency office in Mandevu. Sample ranges of 40 to 1,020 depending on the method of analysis to be used are employed in research (Gefen et al., 2000). The Partial Least Squares Method (PLS) has a minimum of 40 data samples required while the Linear Structural Relations method requires a minimum of 41 respondents. The number 400 meets the minimum required to undertake statistical analysis using any method.

Purposive sampling was employed in the qualitative phase of the study. The respondents were drawn from the initial quantitative phase focusing on people that are suitable for understanding the main phenomenon under investigation (J. Creswell, 2013). Neuman (2014) asserts that purposeful sampling strategy in a qualitative study is important as it focuses on specific cases with a clear purpose in mind. A total number of 30 (*N = 30*) participants were interviewed in the qualitative phase which is a reasonable good number that can be intensively interviewed to reach data saturation needed (J. Creswell, 2013); to get adequate patterns of evidence for themes and meets the minimum required number of participants needed. The respondents were split between the urban poor (*N = 15*) and the employees in the pensions and insurance industry (*N = 15*).

3.4.4 Data Analysis, Validity and Reliability.

3.4.4.1 Statistical Methods and Structural Equation Modelling (SEM) – Quantitative Phase.

Two key methods of analysing primary data quantitatively are highlighted (Lund & Lund, 2013): Inferential Statistics and/or Descriptive Statistics. Both Inferential Statistics and Descriptive Statistics were analysed using IBM SPSS version 25 and AMOS 25. The quantitative analysis highlighted the significant and insignificant determinants of insurance consumption as well as indicating the weighting of the variables in terms of their effect on the decision-making.

Validity has been defined as "having to do with whether the methods, approaches and techniques used in the research process relate to, or measure, the issues that are being explored" (Blaxter et al., 2003, p. 221); validity refers to truthfulness while reliability refers to consistency and dependability (Neuman, 2013). Blaxter et al., (2003) define the concept of reliability as the concept of testing the research process and its findings to ensure that if the research was applied in the same settings by another researcher the results would be more or less the same. If similar results are obtained in the testing of the research, then that research would be termed reliable. This

research used Exploratory and Confirmatory Factor Analysis in testing for and ensuring validity (Grau, 2011; Khelifa, 2012), whereas the Cronbach alpha was used to measure reliability (Grau, 2011; Khelifa, 2012).

The statistical analysis of the quantitative data followed a two-staged approach: firstly, creation of a model through factor analysis, multiple regression and path analysis; and secondly the generated model was explored under social, economic and demographical characteristics of the respondent population so as to get inference into how the two groups differ in terms of insurance consumption decision-making.

A one way between groups Analysis of Variance was also undertaken so as to highlight how the two groups differ in terms of their decision-making on behavioural economics concepts.

3.4.4.2 Thematic Analysis – Qualitative Phase.

Qualitative data in this research was analysed using thematic analysis. Thematic analysis is a method of identifying, analysing and reporting themes or patterns within data (Braun & Clarke, 2006). Thematic analysis was chosen due to its many advantages including its flexibility, suitability to a pragmatic framework, ease of use, its provision of rich description data sets, and its ability to highlight similarities and differences across data sets (Braun & Clarke, 2006; C. P. West, 2012).

The interview process is not without question regarding the validity and reliability of the data collected therein. Teddlie and Tashakkori (2003) have argued that semi-structured interviews have high validity as they allow the participant to talk in detail with little input from the interviewer. However, this has a pitfall in that the researcher may not tell whether the interviewee is telling the truth or not.

Under qualitative studies, different methods are applied to enhance validity. Member checking was used in this research to ensure that there are no misinterpretations (Maxwell, 2012; Sharon B

Merriam, 2009); and reflexivity and peer review was also used (Lincoln & Guba, 2000; Sharon B Merriam, 2009). Thick description was used throughout the process of inquiry to attain high levels of reliability and validity (Goertz & LeCompte, 1984; Guba & Lincoln, 1994; Sharan B Merriam, 1988; Stake, 1995). Thick description has been defined as a detailed account of field experiences (D. Cohen & Crabtree, 2006) aimed at achieving external validity (Lincoln & Guba, 1985) by explaining a phenomenon in detail to make explicit the patterns of cultural and social relationships aimed at attaining transferability of conclusions to other settings (D. Cohen & Crabtree, 2006; Holloway, 1997; Lincoln & Guba, 1985).

3.4.4.3 Validity and Reliability in Mixed Methods Research.

In discussing mixed methods research, it is important to look at matters of validity and reliability in both the quantitative and qualitative phase of the study and how they can be attained. The aim of mixing research is to attain a deeper understanding and to reduce instances of weaknesses that would arise in a mono method. Validity and reliability in quantitative (qualitative research) can be assessed from three points of view: internal (contextual) validity; external validity (generalisability and transferability); and procedural reliability (Ihantola & Kihn, 2011; Tashakkori & Teddlie, 2003) and these are discussed below:

3.4.4.3.1 Internal (contextual) validity

Internal (contextual) validity as relates to quantitative research takes into account how the research fits existing theory; whereas under qualitative research, it focusses on the authenticity (credibility) of the research (Ihantola & Kihn, 2011). These are matters that would arise from testing errors (in quantitative research) and contextual bias (in qualitative research) (Ihantola & Kihn, 2011).

3.4.4.3.2 External validity (generalisability)

External validity looks at whether or not a particular research can attain generalisation of findings. If external validity has been attained, for quantitative research the findings should be similar if other samples are used in the research while under qualitative research theoretical generalisability should be attained (Ihantola & Kihn, 2011).

3.4.4.3.3 Procedural reliability

Under quantitative approach, procedural reliability relates to the consistency in measurement attained by a particular measurement instrument while under qualitative work it relates to consistency in capturing conclusions from a research sample. In quantitative research, threats to procedural reliability include lack of clear measurement instruments, lack of pretesting of the instrument and too long questionnaires or interviews, among others (Ihantola & Kihn, 2011). Inaccurate and unsystematic interviews questions, relations that develop between the researcher and the participants, and being unaware of informal evidence are some of the threats to procedural validity under qualitative research (Lillis, 2006; Ryan et al., 2002).

3.5 Summary of Chapter

This chapter has introduced and discussed the philosophical assumptions underpinning any inquiry, explaining how and why ontology, epistemology and human nature should be taken into account during the research process. Pragmatism has been chosen as the theoretical framework of reference in this study particularly discussing its origin and development. The theoretical lens of the research follows the framework by Outreville (2013) where four broad areas are used in determining insurance demand: economic factors, social and cultural factors, structural factors and personal and demographic factors.

The methodology of the study has been discussed in this chapter. The design of the research is a mixed methods sequential explanatory design, which was chosen due to the need to understand the phenomenon of research fully through an in-depth inquiry and complementarity of methods. The data was collected using a questionnaire in the quantitative phase whereas semi-structured interviews were used in the qualitative phase. Four Hundred (400) respondents were randomly selected in the quantitative phase of the study (the 400 respondents were split equally between the workers in the pensions and insurance industry and the urban poor) while 30 respondents were purposely selected in the qualitative phase of the study. Data analysis was done using IBM SPSS Version 25 and AMOS 25 for Structural Equation Modelling in the quantitative phase whereas frequency tabulations and thematic analysis were used in the qualitative phase of the study.

Chapter 4: Findings – Quantitative Data

4.1 Introduction

This chapter presents the analysis and discussion of quantitative findings. The data was analysed using IBM SPSS 25 and AMOS 25. The analysis looked at the two distinct groups, the urban poor and the workers in the Pensions and Insurance Industry, and how their decision-making on insurance consumption compare. The overall data was first analysed to check for validity and reliability. Validity was assessed using factor analysis and the factor analysis was analysed using the Kaiser-Meyer-Olkin (KMO) test. Reliability of the constructs was assessed using the Cronbach's Alpha. The data is then split to look at how personal attributes (sex, gender, education level, marital status) affect the decision a person makes on insurance consumption, assessing whether or not there are differences in decision-making between the urban poor and the workers in the pensions and insurance industry.

The second part of the analysis tested the hypotheses via multiple regression analysis to establish the statistical significance of the relationships among variables. The contribution towards the insurance purchase decision-making of each variable is assessed via Structural Equation Modelling (SEM) in path Analysis.

A summary of the factors that highlight differences in decision-making between the two populations is highlighted for follow-up in the qualitative phase of the study.

4.2 Research Questions and Hypothesis Development

The research questions and hypothesis stem from the quantitative research questions set out in chapter one of the thesis and these are highlighted below. The hypotheses used in answering the research questions are equally defined. The following questions were raised in chapter one of the thesis:

i. What is the effect of economic, social, structural factors and demographic factors on the decision-making in the purchase of insurance in Zambia?
ii. Do people have sufficient information with which to make insurance consumption decisions?

4.2.1 Research Hypotheses.

H_1: Economic Factors (EFs) impacts positively on the Insurance Purchase Decision (IPD).
H_2: Trust and Understanding of Insurance (TUoIns) impacts positively on the IPD.
H_3: Experiences on Insurance (EoIns) impacts positively on the IPD.
H_4: Beliefs (BFs) impacts positively on the IPD.
H_5: Other Risk Coping Mechanisms (ORCMs) impacts positively on the IPD.
H_6: EFs and TUoIns have a positive relationship.
H_7: TUoIns and EoIns have a positive relationship.
H_8: EoIns and BFs have a positive relationship.
H_9: BFS and ORCMs have a positive relationship.
H_{10}: EFs and EoIns have a positive relationship.
H_{11}: TUoIns and BFs have a positive relationship.
H_{12}: BFS and ORCMs have a positive relationship.
H_{13}: EFs and BFs have a positive relationship.
H_{14}: TUoIns and ORCMs have a positive relationship.
H_{15}: EFs and ORCMs have a positive relationship.

4.2.2 Hypothetical Research Model.

The fifteen research hypotheses compose the hypothetical research model, which follow. All the variables (EFs, TUoIns, EoIns, BFs and ORCMs) were computed as a summation of the factors that composed those variables. The IPD was a summation of the observed variables from the factors listed.

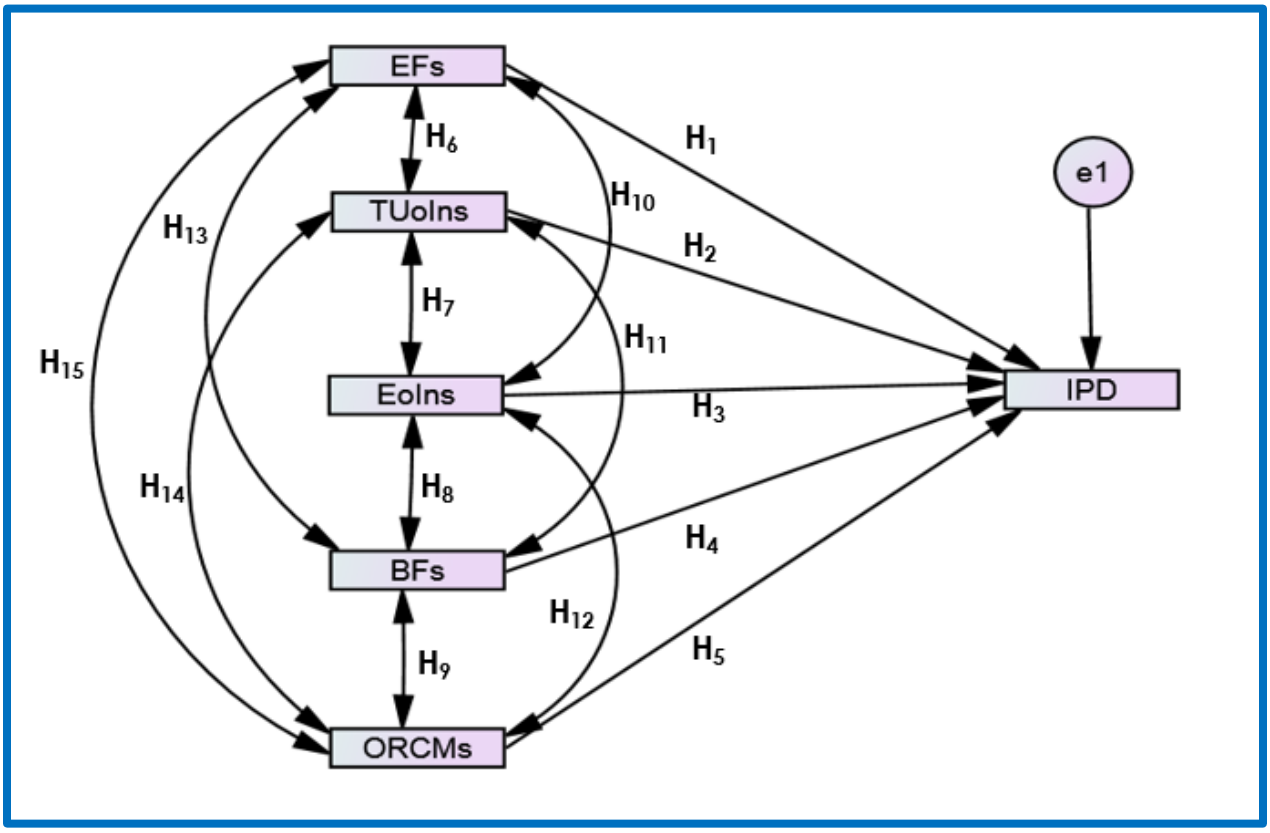

Figure 3: Hypothetical Research Model.

Where: EFs=Economic Factors; TUoIns=Trust and Understanding of Insurance; EoIns=Experiences on Insurance and ORCMs=Other Risk Coping Mechanisms

4.3 Respondent Presentations

4.3.1 Overall response Rate.

A total number of 400 questionnaires were distributed (200 among the urban poor and 200 among the workers in the pensions and insurance industry). The response rate was 100% among the urban poor and 99% among the workers in the pensions and insurance industry giving an overall total response rate of 99.5%. Details are in the table that follow.

Table 4: Overall Response Rate

		What is your sex?		
		Female	Male	Total
Respondent Group [A1 - A200 Urban Poor/ B1 - B200 Pensions and Ins Workers]	Urban Poor	106	94	200
	Workers in the Pensions and Insurance Industry	91	107	198
Total		197	201	398

4.3.2 Distribution of respondents by Gender, Age and Religion.

Of the 400 respondents, 199 were females whereas 201 were males. The urban poor had more female respondents compared to the workers in the pensions and insurance industry who had more male respondents. In terms of the overall age distribution of the respondents, the age band of 21 – 25 had a total of 45 respondents, age band 26 – 30 had 107, age band 31 – 35 had 115, age band 36 – 40 had 77 respondents while those above age 40 were 55. A total number of 399 respondents indicated their age group while one respondent did not indicate their age group. For a breakdown of the age per respondent group see Figure 4 that follow. Of the 400 respondents, 263 were

Protestants, 133 were Catholics, 2 were Hindus, and there was no Muslim among the respondents while 2 respondents did not indicate their religious affiliation. The Figure that follow gives a breakdown of the respondents under the gender, age and religious grouping.

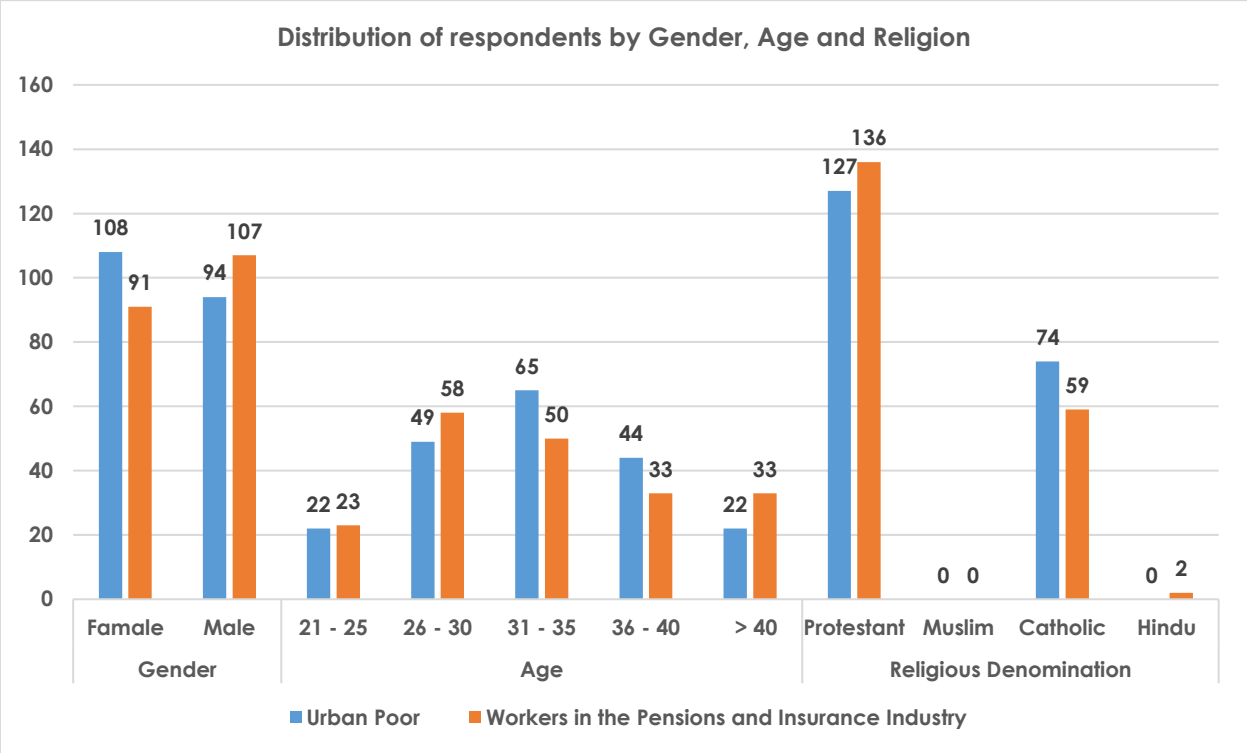

Figure 4: The distribution of Respondents by Gender, Age and Religious Affiliation.

Table 4.2: Hypothesis Test Summary – Sex, Age and Religion

Qn	Null Hypothesis	Test	Sig.	Decision
1	The distribution of sex is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.115	Retain the null hypothesis
2	The distribution of age is the same across categories of respondents	Independent-Samples Mann-Whitney U Test	0.604	Retain the null hypothesis
5	The distribution of religious denomination is the same across categories of respondents	Independent-Samples Mann-Whitney U Test	0.393	Retain the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 4.3: Independent-Samples Mann-Whitney U Test Summary (Sex, Age and Religion)

	Q1 (Gender)	Q2 (Age)	Q5 (Religion)
Total N	389.00	388.00	388.00
Mann-Whitney U	20,400.00	18,299.50	18,015.50
Wilcoxon W	37,978.00	35,620.50	35,593.50
Test Statistic	20,400.00	18,299.50	18,015.50
Standard Error	959.53	1,072.44	910.89
Standardised Test Statistic	1.577	-0.519	-0.854
Asymptotic Sig. (2-sided test)	0.115	0.604	0.393

There were no significant differences (acceptance of the null hypothesis) in the distribution of the sex (*p=0.115)*, age (*p=0.604)* and religion (*p=0.393)* among the respondents as highlighted in tables 5 and 6 above.

4.3.3 Distribution of respondents by Marital Status and Family Size.

In terms of marital status, 238 respondents were married; 124 were single; 18 had been divorced, 12 were widows while 4 were widowers. 4 respondents did not indicate their marital status. The urban poor had more married people compared to the workers in the pensions and insurance industry, an expected social phenomenon. For a break down on a respondent group see Figure 5.

Taking family size into account, 85 respondents had family sizes of less than 2, 212 had family sizes of between 3 to 5 people; 93 respondents had family sizes between 6 to 8 people while 10 people had family sizes above 9 people. More than 50% of the respondents (count = 212) were in the family range (3 – 5). See details in Figure 5.

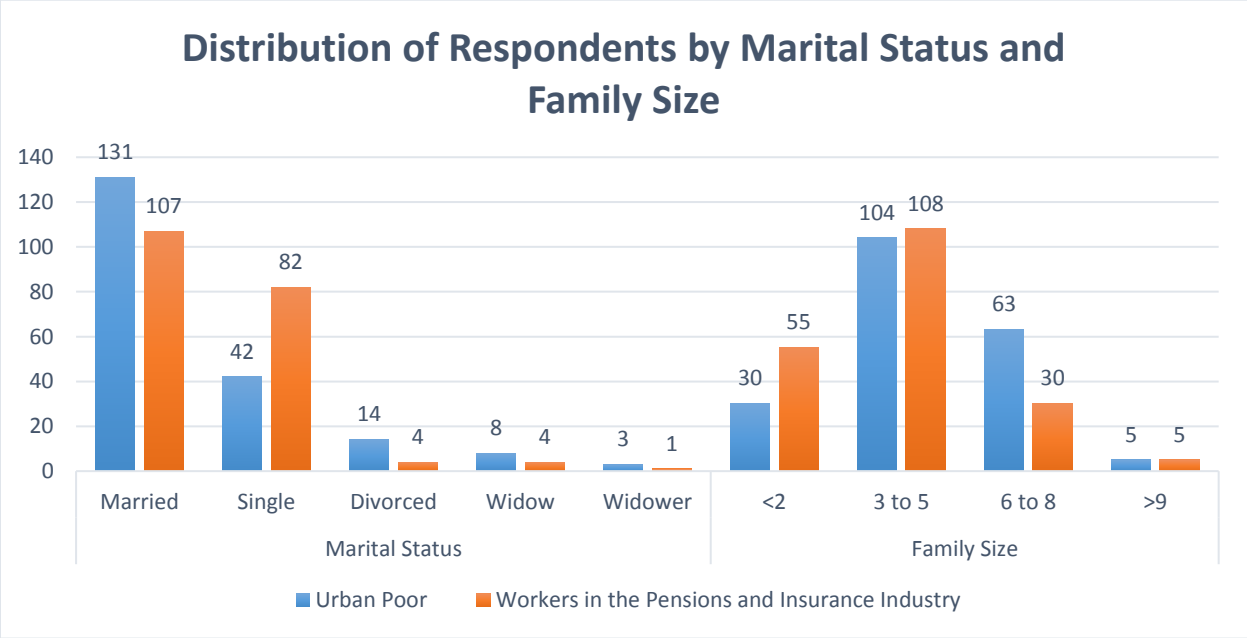

Figure 5: The distribution of Respondents by Marital Status and Family Size.

Table 5: Hypothesis Test Summary – Marital Status and Family Size.

Qn	Null Hypothesis	Test	Sig.	Decision
3	The distribution of marital status is the same across categories of respondents	Independent-Samples Mann-Whitney U Test	0.080	Retain the null hypothesis
4	The distribution of family size is the same across categories of respondents	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 6: Independent-Samples Mann-Whitney U Test Summary (Marital Status and Family Size).

	Q3 (Marital Status)	Q4 (Family Size)
Total N	385.00	389.00
Mann-Whitney U	20,173.00	14,942.50
Wilcoxon W	37,751.00	32,520.50
Test Statistic	20,173.00	14,942.50
Standard Error	948.66	1,011.09
Standardised Test Statistic	1.750	-3.90
Asymptotic Sig. (2-sided test)	0.080	0.000

The p-value (*p=0.08)* is greater than 0.05, we therefore conclude that there were no significant differences (acceptance of the null hypothesis) in the distribution of marital status among the respondents while there were significant differences (rejection of the null hypothesis) with *p=0.000* in the distribution of family size among the respondents as highlighted in the tables 7 and 8 above.

4.3.4 Distribution of respondents by Level of Education and Income.

In terms of education attained, a total of 127 did not complete high school (grade 12) (all from among the urban poor), while 60 completed high school (grade 12) (all among the urban poor), 22 had certificates in various fields. 52 of the respondents had diplomas, 107 had degrees (all from the workers in the Pensions and insurance industry) while 32 had a master's degree and above (all from the workers in the Pensions and insurance industry).

The urban poor had lower income levels compared to the workers in the pensions and insurance industry. Of all the respondents, 199 had income levels below K3, 000 (188 among urban poor), 60 had income in the bracket K3, 001 to K6, 000, where 136 had income levels above K6, 000 (all from the workers in the pensions and insurance industry). Out of all the respondents, 5 of them did not indicate their level of income. See Figure 6 for a detailed breakdown.

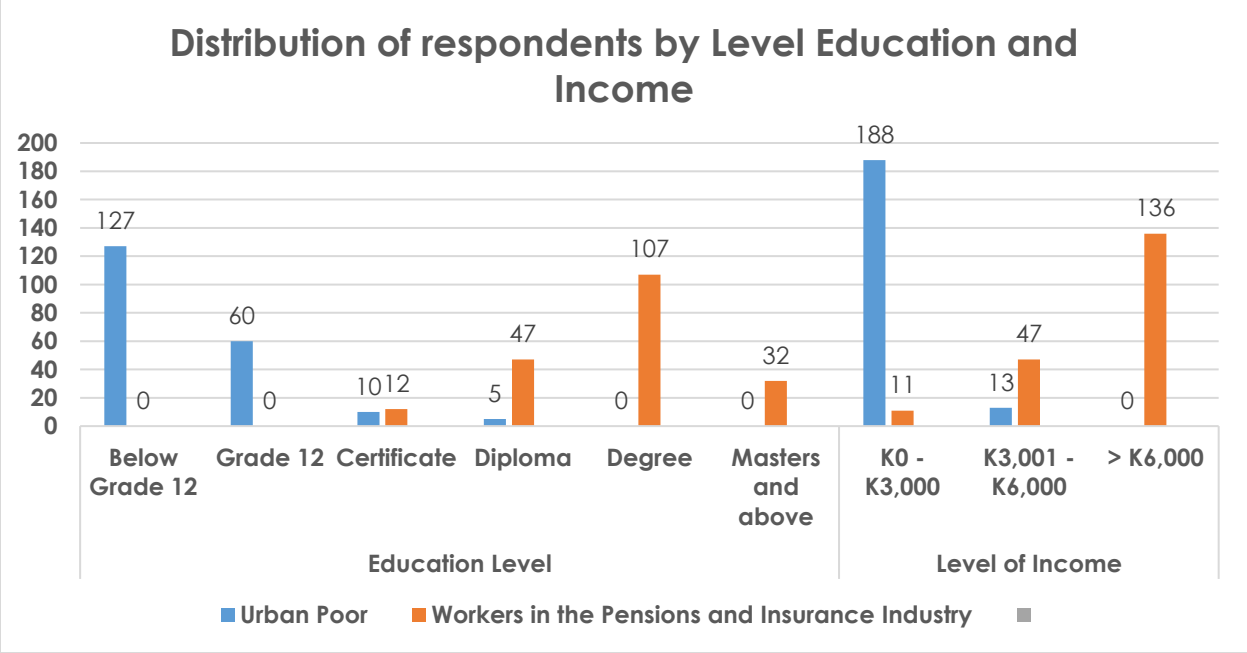

Figure 6: The Distribution of Respondents by Level of Education and Income.

Table 7: Hypothesis Test Summary – Education and Income.

Qn	Null Hypothesis	Test	Sig.	Decision
6	The distribution of education attained is the same across categories of respondents	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis
7	The distribution of the level of income is the same across categories of respondents	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 8: Independent-Samples Mann-Whitney U Test Summary (Education and Income).

	Q6 (Level of Education)	Q7 (Income)
Total N	389.00	386.00
Mann-Whitney U	37,541.50	35,702.50
Wilcoxon W	55,119.50	52,907.50
Test Statistic	37,541.50	35,702.50
Standard Error	1,074.99	994.82
Standardised Test Statistic	17.35	17.20
Asymptotic Sig. (2-sided test)	0.00	0.00

There were significant differences (rejection of the null hypothesis) in the level of education and level of income among the urban poor and the workers in the pensions and insurance industry as highlighted in tables 7 and 8 above. The differences in the levels of income would be indicative of the differences in the levels of education attained between the two populations.

4.4 Statistical Methods and Structural Equation Modelling (SEM)

SEM draws its origins from the already existing mathematical concept of the **Regression Model**. The general regression model was created by Karl Pearson in 1894, while psychologist Charles Spearman used a correlation coefficient to determine how items were correlated and he was the first one to use the term **Factor Analysis** in his work to identify a two factor construct for a theory of intelligence. Sewell Wright, a biometrician, developed a **Path Model** in 1918, which used correlation coefficients and regression analysis to model more complex relationships among variables, testing causal modelling.

SEM development was pioneered by Karl Joreskog, Ward Keesling and David Wiley in 1969 and 1973 and was initially called the JKW model, which later became known as the Linear Structural Relation Model (LISREL) in 1973. According to Ullman (2006), SEM is a large set of statistical modelling techniques that follow the general linear model and has become popular in recent years. SEM can combine complex path models with latent variables, representing relationships between the latent variables (Hox & Bechger, 2001; Nachtigall et al., 2003).

Under SEM, unobserved variables are called latent variables, factors or constructs. These are variables measured indirectly through one or more observable indicator. Independent and dependent variables are called exogenous and endogenous variables. Five major steps have to be followed when undertaking SEM analysis: model specification, data preparation, model estimation, evaluation, and, if need be, model modification (Schumacker & Lomax, 2010).

Each factor was identified by more than the minimum required three indicators per factor with an aim of avoiding non-convergence of the program (Bagozzi & Yi, 2012; R. Kline, 2013).

4.4.1 Data Preparation.

4.4.1.2 Sample Size.

SEM is a large sample technique: the bigger the number the better the results. Smaller sample sizes leads to problems of accuracy in the computation of standard errors and seldom leads to technical problems in the analysis (R. Kline, 2013). Many studies have been undertaken to investigate the minimum required sample when using SEM with a conclusion that there is no number that can be termed as large (Bentler & Yuan, 1999; Jackson, 2001, 2003; Tanaka, 1987). Arguments have been prevalent on what sample size is adequate, with some authors arguing that SEM analysis based on samples less than 200 should not be accepted for publication (Barrett, 2007). Writing on the same subject, Iacobucci (2010) suggests that Barret's opinion of a sample of 200 is too simplistic and proposes a sample of size of 50 or 100 provided the measurement has good reliabilities (Iacobucci, 2010). There is no consensus on the minimum sample size and it is suggested that, "the distributional properties of measures are important, not sample size or ratios of sample size to free parameters, per se" (Bagozzi & Yi, 2012, p. 29). The sample size in this research was sufficient and the measurements had good reliabilities.

4.4.1.3 Missing Data Treatment.

In this study, there was no variable with more than 10% missing values (**Appendix A**). The imputation method was used to address missing values. The imputation method was used instead of listwise deletion which reduces the number of participants and this has an effect of reducing the representativeness of the population. In line with the imputation method, maximum likelihood of estimation, which is the most widely used estimation algorithm in SEM, was used to replace the missing values (R. B. Kline, 2005).

4.4.1.4 Normality and Influential Outliers.

Most techniques in SEM assume multi-variate normality for one to obtain good results and violation of the assumption can cause incorrect results. West et al., (1995) indicate that the incorrectness of the results increase with increases in the non-normality of the data. Difficulties have been recognised in examining multivariate normality. However, skewness and kurtosis are often used to examine univariate normality. If the skewness is larger than 2 or the kurtosis greater than 7, the variable has severe non-normality (S. G. West et al., 1995). In instances where non-normality has been detected in the data, the data should be transformed accordingly. The data met the acceptable normality range (see **Appendix B**) using skewness and kurtosis. Multicollinearity was measured using Variance Inflation Factors (VIFs). The VIFs were within the acceptable range, bellow the value of 5 which would indicate the presence of collinearity (**See Tables 33 and 34**). The data used in the regression analysis had no influential outliers (see **Appendices C**).

4.4.1.5 Data fit for Factorial Analysis.

The 20 items of the insurance purchase decision-making were subjected to Principal Component Analysis (PCA) using IBM SPSS version 25. Prior to performing PCA, the suitability of data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .910, exceeding the minimum recommended value of .6 (Kaiser, 1970, 1974) and the Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance ($p<0.05$), supporting the factorability of the data.

Table 9: KMO and Bartlett's Test.

Test		Score
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.910
Bartlett's Test of Sphericity	Approx. Chi-Square	5187.879
	df	190
	Sig.	.000

4.4.1.6 Factor Rotation.

Khelifa (2012) and Cramer (2003) suggest that Varimax and Oblique are the common methods used in factor rotation. The varimax method was used in this research owing to it being popular among researchers and it is less complex to use; the method uses orthogonal rotations yielding uncorrelated components; and it minimises the number of variables that have high loadings in a factor (Rutendo, 2014; Khelifa, 2012; Cramer, 2003).

4.4.1.7 Reliability.

Reliability indicates how free a measurement is from random error; it is the extent to which the items that make up the questionnaire measure the same attribute (Pallant, 2016). A minimum level of .7 of the Cronbach Alpha coefficient are required for purposes of attaining reliability (Nunnally, 1978). However, values above 0.6 are considered acceptable (Minitab, 2012). The Cronbach alpha measures internal consistency of the constructs (Grau, 2011) and it increases merging to 1 when the correlation between the items of the measuring instrument is high (Rutendo, 2014). The measurement instrument used in the research attained the minimum reliability needed, see table 11 that follows.

Table 10: Reliability Statistics.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.909	.917	20

The overall Cronbach alpha was .909 indicating good reliability of the measurement instrument. The grouped constructs under investigation indicated Cronbach alpha measures (see **Appendix D)** which were all above the minimum of .06 (Minitab, 2012).

4.4.1.8 Estimating the Model Validity.

Validity is important in any research undertaking. Blaxter (2003, p. 221) suggests that "validity is having to do with whether the methods, approaches and techniques used in the research process relate to, or measure, the issues that are being explored". Pallant (2016) agrees that validity refers to the degree to which a scale measures what it intends to measure. Validity can either be *content validity* or *construct validity.* In this research, validity was investigated using factor analysis.

4.4.2. Factor Analysis.

Factor analysis has been defined as a procedure to establish a grouping of related variables so as to view them as a single variable and not distinct variables (Cramer, 2003) and it allows for streamlining of the data into a small number of factors based on inter-related quantitative variables (Khelifa, 2012; Pallant, 2016). To perform factor analysis, a sample greater than N>=150 is required (Gerber and Hall, 2013) and this research meets the specified minimum requirement.

Principal Component Analysis (PCA) as an Exploratory Factor Analysis (EFA)

Literature highlights two main approaches to factor analysis[26]: exploratory and confirmatory (Pallant, 2016). Factor analysis incudes different, although related techniques, with two major variants: Principal Components Analysis (PCA) and Exploratory Factor Analysis (EFA), both with an aim of reducing the number of linear combinations of variables (Pallant, 2016). Both methods of factor analysis are cited to produce similar results. However, for purposes of this research, I adopted PCA due to it being "psychometrically sound and simpler mathematically and it avoids some of the potential problems with 'factor indeterminacy' associated with factor analysis

[26] Pallant (2016, p. 183) suggests that factor analysis "refers to the group or clump of related variables: in analysis of variance techniques, it refers to the independent variable".

(Stevens, 1996, p. 363); and another reason is that ‘it gives an empirical summary of the data set’ (Tabachnick & Fidell, 2013, p. 640). PCA was used to identify the factors of interest and these factors were rotated for easy interpretation (Khelifa, 2012).

Eigenvalues were used in factor extraction with eigenvalues higher than 1 being extracted. The eigenvalue is used as the measurement for the PCA (Statsoft, 2018). Factors with an eigenvalue greater than 1 depict stronger variability than those with an eigenvalue less than 1, which shows a weaker variability (Rutendo, 2014).

The Kaiser-Meyer-Olkin criterion and the scree-test were used in discarding factors that have low eigenvalue scores.

4.4.2.1 Factor Rotation.

Khelifa (2012) and Cramer (2003) suggest that Varimax and Oblique are the common methods used in factor rotation. The varimax method was used in this research owing to it being popular among researchers and it is less complex to use; the method uses orthogonal rotations yielding uncorrelated components; and it minimises the number of variables that have high loadings in a factor (Rutendo, 2014; Khelifa, 2012; Cramer, 2003). The results of the Factor Analysis follow.

4.4.2.2 Correlation Matrix.

The following table extracted from the factor analysis shows the correlation of the items. All variables had at least one correlation coefficient greater than 0.3.

Table 11: Correlation Matrix.

	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27.	Q28	Q29.	Q30	Q31	Q32
Q13	1.000	.846	.318	.551	.459	.561	.672	.735	.491	.192	.712	.533	.655	.747	.131	.167	.321	.335	.072	.039
Q14	.846	1.000	.309	.528	.461	.497	.632	.678	.456	.246	.667	.541	.621	.698	.088	.120	.248	.278	.050	.050
Q15	.318	.309	1.000	.378	.242	.331	.259	.290	.206	.090	.293	.216	.249	.297	.100	.125	.155	.214	.098	.076
Q16	.551	.528	.378	1.000	.541	.567	.472	.499	.433	.236	.520	.478	.571	.513	.274	.317	.372	.433	.205	.216
Q17	.459	.461	.242	.541	1.000	.500	.316	.323	.264	.270	.402	.440	.474	.363	.331	.312	.366	.337	.285	.240
Q18	.561	.497	.331	.567	.500	1.000	.570	.507	.466	.134	.494	.492	.642	.482	.243	.243	.317	.368	.214	.179
Q19	.672	.632	.259	.472	.316	.570	1.000	.780	.546	.089	.689	.467	.603	.702	.116	.163	.266	.279	.056	.021
Q20	.735	.678	.290	.499	.323	.507	.780	1.000	.547	.125	.750	.519	.621	.759	.109	.138	.296	.306	.024	-.011
Q21	.491	.456	.206	.433	.264	.466	.546	.547	1.000	.029	.437	.353	.515	.505	.113	.107	.126	.240	.108	.118
Q22	.192	.246	.090	.236	.270	.134	.089	.125	.029	1.000	.225	.283	.280	.146	.127	.132	.207	.168	.135	.113
Q23	.712	.667	.293	.520	.402	.494	.689	.750	.437	.225	1.000	.554	.613	.754	.108	.175	.294	.273	.015	-.010
Q24	.533	.541	.216	.478	.440	.492	.467	.519	.353	.283	.554	1.000	.729	.519	.206	.220	.294	.369	.146	.196
Q25	.655	.621	.249	.571	.474	.642	.603	.621	.515	.280	.613	.729	1.000	.632	.260	.263	.364	.375	.136	.156
Q26	.747	.698	.297	.513	.363	.482	.702	.759	.505	.146	.754	.519	.632	1.000	.106	.180	.304	.265	-.006	-.011
Q27	.131	.088	.100	.274	.331	.243	.116	.109	.113	.127	.108	.206	.260	.106	1.000	.842	.610	.491	.526	.594
Q28	.167	.120	.125	.317	.312	.243	.163	.138	.107	.132	.175	.220	.263	.180	.842	1.000	.665	.471	.544	.557
Q29	.321	.248	.155	.372	.366	.317	.266	.296	.126	.207	.294	.294	.364	.304	.610	.665	1.000	.464	.419	.349
Q30	.335	.278	.214	.433	.337	.368	.279	.306	.240	.168	.273	.369	.375	.265	.491	.471	.464	1.000	.490	.470
Q31	.072	.050	.098	.205	.285	.214	.056	.024	.108	.135	.015	.146	.136	-.006	.526	.544	.419	.490	1.000	.789
Q32	.039	.050	.076	.216	.240	.179	.021	-.011	.118	.113	-.010	.196	.156	-.011	.594	.557	.349	.470	.789	1.000

4.4.2.3 Communalities.

Gerber and Hall (2013) define communality as the proportion of each variable's variance that is accounted for by the PCA. The communality is as in the table that follow.

Table 12: Communalities.

Question	Initial	Extraction
Q13. EFs	1.000	.767
Q14. EFs	1.000	.713
Q15. EFs	1.000	.171
Q16. EFs	1.000	.565
Q17. EFs	1.000	.526
Q18. TUoIns	1.000	.534
Q19. TUoIns	1.000	.741
Q20. TUoIns	1.000	.782
Q21. TUoIns	1.000	.515
Q22. TUoIns	1.000	.726
Q23. EoIns	1.000	.710
Q24. EoIns	1.000	.571
Q25. EoIns	1.000	.699
Q26. EoIns	1.000	.746
Q27. BFs	1.000	.747
Q28. BFs	1.000	.740
Q29. BFs	1.000	.541
Q30. ORCMs	1.000	.521
Q31. ORCMs	1.000	.661
Q32. ORCMs	1.000	.675
Extraction Method: Principal Component Analysis.		

Grid: EFs = Economic Factors; TUoIns = Trust and Understanding of Insurance; EoIns = Experiences on Insurance; BFs = Beliefs (Cultural) Factors; ORCMs = Other Risk Coping Mechanisms.

Extracting Components – PCA aims at explaining variances using fewer components (Lund & Lund, 2013). Two major factors were used in deciding what factors to retain: eigenvalue and the scree plot.

The Eigenvalue - one criterion – An eigenvalue less than 1 is indicative of a variable that explains less variance and such a variable should not be retained (Gerber and Hall, 2013). Using the eigenvalue criterion, three components were chosen for retention as they explain 63.25% of the variances.

Table 13: Total Variance Explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	8.155	40.774	40.774	8.155	40.774	40.774	7.699
2	3.373	16.864	57.638	3.373	16.864	57.638	4.633
3	1.123	5.615	63.253	1.123	5.615	63.253	2.310
4	.982	4.911	68.164				
5	.892	4.458	72.622				
6	.735	3.677	76.299				
7	.617	3.086	79.384				
8	.597	2.985	82.369				
9	.537	2.684	85.053				
10	.470	2.349	87.402				
11	.407	2.036	89.438				
12	.376	1.880	91.317				
13	.373	1.863	93.181				
14	.274	1.369	94.550				
15	.237	1.183	95.732				
16	.206	1.031	96.763				
17	.199	.993	97.756				
18	.187	.935	98.691				
19	.135	.675	99.367				
20	.127	.633	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

4.4.2.4 Scree Plot.

The scree plot is a plot showing the total variance explained by each component (the 'eigenvalue') when compared to its respective component. The scree plot revealed a clear break after the third component as shown in figure 4. Applying Catell's (1966) scree test, it was decided to retain three components for further investigation.

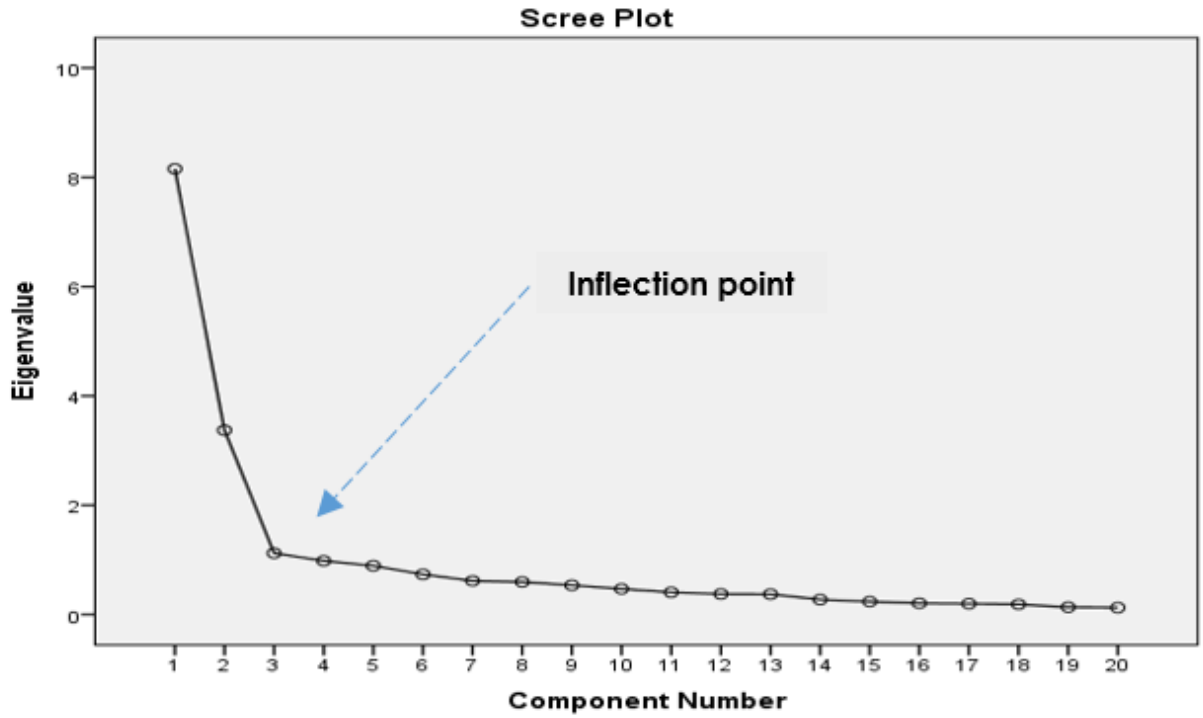

Figure 7: Scree Plot.

4.4.2.5 Interpretability Criterion.

PCA extracted three components and all factors loaded on the three components, with varying loadings (positive and negative in some instances). A simple structure of the component matrix is required for easy interpretation (Lund and Lund, 2013c). The component matrix does not exhibit traits of a complex structure where many components load on the same individual variable (Cramer, 2003; Lund and Lund, 2013c). Irrespective of the effect, the components load on more

than one variable. Due to the structure being simple, there was no need to undertake further PCA runs. The factors that were loaded are as in the following table.

Table 14: Component Matrix[a]

	Component		
	1	2	3
Q13. EFs	.829		
Q25. EoIns	.821		
Q20. TUoIns	.792	-.338	
Q26. EoIns	.788	-.331	
Q14. EFs	.784	-.302	
Q23. EoIns	.783	-.310	
Q19. TUoIns	.763	-.303	
Q16. EFs	.741		
Q18. TUoIns	.730		
Q24. EoIns	.712		
Q17. EFs	.623		.334
Q21. TUoIns	.602		-.337
Q30. ORCMs	.555	.458	
Q29. BFs	.537	.502	
Q15. EFs	.410		
Q32. ORCMs		.762	
Q27. BFs	.408	.753	
Q31. ORCMs	.307	.748	
Q28. BFs	.443	.726	
Q22. TUoIns			.792
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

All questions loaded as factors onto the components. Component 3 had only three factors that loaded onto it (Questions 17, 21, and 22). Questions 20, 26, 14, 23 and 19 loaded on both component 1 and 2. However, the loadings on component 2 were less than the loadings on component 1 and they were removed as factors under component 2. Questions 30 and 29 loaded on component 1 and 2 with loadings on component 2 less than those on component 1 and as such

they were discarded under component 2. Similarly, questions 27, 31 and 28 loaded on both component 1 and 2 but with lower loadings on component 1 and as such, they were discarded from component 1. Component 3 had three loadings (questions 17, 21, and 22) of which question 21 had a negative loading of -.337 (which is lower than the loading on component 1 of .602) and was discarded from component 3, question 17 had a loading of .334 which is lower than the loading on component 1 (.602) and as such was discarded from component 3. After discarding the loadings from questions 17 and 21, only question 22 remained with a loading of 0.792 on component 3. Component 3 was discarded from the matrix as it remained with only one factor against a minimum of three factors for acceptability (Cramer, 2003; Lund and Lund, 2013c). This entails that question 22 will not load under any of the components.

PCA was run on the 20 questions that make up the five constructs being analysed as determinants of the insurance purchase decision-making. The suitability of the PCA was assessed before the analysis (Cramer, 2003) and the inspection of the correlation matrix showed that all variables had at least one correlation coefficient greater than 0.3. The overall Kaiser-Meyer-Olkin (KMO) measure was 0.90, which exceeded the minimum recommended value of .6 (Kaiser, 1974). The Bartlett's test of sphericity was statistically significant ($p<0.0005$) indicating that data was likely to be factorisable (Bartlett, 1954).

Three components with eigenvalues greater than one emerged out of the PCA explaining 63.25% of the variance. The scree plot indicated three components to the inflection point (Pallant, 2016). Based on the findings, we can conclude that the data methods, approaches and techniques used were valid.

4.4.2.6 Correlation among the Variables – Grouped Data.

The grouped variables indicated Cronbach Alpha levels above the minimum required for acceptance: EFs (0.750), TUoIns (0.773), EoIns (0.873), BFs (0.866) and ORCMs (0.797). The correlations among the grouped variables did not show any negative correlations, indicating that the items are measuring the same underlying characteristics.

Table 15: Inter-Item Correlation Matrix.

Determinants of Insurance Consumption	Economic Factors	Trust and Understanding of Insurance	Insurance Experiences	Beliefs	Other Risk Coping Mechanisms
EFs	1.000	.735	.742	.324	.305
TUoIns	.735	1.000	.837	.292	.275
EoIns	.742	.837	1.000	.312	.241
BFs	.324	.292	.312	1.000	.646
ORCMs	.305	.275	.241	.646	1.000

4.4.2.7 Independent-Samples t-test.

An independent-samples t-test was conducted to compare the scores on the determinants of insurance consumption for the urban poor and the workers in the pensions and insurance industry. There was significant differences in scores for the urban poor and the workers in the pensions and insurance industry on the determinants of insurance consumption using a 2-tailed test ($p<0.05$). On trust and understanding of insurance, Levene's test for equality of variances indicated a significance value larger than .05 ($p=.430$). However, the sig. (2-tailed) indicates significant differences in the variances ($p<0.05$). See table 18 for details.

The difference were explored further in the quantitative analysis and during interviews in the qualitative phase of the study.

Table 16: Independent Samples Test.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Economic Factors	Equal variances assumed	60.484	.000	16.255	377	.000	8.36852	.51482	7.35623	9.38080
	Equal variances not assumed			16.613	282.462	.000	8.36852	.50372	7.37699	9.36005
Trust and Understanding	Equal variances assumed	.623	.430	25.600	380	.000	8.06573	.31506	7.44625	8.68522
	Equal variances not assumed			25.638	379.705	.000	8.06573	.31460	7.44715	8.68432
Insurance Experiences	Equal variances assumed	60.949	.000	27.320	381	.000	8.23349	.30137	7.64094	8.82604
	Equal variances not assumed			27.618	324.532	.000	8.23349	.29812	7.64700	8.81999
Beliefs	Equal variances assumed	4.202	.041	3.811	386	.000	.82486	.21642	.39935	1.25037
	Equal variances not assumed			3.823	385.967	.000	.82486	.21578	.40060	1.24912
Other Risk Coping Mechanisms	Equal variances assumed	32.994	.000	2.237	386	.026	.52710	.23563	.06382	.99037
	Equal variances not assumed			2.263	363.085	.024	.52710	.23292	.06906	.98513

4.4.3 Behavioural Economics and Insurance Consumption Decision-Making.

The Mann-Whitney U test was used to test for differences in decision-making between the urban poor and workers in the pensions and insurance industry taking into account selected BE concepts: preferences, loss aversion, bounded rationality and framing. These concepts were discussed in Chapter 2 of the thesis. An analysis of the findings follow.

4.4.3.1 The Effect of Preferences on Decision-Making.

According to standard economic theory, when people are endowed with choices, they make decisions differently. An investigation was made to find out whether or not people had other choices (ways of managing their risks) when it comes to insurance consumption. Questions 30, 31 and 32 were structured to reflect situations under which people have other methods of managing the risks that they face (preferences). The results of the Mann-Whitney U Test are highlighted in the tables that follow.

Table 17: Hypothesis Test Summary – Decision-Making and Preferences.

Qn	Null Hypothesis	Test	Sig.	Decision
30	The distribution of having other ways of managing risks is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis
31	The distribution of my nuclear and extended family is my insurance is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.771	Retain the null hypothesis
32	The distribution of the community I live in is my insurance is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.189	Retain the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 18: Independent-Samples Mann-Whitney U Test Summary (Decision-Making and Preferences).

	Q30	Q31	Q32
Total N	388.00	388.00	388.00
Mann-Whitney U	12,617.00	19,097.50	20,143.00
Wilcoxon W	30,195.00	36,675.50	37,721.00
Test Statistic	12,617.00	19,097.50	20,143.00
Standard Error	1,054.11	1,045.14	1,026.54
Standardised Test Statistic	(5.86)	0.29	1.32
Asymptotic Sig. (2-sided test)	0.000	0.771	0.189

Grid: Q30= Other Risk Coping Mechanisms; Q31 = Nuclear and extended family as a form of insurance; and Q32 = The community one lives in as a form of insurance.

Using other risk coping mechanisms (question 30), the Mann-Whitney U Test revealed significant differences (rejection of the null hypothesis) in having other ways of managing risks (question 30 *N = 388, U = 12,617, z =-5.86, p = 0.000, and r = 0.30).* The urban poor and the workers in the pensions and insurance industry do not have the same other risk coping mechanisms. ***This matter was followed further in the qualitative phase of the study with an aim of establishing where the differences were.***

Questions 31 and 32 assessed whether or not the respondents regard the support they get from their nuclear and extended families and the community they live in as a form of insurance. In both cases (questions 31 and 32), a Mann-Whitney U Test revealed no significant differences (acceptance of the null hypothesis) in regarding the family (nuclear and extended) and the community one leaves in as a form of insurance (question 31 *N = 388, U = 19,097.50, z =0.29, p = 0.771, and r = 0.01; and* question 32 *N = 388, U = 20,143, z =1.32, p = 0.189, and r = 0.07*). Both samples regard the support they get from their nuclear and extended families and the community they live in as a form of insurance. ***This matter was followed in the qualitative phase to assess the extent to which the two parameters were a form of insurance.***

4.4.3.2 The effect of Loss Aversion (LA) on Decision-Making.

BE suggests that the degree of loss aversion that people have affects how they make decisions in situations of uncertainty (Obermeier & Schneider, 2015). Losses have been reported to weigh heavier than gains in peoples' minds (R. H. Thaler & Benartzi, 2004, p. S169). This phenomenon applies to insurance in that when people are buying insurance, the probability of suffering the insured risk and making a claim during the phase of the policy is unknown.

LA was investigated in the research using questions 8 and 12 that depicted scenarios testing decision-making given situations of uncertainty. Questions 8 and 12 gave choices between a known (certain) outcome and an unknown (uncertain) outcome.

Table 19: Hypothesis Test Summary – Decision-Making and Loss Aversion.

Qn	Null Hypothesis	Test	Sig.	Decision
8	The distribution of choices on a fair coin bet is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.018	Reject the null hypothesis
12	The distribution of choices given a certain and an uncertain situation is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.011	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 20: Independent-Samples Mann-Whitney U Test Summary (Decision-Making and Loss Aversion).

	Qn8	Qn12
Total N	387.00	383.00
Mann-Whitney U	20,908.50	20,667.00
Wilcoxon W	38,486.50	37,503.00
Test Statistic	20,908.50	20,667.00
Standard Error	932.29	927.52
Standardised Test Statistic	2.37	2.55
Asymptotic Sig. (2-sided test)	0.018	0.011

Grid: Qn8 and 12 = Scenario for decision-making under uncertainty

A Mann-Whitney U Test revealed significant difference (rejection of the null hypothesis in both cases) in the decision-making among the urban poor and the workers in the pensions and insurance industry given a situation of pure uncertainty under question 8 (*N = 387, U = 20,908.5, z = 2.37, p = 0.018, and r = 0.12.)* and question *12* (*N = 383, U = 20,667.0, z = 2.55, p = 0.011, and r = 0.13).* The result indicates that the two populations (the urban poor and the workers in the pensions and insurance industry) react differently to matters of uncertainty and have different levels of loss aversion, an aspect that could be attributable to the level of education (Hjorth & Fosgerau, 2009, p. 18). This result is in agreement with other researchers who report that the extent of loss aversion reduces with the level of education attained (Hjorth & Fosgerau, 2009; J François Outreville, 2015). In this research, there was a significant difference in the level of education between the two populations (see table 9 and 10) and this tallies with the level of loss aversion computed.

4.4.3.3 The Effect of Bounded Rationality (BR) on Decision-Making.

Bounded Rationality (BR) is a concept that was coined by Hebert Simon "that challenges the notion of human rationality as implied by the concept of *home economicus"* (A. (Ed. . Samson, 2018, p. 83). Standard economic theory agrees that human beings make rational decisions when they are making economic choices (Mathis & Steffen, 2015; Bias et al., 2012; Simon, 1955, p. 99), an aspect which BE refutes proposing that human beings suffer mental and other biases in understanding situations, leading to making of sub-optimal decisions (Kahneman & Egan, 2011; Reason, 1990). The levels of understanding required to make rational decisions when it comes to insurance consumption was assessed in the research and the results are in tables 25 and 26 that follow.

Table 21: Hypothesis Test Summary – Decision-Making and Loss Aversion.

Qn	Null Hypothesis	Test	Sig.	Decision
21	The distribution of understanding insurance is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis
22	The distribution of needing a trusted insurer is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.61	Retain the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 22: Hypothesis Test Summary – Level of Education attained.

Qn	Null Hypothesis	Test	Sig.	Decision
6	The distribution of the level of education is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 23: Independent-Samples Mann-Whitney U Test Summary (Education and Loss Aversion).

	Q21	Q22	Q6
Total N	388.00	388.00	389.00
Mann-Whitney U	7,235.00	16,910.00	37,541.50
Wilcoxon W	24,813.00	34,488.00	55,119.50
Test Statistic	7,235.00	16,910.00	37,541.50
Standard Error	1,071.79	1,004.92	1,074.99
Standardised Test Statistic	(10.78)	(1.87)	17.353
Asymptotic Sig. (2-sided test)	0.000	0.610	0.000

Grid: Q21=understanding of insurance; Q22=Need for a trusted insurer to enable one understand insurance and Q6 = Level of education.

A Mann-Whitney U Test revealed significant differences (rejection of the null hypothesis) in the understanding of insurance (question 21) among the urban poor and the workers in the pensions

and insurance industry with *N = 388, U = 7,235, z = -10.78, p = 0.000, and r = -0.55*. This shows that the workers in the pensions and insurance industry understand more of insurance (this may be attributed to information availability, levels of education, and access to insurance education literature) compared to the urban poor (who may have no access to insurance information, low education and no access to insurance education literature).

The data indicate significant differences in education levels between the urban poor and the workers in the pensions and insurance industry which could be attributed to differences in the understanding of insurance between the two categories (with *N = 389, U = 37,541.50, z = 17.35, p = 0.000, and r = 0.88*); an aspect supporting the differences in the levels of understanding of insurance (refer to table 25 and 26).

A Mann-Whitney U Test revealed no significant difference (acceptance of the null hypothesis) in the requirement for a trusted insurer (question 22) among the urban poor and the workers in the pensions and insurance industry with *N = 388, U = 16,910, z = -1.87, p = 0.610, and r = -0.10.* This implies that the trust that consumers have in an insurance company (their ability to deliver on their promise) is critical in the decision-making on insurance consumption and both the urban poor and workers in the pensions and insurance industry require a trusted insurer to make them understand insurance and its complicacies and would lead to eventual purchase of insurance. The trust of an insurer is critical as it informs the experiences on insurance of the consumers. Trust revolves around aspects in the pre and after sale of an insurance policy. In the pre-sale, it includes situation of truthful selling, as opposed to deceitful marketing, explaining the exclusions and inclusions in policy documents among others. The effect of the pre-sale trust comes to manifest at the point when a policy matures or a claim is being made and at this time, the true detail of a particular policy is revealed to the consumers. This may affect their experiences on insurance.

A Mann-Whitney U Test revealed significant difference (rejection of the null hypothesis) in the distribution of the level of education (question 6) among the urban poor and the workers in the pensions and insurance industry with *N = 389, U* = 37,541.50, *z* = 17.353, *p* = 0.000, *and r = 0.88.* The workers in the pensions and insurance have higher education as compared to the urban

poor some of whom might not have completed their high school (Grade 12). This finding resonates with the difference in the understanding of insurance (attributable to the level of education).

4.4.3.4 The Effect of Framing on Decision-Making.

Individuals are affected by framing effects and their choices would differ depending on how the options are worded (Kahneman & Tversky, 2013), an aspect that is contrary to the tenets of rational choice (Carvalho et al., 2016). Situations that are framed positively attract people to decide towards them while those that are framed negatively deter people from choosing them (Frydman & Camerer, 2016; Kahneman, 2011). A comparison of the urban poor and the workers in the pensions and insurance industry indicated that framing effects impacts decision-making. See a summary of results that follow.

Table 24: Hypothesis Test Summary – Decision-Making and Framing Effect.

Qn	Null Hypothesis	Test	Sig.	Decision
9	The distribution of choices given a negative situation and a positive situation is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.297	Retain the null hypothesis
10	The distribution of choices given a negative situation and a positive situation is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.000	Reject the null hypothesis
11	The distribution of choices given a certain situation and an uncertain situation is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.115	Retain the null hypothesis
12	The distribution of choices given a negative situation and an uncertain situation is the same across categories of respondents.	Independent-Samples Mann-Whitney U Test	0.011	Reject the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Table 25: Independent-Samples Mann-Whitney U Test Summary (Decision-Making and Framing Effect).

	Q9	Q10	Q11	Q12
Total N	387	386.00	386.00	383.00
Mann-Whitney U	20,908.50	12,305.00	17,130.00	20,667.00
Wilcoxon W	34,486.50	29,696.00	34,521.00	37,503.00
Test Statistic	20,908.50	12,305.00	17,130.00	20,667.00
Standard Error	932.29	933.73	933.73	927.52
Standardised Test Statistic	2.37	(6.74)	(1.57)	2.55
Asymptotic Sig. (2-sided test)	0.297	0.000	0.115	0.011

Grid: Q9 = Same scenario framed differently; Q10 = Same Scenario framed differently; Q11 = Same scenario framed differently; and Q12 = Same scenario framed differently.

A Mann-Whitney U Test revealed no significant differences (acceptance of the null hypothesis) in the decision-making among the urban poor and the workers in the pensions and insurance industry given a situation where choices are framed differently under questions 9 and 11. Questions 9 and 11 depicted a situation with a negative and a positive framing towards a decision to be made. The results under question 9 accepts the null hypothesis (the decision-making depicted was similar between the urban poor and the workers in the pensions and insurance industry with *N= 387, U=20,908.5, z=2.37, p=0.297, and r=0.12*). The results under question 11 accepts the null hypothesis (the decision-making depicted was similar between the urban poor and the workers in the pensions and insurance industry with *N= 386, U=17, 130, z=-1.57, p=0.115, and r=-0.08*).

A Mann-Whitney U Test revealed significant differences (rejection of the null hypothesis) in the decision-making among the urban poor and the workers in the pensions and insurance industry under questions 10 and 12. The questions tested situations with options provided framed differently (in the negative and in the positive frame). The results under question 10 (giving an option between 95% lean beef and 5% fat beef) rejects the null hypothesis (the decision-making depicted was not the same between the urban poor and the workers in the pensions and insurance industry with *N= 386, U=12,305, z=-6.74, p=0.000, and r=-0.34*). This finding agrees with the assertions by other researchers that that decisions that human beings make are influenced by framing effects (Schindler & Pfattheicher, 2017; W. M. Wolfe, 2008, p. 6).

***This matter was probed further in the qualitative phase of the study to establish more detail on framing among the respondents*.**

The results under question 12 (giving an option between 4,000 people dying and a situation with probabilities of one-third that nobody dies and a two-thirds probability that 6,000 will die) rejects the null hypothesis (the decision-making depicted was not the same between the urban poor and the workers in the pensions and insurance industry with *N= 383, U=20,667, z=2.55, p=0.01, and r= 0.13).* This may be a situation of the attractiveness of the option given and the uncertainty embedded in it. This indicates that the respondents try to reduce losses as a result of uncertainty (Schilirò, 2016; W. M. Wolfe, 2008).

4.4.4 Multiple Regression Analysis, Hypothesis Testing and Path Analysis.

Multiple linear regression was used in hypothesis testing and IBM SPSS Version 25 was used to undertake the regression. Path Analysis was conducted using IBM AMOS version 25. The aim of the Path Analysis was to generate the Insurance Purchase Decision variables for the two population samples and also to show the loadings on each variable under investigation.

4.4.5.1 Interpreting the Multiple Regression.

The research hypotheses were tested based on the conducted multiple regression analysis by considering the statistical significance of the relationship between and among variables. The *p-value* was used under the following conditions:

P<0.05 : a *p-value* less than 0.05 indicates a non-significant relationship between the variables, a rejection of the null hypothesis

P≥0.05 : .a *p-value* greater than 0.05 indicates a significant relationship exists between the variables, the hypothesis reflecting the relationship between the variables is confirmed.

4.4.5.2 Statistical Measures of the Multiple Regression Analysis.

The correlation among the variables was analysed as the first step of the multiple regression analysis. For both populations, the correlation of the dependent and independent variables depict a statistically significant relationship among most of the variables (*p<0.01).* See the tables that follow.

Table 26: Correlations (Workers in the Pensions and Insurance Industry).

Correlations

		IPD	EFs	TUoIns	EoIns	BFs	ORCMs
Pearson Correlation	IPD	1.000	.710	.661	.530	.413	.420
	EFs	.710	1.000	.291	.292	.103	.126
	TUoIns	.661	.291	1.000	.203	.001	.112
	EoIns	.530	.292	.203	1.000	.057	-.023
	BFs	.413	.103	.001	.057	1.000	.199
	ORCMs	.420	.126	.112	-.023	.199	1.000
Sig. (1-tailed)	IPD	.	.000	.000	.000	.000	.000
	EFs	.000	.	.000	.000	.074	.038
	TUoIns	.000	.000	.	.002	.495	.058
	EoIns	.000	.000	.002	.	.211	.375
	BFs	.000	.074	.495	.211	.	.002
	ORCMs	.000	.038	.058	.375	.002	.
N	IPD	198	198	198	198	198	198
	EFs	198	198	198	198	198	198
	TUoIns	198	198	198	198	198	198
	EoIns	198	198	198	198	198	198
	BFs	198	198	198	198	198	198
	ORCMs	198	198	198	198	198	198

Table 27: Correlations (Urban Poor).

Correlations

		IPD	EFS	TUoIns	EoIns	BFs	ORCMs
Pearson Correlation	IPD	1.000	.841	.823	.793	.675	.654
	EFS	.841	1.000	.586	.547	.340	.331
	TUoIns	.823	.586	1.000	.759	.409	.389
	EoIns	.793	.547	.759	1.000	.376	.315
	BFs	.675	.340	.409	.376	1.000	.907
	ORCMs	.654	.331	.389	.315	.907	1.000
Sig. (1-tailed)	IPD	.	.000	.000	.000	.000	.000
	EFS	.000	.	.000	.000	.000	.000
	TUoIns	.000	.000	.	.000	.000	.000
	EoIns	.000	.000	.000	.	.000	.000
	BFs	.000	.000	.000	.000	.	.000
	ORCMs	.000	.000	.000	.000	.000	.
N	IPD	202	202	202	202	202	202
	EFS	202	202	202	202	202	202
	TUoIns	202	202	202	202	202	202
	EoIns	202	202	202	202	202	202
	BFs	202	202	202	202	202	202
	ORCMs	202	202	202	202	202	202

The independent variables were entered into the model at the same time using the *Enter* method. The proposed model indicates that it explains 99.3% of the dependent variable with respect to the workers in the pensions and insurance industry and 99.7% of the dependent variable with respect to the urban poor.

Table 28: Model Summary (Workers in the pensions and insurance industry).

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997[a]	0.993	0.993	0.57317

a. Predictors: (Constant), ORCMs, EoIns, BFs, TUoIns, EFs

b. Dependent Variable: IPD

Table 29: Model Summary (Urban Poor).

(UP) Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999[a]	.997	.997	.707

a. Predictors: (Constant), ORCMs, EoIns, EFS, TUoIns, BFs

b. Dependent Variable: IPD

Table 30: ANOVA (Workers in the pensions and insurance industry).

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9245.980	5	1849.196	5628.816	.000[b]
	Residual	63.076	192	.329		
	Total	9309.057	197			

a. Dependent Variable: IPD

b. Predictors: (Constant), ORCMs, EoIns, BFs, TUoIns, EFs

Table 31: ANOVA (Urban Poor).

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38076.638	5	7615.328	15255.475	.000[b]
	Residual	97.341	195	.499		
	Total	38173.979	200			

a. Dependent Variable: IPD

b. Predictors: (Constant), ORCMs, EoIns, EFS, TUoIns, BFs

The coefficients of the variables are indicated in table 27 and 28 for both the workers in the pensions and insurance industry and the urban poor. This is an unusual situation. The Variance Inflation Factors (VIFs) for both populations are below the threshold of 5 that would indicate the presence of collinearity (O'brien, 2007, p. 684). The data is thus free from collinearity effects.

Table 32: Coefficients of the multiple regression analysis (workers in the pensions and insurance industry).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.452	.331		1.363	0.174		
	EFs	1.01	.015	.428	66.22	.000	0.843	1.186
	TUoIns	.993	.014	.445	70.736	.000	0.891	1.122
	EoIns	.973	.020	.304	48.34	.000	0.893	1.120
	BFs	1.009	.021	.298	48.907	.000	0.950	1.053
	ORCMs	.959	.022	.263	42.868	.000	0.936	1.069

a. Dependent Variable: IPD

Table 33: Coefficients of the multiple regression analysis (Urban Poor).

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.171	.346		.493	.623		
	EFS	1.004	.010	0.454	98.942	.000	0.620	1.613
	TUoIns	1.016	.026	0.230	38.649	.000	0.496	2.016
	EoIns	.993	.023	0.251	43.707	.000	0.430	2.326
	BFs	1.076	.055	0.172	19.564	.000	0.516	1.938
	ORCMs	.889	.045	0.170	19.606	.000	0.530	1.887
a. Dependent Variable: IPD								

Tables 36 and 37 indicates coefficients of the multiple regression analysis between the two populations.

4.4.5.2 Testing the Research Hypotheses.

An analysis of the research hypothesis (as highlighted in 4.2.1) follow. The discussions revolves around confirming, or not, the null hypotheses.

H1: Economic Factors impacts positively on the IPD.

With respect to the urban poor, the IPD = 0.45EFs; whereas for the workers in the pensions and insurance industry the IPD = 0.43UoIns (subject to the values of the other factors being stable), $p=.000$. This denotes the existence of a significant relationship between the variables, $p<0.05$, and it is positive thus confirming hypothesis H_1.

H_2: Trust and understanding of insurance (TUoIns) impacts positively on the IPD.

With respect to the urban poor, the IPD = 0.23TUoIns; whereas for the workers in the pensions and insurance industry the IPD = 0.45TUoIns (subject to the values of the other factors being stable), *p=.000.* This denotes the existence of a significant relationship between the variables, *p<0.05,* and it is positive thus confirming hypothesis H_2.

H_3: Experiences on Insurance (EoIns) impacts positively on the IPD.

With respect to the urban poor, the IPD = 0.26EoIns; whereas for the workers in the pensions and insurance industry the IPD = 0.30EoIns (subject to the values of the other factors being stable), *p=.000.* This denotes the existence of a significant relationship between the variables, *p<0.05,* and it is positive thus confirming hypothesis H_3.

H_4: BFs (BFs) impacts positively on the IPD.

With respect to the urban poor, the IPD = 0.16BFs; whereas for the workers in the pensions and insurance industry the IPD = 0.30BFs (subject to the values of the other factors being stable), *p=.000.* This denotes the existence of a significant relationship between the variables, *p<0.05,* and it is positive thus confirming hypothesis H_4.

H_5: Other Risk Coping Mechanisms (ORCMs) impacts positively on the IPD.

With respect to the urban poor, the IPD = 0.19ORCMs; whereas for the workers in the pensions and insurance industry the IPD = 0.26ORCMs (subject to the values of the other factors being stable), *p=.000.* This denotes the existence of a significant relationship between the variables, *p<0.05,* and it is positive thus confirming hypothesis H_5.

Hypotheses 7, 8, 9, 11, 12 and 14 were calculated under the path analysis and depict the following results.

H_7: TUoIns and EoIns have a positive relationship.

TUoIns and EoIns were found to have a positive correlation (subject to the values of the other factors being stable), *p=.000.* A significant relationship exists between the two variables (0.76 for the urban poor and 0.20 for the workers in the pensions and insurance industry) and it is positive thus confirming hypothesis H_7.

TUoIns and EoIns showed a stronger correlation with respect to the urban poor (0.76) compared to the workers in the pensions and insurance industry (0.20). This is indicative of the fact that the workers in the pensions and insurance industry have more trust and understanding of insurance and they experience more positive effects from insurance consumption compared to the urban poor.

H_8: EoIns and BFs have a positive relationship.

EoIns and BFs were found to have a positive correlation (subject to the values of the other factors being stable), *p=.000.* A significant relationship exists between the two variables (0.38 for the urban poor and 0.06 for the workers in the pensions and insurance industry) and it is positive thus confirming hypothesis H_8.

The relationship between EoIns and BFs for the workers in the industry is low at 0.06. This resonates with the level of education and exposure to insurance information and working in the insurance environment, which would be a factor that gives the workers in the industry positive experiences.

H_9: BFs and ORCMs have a positive relationship.

BFs and ORCMs were found to have a positive correlation (subject to the values of the other factors being stable), *p=.000.* A significant relationship exists between the two variables (0.91 for the urban poor and 0.20 for the workers in the pensions and insurance industry) and it is positive thus confirming hypothesis H_9.

The correlation between BFs and ORCMs is higher for the urban poor (at 0.91) compared to that for the workers in the pensions and insurance industry (0.20). The beliefs that the urban poor have are strongly correlated to their ORCMs. Understanding the beliefs of the urban poor vis-à-vis insurance consumption would benefit insurance practice in the quest to capture the urban poor on insurance consumption and increasing financial inclusion. The correlation for the workers in the pensions and insurance industry is low and is indicative of how positive their beliefs are in relation to insurance.

H_{11}: TUoIns and BFs have a positive relationship.

TUoIns and BFs were found to have a positive correlation (subject to the values of the other factors being stable), *p=.000.* A significant relationship exists between the two variables (0.41 for the urban poor and 0.00 for the workers in the pensions and insurance industry) and it is positive thus confirming hypothesis H_{11}.

The TUoIns of the workers in the pensions and insurance industry has a weak correlation of 0.00 (compared to the urban poor which is at 0.41) indicating that there is no relationship whatsoever. The TUoIns does not affect the BFs of the workers in the pensions industry. This informs insurance practice in that efforts to lure insurance consumption among the workers in the industry could be targeted towards other variables other than BFs and TUoIns. On the other hand, the TUoIns of the urban poor should be taken into consideration as it impacts on their decision-making.

H_{12}: BFS and ORCMs have a positive relationship.

BFs and ORCMs were found to have a positive correlation (subject to the values of the other factors being stable), *p=.000.* A significant relationship exists between the two variables (0.91 for the urban poor and 0.20 for the workers in the pensions and insurance industry) and it is positive thus confirming hypothesis $H_{12.}$

The correlation is higher with respect to the urban poor (at 0.91) compared to the workers in the pensions and insurance industry (at 0.20). Therefore, the beliefs of the urban poor affects their ORCMs more compared to the workers in the pensions and insurance industry. The beliefs need to be fully understood aimed at understanding how they influence the IPD of the urban poor and only then can insurance practices be adjusted accordingly to capture the uncovered population.

H_{14}: TUoIns and ORCMs have a positive relationship.

TUoIns and ORCMs were found to have a positive correlation (subject to the values of the other factors being stable), *p=.000.* A significant relationship exists between the two variables (0.39 for the urban poor and 0.11 for the workers in the pensions and insurance industry) and it is positive thus confirming hypothesis $H_{14.}$ The magnitude of positivism differs among the two population samples with a negligible correlation with respect to the workers in the pensions and insurance industry.

The path analysis had to be re-done using AMOS to evaluate the model fit and to establish whether or not the coefficients are within the acceptable range. The following section discusses the PA and the attendant findings.

4.4.5 Path Analysis and development of equations.

Path Analysis was conducted using IBM AMOS 25. The aim of the path analysis was to establish whether or not the structural model has good fit and can be relied upon. The data was analysed to understand insurance purchase decision-making taking into account Economic Factors (EFs), Trust and Understanding of insurance Factors (TUoIns), Experiences on insurance Factors (EoIns), Beliefs (Cultural) Factors (BFs) and Other Risk Coping Mechanisms (ORCMs). The effect of these factors on the IPD was analysed and the estimation was done using the Maximum Likelihood (ML) estimations.

The hypothetical research model (figure 4.1) was run in AMOS 25. All elements in the model were part of the first run of the combined data. Minimisation was unsuccessful at 20 iterations. The second run of the combined data was conducted after eliminating the EFs from the model, and consequently elimination of 5 hypotheses ($H_{1,}$ $H_{6,}$ $H_{10,}$ $H_{13,}$ and H_{15}). The model was run twofold: firstly using combined data from the two populations and secondly using split data sets of each population. The combined data yielded the impact weights (beta coefficients) as indicated in the figure that follow.

The EFs were made up of constructs that depicted the price and other measures that move in the opposite direction when compared to all other constructs in the analysis and thus the reason for non-convergence leading to elimination of the EFs from the model.

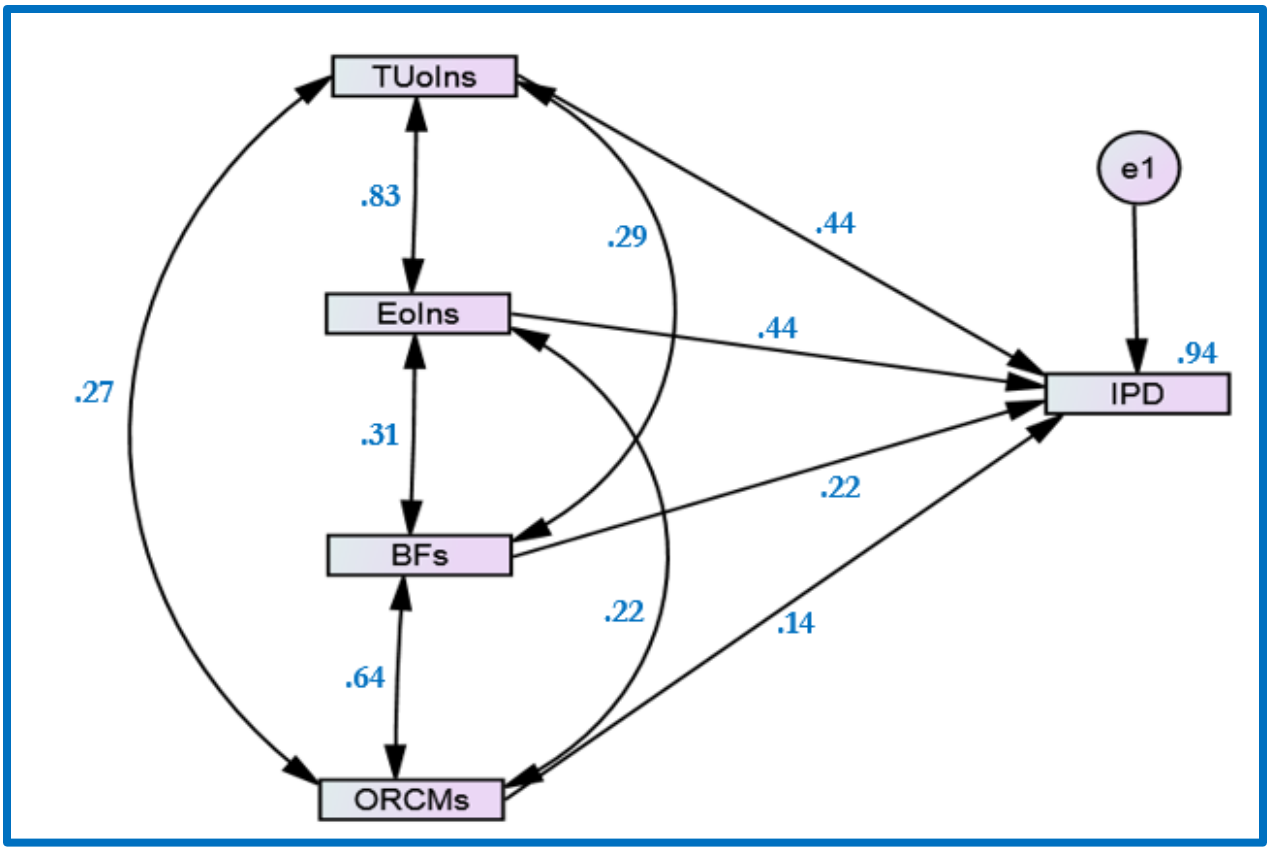

Figure 8: Impact Weights (Combined Data).

The model above contain errors *e1* directed towards the IPD which indicate the extent of dispersion of the dependent variable that is not explained by the independent variables. The errors of the variables are calculated referring to the *R Square* measure

$$\boldsymbol{e = \sqrt{(1 - R^2)}.}$$

The error of the IPD is $\boldsymbol{e = \sqrt{(1 - 94^2)}}$**= 0.341**. The error indicates the error of measurement and the fact that there are other variables that may impact the IPD (Ulbinaite et al., 2013, p. 151).

The model was assessed under separated data sets to gauge the effect of the relationship among the variables. Minimisation was successful for both data sets and yielded the results that follow:

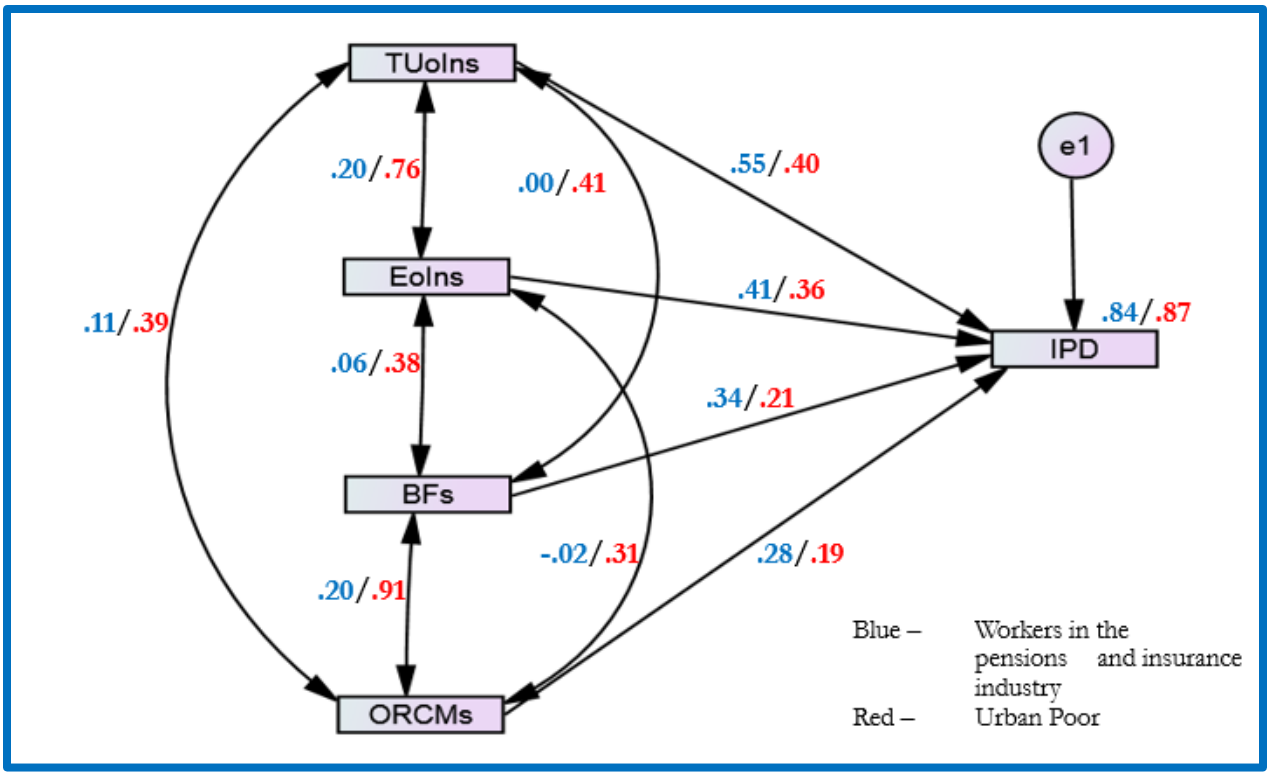

Figure 9: Impact Weights (Split Samples: Workers in the Pensions and Insurance Industry and the Urban Poor)

4.4.5.1 Goodness of Fit of the Structural Model.

Path analysis was undertaken to gauge whether the regression model correctly depicted a good model fit (as indicated under the multiple regression analysis under 4.4.5.1). The fitting of the model to the data is described by the goodness of fit (Zhang, 2014). The fit statistics for the developed model are indicated in the table that follow. In this research, I chose the χ^2 and the associated degrees of freedom, SRMR, RMSEA and the CFI as evaluation measures in the model (Bagozzi & Yi, 2012; Zhang, 2014). Despite some scholars indicating that the chi-square may not be a good statistic measure (Hu & Bentler, 1999), it has been proposed that research should "always report the model chi-square and its *p-value* for all models tested" (R. Kline, 2013, p. 291). Multiple criteria had been used simultaneously in research to assess model fit and these include SRMR with a choice from TLI, RNI, CFI, or RMSEA (Bagozzi & Yi, 2012; Hu & Bentler, 1999; R. Kline, 2013; Schermelleh-Engel et al., 2003; Zhang, 2014).

Table 34: Goodness of Fit of the Structural Model.

Fit Indices	*Respondent Population*			*General Rule for Acceptable Fit*
	Combined Data	*Urban Poor*	*Workers in the pensions and insurance industry*	
X^2 *(df)*	5.284 (1)	0.93 (1)	0.902 (1)	Ratio of X^2 to df ≤ 2 or 3
X^2*/ (df)*	5.284	0.93	0.902	2.0 - 3.0
SRMR	0.0055	0.0024	0.0063	≤0.08 -0.1
RMSEA	0.105	0	0	≤0.06 - 0.08
LO 90 -- HI 90	0.032 - 0.200	0.000 - 0.184	0.000 - 0.185	
CFI	0.998	1	1	≥0.95

Grid: SRMR = Standardised Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; LO90 = Lower boundary of a two-sided 90% confidence interval for the RMSEA; HI90 = Upper boundary of two-sided 90% confidence interval for the RMSEA; CFI = Comparative Fit Index.

All the fit indices fall within the acceptable threshold levels. The fit indices under the multiple regression analysis and path analysis (SRMR, RMSEA and CFI) indicate a good model fit resonating with the model summary under tables 30 and 31.

4.4.5.2 Results of the Path Analysis.

The aim of the path analysis was to provide the quantitative values of the relationship between the variables. From the relationships established in figure 6, the following equations representing the key factors can be deduced:

For the urban poor:

$$IPD = 0.40TUoIns + 0.36EoIns + 0.21BFs + 0.19ORCMs + e^1$$

For the workers in the pensions and insurance industry:

$$IPD = 0.55TUoIns + 0.41EoIns + 0.34BFs + 0.28ORCMs + e^1$$

4.4.5.2.1 Trust and Understanding of Insurance (TUoIns) and the IPD.

Questions 18, 19, 20, 21 and 22 of the questionnaire addressed aspects to do with the TUoIns. Question 18 sought to find out whether or not the respondents trust insurance companies. Question 19 sought to analyse the quality of service gotten from insurance companies. Question 20 dealt with claims management whereas 21 and 22 dealt with the understanding of insurance and the need for a trusted insurer to make consumers understand more of insurance respectively.

Under the revised model, Trust and Understanding of Insurance (TUoIns) shows varying degrees of affecting the IPD: 0.4 for the urban poor and 0.55 for the workers in the pensions and insurance industry. We see the urban poor's decision-making is less affected by TUoIns compared to the workers in the pensions and insurance industry. The effect of the understanding of the use and mechanisms of insurance is almost similar between the two populations, raising the question as to why there are differences in other areas of insurance consumption. *Ideally,* ***TUoIns would affect the decision-making of the urban poor more but this is not the case, denoting a situation of lack of knowledge even among the workers in the pensions and insurance industry*****.**

4.4.5.2.2 Experiences on Insurance and the IPD.

EoIns and its impact on the IPD was investigated using aggregate factors under questions 23, 24, 25 and 26. Question 23 assessed how much attention the behaviour of the workers from the insurance companies receive from the consumers of insurance. Question 24 analysed the population's inclination to spread negative opinions while spreading of positive opinions was captured under question 25. The last aspect under experiences on insurance looked at the effect of the insurance experiences on the continued use and consumption of insurance and was assessed via question 26.

The effect of EoIns was analysed to gauge how it affects the decision-making of the two populations. The EoIns of the urban poor has a lower effect on the IPD (0.36) compared to that of the workers in the pensions and insurance industry (0.41). This denotes the fact that the urban poor

do not consume insurance and as such, they may not have much experience on the insurance phenomenon, an aspect pointing to the need for more insurance education and eventual financial inclusion. For the workers in the industry, the EoIns affect the IPD by 0.40 which is high and it calls for the insurance industry to rid itself of the practices that affect the perception towards insurance consumption. The workers in the pensions and insurance industry pay more attention to their EoIns compared to the urban poor, and they showed more inclination to spread positive attributes compared to the urban poor. However, the variation was minimal indicating that both populations could be used to spread positive experiences on insurance with a probable positive gain in perceptions in the population.

The urban poor indicated having a higher weighting on the continued use of insurance dependent on experiences compared to the workers in the pensions and insurance industry. ***Insurance practice would benefit by managing the positivism of the insurance experiences as it affects the eventual decision made on insurance consumption and usage.***

4.4.5.2.3 Beliefs and the IPD.

Questions 27, 28 and 29 assessed the beliefs that people have around insurance consumption. Question 27 interrogated the effect of religious beliefs on the IPD, while the cultural and traditional beliefs were investigated under question 28. On the other hand, question 29 analysed the effect of friends and family on the IPD.

The beliefs affects the IPD more for the workers in the pensions and insurance industry (0.34) compared to the urban poor (0.21). Again, data indicates the unobvious: those who understand the insurance phenomenon have their IPD affected more by their beliefs.

4.4.5.2.4 Other Risk Coping Mechanisms and the IPD.

The ORCMs were assessed via questions 30, 31 and 32. Question 30 looked into alternative risk coping mechanisms (an aspect of preferences), whereas questions 31 and 32 looked into the societal provisions of insurance via the nuclear and extended family and the community one lives in.

The ORCMs show a similar picture: a higher effect on the IPD for the workers in the pensions and insurance industry (0.28) compared to the urban poor (0.19). The ORCMs show how resilient a particular people is in terms of managing their risks. In this case, we see that the workers in the pensions and insurance industry have more risk coping choices and as such, their IPD is affected more by these other alternatives available. The preferences available on risk coping have a less effect on the IPD of the urban poor, a situation which would be indicative of little to no alternative risk coping mechanisms available to such a group.

4.5 Thematic Indicators for Qualitative Data Collection

The quantitative data analyses highlighted areas requiring further follow-up in the qualitative phase of the study:

One fundamental area for follow-up is on the process of decision-making and what necessitates it. The four BE concepts under investigation (Preferences, Loss aversion, Bounded Rationality and Framing) were subject of inquiry in the qualitative phase of the study so as to elucidate on the aspects that did not come out clearly in the quantitative phase and to gain a deeper understanding of the insurance purchase decision-making phenomenon. The two population samples showed differences in their TUoIns; ways of managing risks (preferences); their degree of loss aversion; and their understanding of insurance. Both populations suffer from framing effects with the results differing on a situation by situation basis. The differences in these thematic areas will be investigated further in the qualitative phase of the study.

The effect of the key variables of interest (EFs, TUoIns, EoIns, BFs and ORCMs) on the IPD showed varying weightings. This issue was followed up in the qualitative phase of the study so as to get further insight into the mechanisms of decision-making taking into account the EFs, TUoIns, EoIns, BFs and ORCMs.

The questions used in the qualitative inquiry were in tandem with the guiding questions raised in chapter one of the thesis.

4.6 Summary of Chapter

This research collected quantitative data using questionnaires aimed at answering the research questions: what is the effect of economic, social, structural factors and demographic factors on the decision-making in the purchase of insurance in Zambia; and do people have sufficient information with which to make insurance consumption decisions? Data was collected from 2 distinct groups: the urban poor and the workers in the pensions and insurance industry. The analysis was done using IBM SPSS 25 and AMOS 25 by comparing the two populations on the thematic areas of interest using 15 hypotheses. A total number of 400 questionnaires (200 among the urban poor and 200 among the workers in the pensions and insurance industry) were distributed with a response rate of 100% among the urban poor and 99% among the workers in the pensions and insurance industry, giving an overall response rate of 99.26%.

Statistical methods were used in the data analysis process using IMB SPSS version 25 and AMOS 25. The sample size met the minimum statistical requirements and the data attained multi-variate normality. The model validity was assessed using Factor Analysis (FA) and the sample size met the minimum requirement (N>=150) to undertake factor analysis. PCA was used as an EFA method with factors being extracted using eigenvalues. The KMO criterion and the scree test were used in discarding factors that have low eigenvalue scores. The fitness of the data for factorial analysis was tested using the KMO and Bartlett's test of sphericity with both tests meeting the minimum required threshold. The KMO was 0.910 while the Bartlett's test reached statistical significance ($p<0.05$) supporting the factorability of the data. The measures used in the research

attained reliability with the combined Cronbach Alpha statistic at 0.909 against a minimum requirement of 0.06.

The independent samples t-test highlighted significant differences on the determinants of the insurance purchase decision-making using a 2-tailed test with $p=0.430$ between the urban poor and the workers in the pensions and insurance industry on TUoIns. Differences on preferences available for managing risks and on the levels of loss aversion were also found. The two population samples displayed differences in understanding of insurance and in the levels of education attained. The data indicated variability in decision-making of the two populations under situations of uncertainty and due to framing.

The data was subjected to multiple regression analysis to establish the relationships among the variables and the model explained 99.3% and 99.7% of the dependent variable with respect to the workers in the pensions and insurance industry and the urban poor respectively. Further statistical analysis using path analysis was done aimed at confirming the goodness of fit of the model as being ok.

The path model saturated upon elimination of the EFs and all goodness of fit statistics (the Chi-Square, SRMR, RMSEA, and CFI) met the minimum threshold required. The path analysis provided the quantitative values of the relationships between the variables.

The areas for follow-up in the qualitative phase of the study have been highlighted in this chapter.

Chapter 5: Findings – Qualitative Data

5.1 Introduction

This chapter presents the findings of the qualitative phase of the research and compares the findings with those of the quantitative study. Research on insurance consumption studies has been conducted using quantitative methods, an approach that may lead to missing out on the richness a research would derive from qualitative methods. This research is a mixed methods sequential explanatory study of the determinants of the insurance purchase decision-making in Zambia. The research compares the insurance purchase decision-making of the urban poor and the workers in the pensions and insurance industry.

This second phase of the study is part of the larger research which started with the collection and analysis of quantitative data following the laid down themes. The quantitative data highlighted areas that had unclear results in the research. The second phase of the study had a clear aim of explaining in detail the elements that did not come out clearly in the quantitative phase. The qualitative phase of the study aimed at answering the questions highlighted in 4.2.

This chapter, therefore, aims at representing the views and elucidations of the participants in the study, amplifying the findings from the qualitative data through getting insight into aspects that did not come out clearly in the quantitative phase of the study. Overall, this chapter will ensure a thorough and deep understanding and explanation of the insurance purchase decision-making in Zambia from a qualitative inquiry facet.

5.2 Research Questions

In chapter one of the study, mention was made that the qualitative research questions will be developed from the analysis of the quantitative data with the following preliminary questions set on the onset to guide the qualitative inquiry:

i. How do the economic, social and demographic factors affect decision-making in the purchase of insurance?
ii. What other risk coping strategies do employees in the pensions and insurance industry and the urban poor use?
iii. What role can insurance practice and management play in promoting insurance consumption?

The analysis of the quantitative data highlighted areas that required further investigation so as to explain the phenomenon of the IPD fully. The two population samples showed differences in their TUoIns; ways of managing risks (preferences); their degree of loss aversion; and their understanding of insurance. Quantitative data highlighted that both populations suffer from framing effects with the results differing on a situation by situation basis. The effect of the key variables of interest (EFs, TUoIns, EoIns, BFs and ORCMs) on the IPD showed varying weightings. The differences highlighted in the quantitative data necessitated the maintenance of the qualitative questions set in chapter one of the study and the interviews were structured to give clarity to items that were not clear in the quantitative data.

5.3 The Study

This study was part of a larger mixed methods sequential explanatory study aimed at understanding the determinants of the insurance purchase decision-making in Zambia: particularly comparing how the workers in the pensions and insurance industry make their insurance purchase decisions. The focus of the qualitative phase was to understand and explain in detail how key decision-making variables that showed significant differences among the two populations differ and to also explain further matters that did not come out clearly in the quantitative phase.

5.4 Participants

Participants in the study were selected using purposive sampling. During the quantitative data collection phase, respondents were asked to volunteer to participate in the qualitative phase of the study. The participants in the qualitative phase of the study were drawn from the respondents in the quantitative phase of the study. After interviewing 15 people from both the sample populations, (the urban poor and the workers in the pensions and insurance industry), and hearing the same responses, I decided data saturation had been attained (Guest et al., 2006; Strauss & Corbin, 1998). The saturation was attained due to having enough information for replication of the study (O'reilly & Parker, 2013; Walker, 2012), no new themes arising out of the data and when further coding was no longer possible (Guest et al., 2006). It has been opined that one attains data saturation when one "has reached a point of no new data, one has also most likely reached the point of no new themes; therefore, one has reached data saturation" (Fusch & Ness, 2015, p. 1409).

The respondents were required to be of age not less than 18 years and they were required to be able to communicate in English. The respondents were required to have participated in the quantitative phase of the study.

5.4.1 Demographic Profile of Participants.

5.4.1.1 Workers in the Pensions and Insurance Industry.

In terms of gender, 5 out of 15 respondent under the workers in the pensions and insurance were female and 10 were male; 13 out of 15 respondent were married whereas 2 were not married; 12 of the respondents had children while 3 had no children. All the respondents under the workers in the pensions and insurance industry were in formal employment in the pensions and insurance industry and all owned assets, had bought insurance before and had active insurance policies. In terms of insurance purchase decision-making, 10 out of the 15 respondents indicated that they always consulted when making IPDs whereas 5 indicated that they made solitary IPDs (they did not consult anyone including their partners, spouses or families).

5.4.1.2 The Urban Poor.

In terms of gender, 6 out of 15 respondent under the urban poor were female and 10 were male; 14 out of 15 respondents were married whereas 1 was not married; 11 of the respondents had children while 4 had no children. 10 out of the 15 respondents were in informal employment (self-employed) whereas 5 indicated that they were in formal employment and 14 out of 15 owned assets. 12 out of 15 respondents had bought insurance before but only 3 had active insurance policies as at the time of data collection. In terms of insurance purchase decision-making, 8 out of the 15 respondents indicated that they always consulted when making IPDs while 7 indicated that they made solitary IPDs (they did not consult anyone including their partners, spouses or family).

5.5 Interviews

Data was gathered through in-depth, semi structured interviews which lasted an average of 15 to 23 minutes. The interview questions revolved around the thematic areas that were highlighted in the quantitative phase of the study and probed in detail the effect on the Insurance Purchase Decision-Making (IPD) of key variables in the study: Economic Factors (EFs), Trust and Understanding of Insurance (TUoIns), Experiences on Insurance (EoIns), Beliefs (BFs) and Other Risk Coping Mechanisms (ORCMs). The five key variables disaggregated to investigate how behavioural economics concepts of Preferences, Loss Aversion, Framing, and Bounded Rationality affect the IPD. The questions asked to the respondents were the same in all instances and this was undertaken with an aim of attaining data saturation (Bernard & Bernard, 2012; Fusch & Ness, 2015).

5.6 Ethical Considerations

The research was approved by the Ethics committee of the University of the Witwatersrand with the Clearance Certificate having Protocol Number H17/10/06 (See **APPENDIX I**). The respondents were given the latitude to choose the place of the interview. The aim of the research was explained to all the participants and their willingness to participate was gotten through signing of a consent form. The consent form highlighted key precepts including the rights of the respondent to stop the interviews at any time, the respondent's right not to answer questions that they were not comfortable with; an assurance of their privacy as well as keeping their identity anonymous. All interviews were audio recorded with written consent of the respondents. The verbatim was transcribed and thereafter stored for analysis. All data was backed up and securely stored.

5.7 Data Analysis

A number of questions were aimed at assessing the populations' responses on a phenomenon of interest: the insurance purchase decision-making. These were questions that had already been subjected to quantitative analysis in the quantitative phase of the study. Questions that probed the effect of Economic, Social and Demographic factors on the insurance purchase decision-making and Other Risk Coping Mechanisms (ORCMs), Beliefs and the Insurance Purchase Decision (IPD) were subjected to frequency tabulation aimed at assessing congruity in the responses in the two phases of the study.

Qualitative data analysis on two questions (*the role insurance practice and management can play in promoting insurance consumption; and the role the government should play in promoting insurance consumption*) was done using Thematic Analysis (TA).

5.7.1 Thematic Analysis.

TA is a method for 'identifying analysing, and reporting patterns (themes) within the data' (Braun & Clarke, 2006, p. 79), with an aim of illustrating which themes are important in describing a phenomenon of interest (Daly et al., 1997), and the final result 'should highlight the most salient constellations of meanings present in the dataset' (Joffe, 2012, p. 211). TA uses themes embedded in the data to help explain a particular phenomenon, an attribute which makes it suited to analyse behavioural and attitude related investigations. Explaining TA, Costa et al. (2016, p. 39) opines that TA involves

> "identifying recurring messages and unifying situations through breaking of the narrative data to produce categories, looking for patterns across all data aimed at understanding the phenomenon and comparing the phenomenon in different settings".

These themes come from the respondents' perspective and experiences about a subject of interest. At the centre of TA is the concept of a theme which has been defined by Joffe (2012, p. 211) as, "…a specific pattern of meaning found in the data: it can contain manifest content that is something directly observable …across a series of interview transcripts; …they are patterns of explicit and implicit content". In summary TA is "a method of identifying and reporting patterns" (Costa et al., 2016, p. 39). The structure of these patterns will help in understanding the orientation of the thought process in relation to the insurance purchase decision-making. The aim of the research is to compare how the urban poor and the workers in the pensions and insurance industry make their insurance purchase decision-making and TA was judged as a method that would inform the analysis better.

5.7.1.1 Historical Originations of TA.

Gerald Horton founded TA. The origins of TA are attributable to the 20th Century within the social sciences and TA is reported to be rooted in the much older tradition of Content Analysis (CA) which is a historically quantitatively oriented approach (Smith, 2000). The concept of TA is looked

at as one that goes beyond observable material to more implicit, tacit themes and thematic structures (Merton, 1975) and Gerald termed such materials as 'themata'. TA allows the analysis of the frequency of codes together with their tacit meanings, an aspect that gives TA an advantage.

5.7.1.2 Key epistemological assumptions of TA.

TA is not tied to a particular theoretical orientation, making it applicable to varied theoretical and epistemological approaches (Joffe, 2012, p. 12). According to Joffe (2012), TA is a useful tool in illuminating the process of construction of a particular phenomenon and tracing how such a phenomenon develops. Due to its applicability to varied epistemological assumptions, TA serves as a useful tool in explaining social phenomenon.

TA can be used to analyse a range of research questions aimed at 'explaining a specific nature of a given group's conceptualisation of the phenomenon under study' (Joffe, 2012, pp. 13–14), and could be applied to 'open-ended responses to questionnaire items'. Due to its broad applicability, TA would give a concise explanation of the IPD process and would aid in elucidating the comparison of two groups of interest (the WPII and the UP).

5.7.1.3 Demarcation of a Theme.

There are two key distinctions in terms of theme demarcation: a theme can either be drawn from a theoretical idea (termed as deductive) or from raw data (termed as inductive). The insurance purchase decision-making has not been subjected to qualitative methods and most, if not all, of the findings in insurance research are of a quantitative nature. Data was analysed taking into account the findings of the quantitative phase (and previous quantitative results) with an aim of highlighting what has already been discovered, and more importantly, to bring to light new themes in the data. The deductive and inductive approaches were used simultaneously. The inductive approach was applied more as the themes of interest arose out of the raw data.

5.7.1.4 Why Thematic Analysis.

TA was chosen because a "rigorous thematic approach can produce an insightful analysis that answers particular research questions" (Judger, 2016, p. 2). TA allows for flexibility: "… because the search for, and examination of, patterning across language does not require adherence to any particular theory of language, or explanatory meaning framework for human beings, experiences or practices" (V. Clarke & Braun, 2013, p. 2). The investigation of the insurance purchase decision-making is an aspect that deals with human beings, could involve their experiences and or practices and it is on such a premise that TA was chosen as the method of analysis. Clarke and Braun (2013, p. 3) summarise the advantages and usefulness of TA elucidating that:

> "(a) it works with a wide range of research questions, from those about people's experiences or understandings to those about the representation and construction of particular phenomenon in particular contexts; (b) it can be used to analyse different types of data, from secondary sources such as media to transcripts of focus groups or interviews; (c) it works with large or small data-sets; and (d) it can be applied to produce data-driven or theory-driven analyses".

The data collected to answer the research questions raised in 4.2 above was investigated from a dual perspective: "one that was data driven and based on coding in an inductive way and from a research question perspective to check for consistency between the data and the research questions" (Judger, 2016, pp. 2–3). In support of TA, Joffe concludes by asserting that, " TA facilitates the gleaning of knowledge of the meaning made of the phenomenon under study by the groups studied and provided the necessary groundwork for establishing valid models of human thinking, feeling and behaviour" (Joffe, 2012, p. 2). TA was judged as a method that would provide an understanding of the thinking of the two groups and elucidate how their feelings and behaviour affect their insurance purchase decision-making. The two questions subjected to TA were of a free narrative in nature and TA was judged as the method that would highlight the key common themes that affected the IPD of the two respondent populations. The study aimed at producing data driven analyses and TA was the method of choice.

5.7.1.5 Phases followed in the TA.

Clarke and Braun (2013) propose six phases that any TA undertaking should follow. In this study, TA was undertaken following the six phased process attributable to Clarke and Braun (2013): familiarisation with the data, Coding, Searching for Themes, Reviewing Themes, Defining and naming themes, and writing up. An explanation on the six phases follow.

5.7.1.5.1 Familiarisation with the data.

This is the first step of the TA process which entails that the researcher familiarises themselves with the data of interest. In this phase, "the researcher must immerse themselves in, and become intimately familiar with, their data, reading and re-reading the data (and listening to audio-recorded data at least once if relevant) and noting any initial analytical observations" (V. Clarke & Braun, 2013, p. 120). In this research, I familiarised with the data through listening to the audio several times and transcribing it into the verbatim. Transcribing the data led to more listening to the interview audio's and hence getting very familiar with the data.

5.7.1.5.2 Coding.

This step follows after the familiarisation stage. The aim of coding is to reduce the data through dissecting the text into manageable and meaningful segments (Attride-Stirling, 2001, p. 390); it involves "the generation of pithy labels for important features of the data of relevance to the (broad) research question guiding the analysis" (V. Clarke & Braun, 2013, p. 121). This stage entails development of the coding framework which would be used in the analysis. The codes will be applied to the data set. Two types of codes were developed in this case: inductive codes grounded in the content of the data, and deductive (or theoretical) codes emanating from the past research on the subject (Joffe, 2012). Clark and Braun (2013, p. 121) caution that "coding should not only be looked at as a method of data reduction, it is also an analytic process, so codes capture both a semantic and conceptual reading of the data".

The data is then dissected into text segments using the coding framework. Such coding frameworks could include things such as "passages, quotations, single words, or other criterial judged necessary for a particular analysis" (Attride-Stirling, 2001, p. 391); and the codes were "developed to have clear boundaries so as to attain non-interchangeability or redundancy; and they had to focus on the object of analysis'. The developed codes in this instance were relevant to the research questions.

5.7.1.5.3 Searching for themes.

Having familiarised with the data and developed the coding framework and coded all the data, one begins the process of searching for themes in the data. A theme has been defined as a 'coherent and meaningful pattern in the data relevant to the research question; it can be looked at as coding one's own codes so as to identify similarity in the data' (V. Clarke & Braun, 2013, p. 121). These themes are gotten from the coded text. The process of searching for themes, according to Attride-Stirling (2001), entails identifying abstract themes from coded text segments and extracting of salient themes from the coded text. This stage involved re-reading of the text which allowed identification of the underlying patterns and structures in the text.

5.7.1.5.4 Reviewing Themes.

This stage entails going through the identified themes with an aim of refining them further into what Attride-Stirling (2001, p. 392) points out as themes that are "specific enough to be discreet (non-repetitive); and broad enough to encapsulate a set of ideas contained in numerous text segments". It entails assessing whether or not the themes work in relation to both the coded data and the full data set (V. Clarke & Braun, 2013). This process entailed paying close attention to the conceptual details of the research and undertaking interpretative work. The themes emerging out of this stage were integrated to accommodate new text segments without discarding the old ones.

Care had to be taken to ensure that each theme was unique to a particular idea while open enough to find linkages to other different text segments (Attride-Stirling, 2001, p. 392).

5.7.1.5.5 Defining and Naming Themes.

This process is undertaken once the themes have been reviewed with an aim of summarising the main themes and patterns characterising the subject of investigation. The principle themes are summarised in a succinctly and clear manner so as to report them in a more clear and compelling manner (Attride-Stirling, 2001). This stage involves analysis of the identified themes so as to establish what story the theme(s) tell about the data under analysis and it is in this stage that the themes are allocated a concise name that resonates with the what is being investigated (Attride-Stirling, 2001; V. Clarke & Braun, 2013).

5.7.1.5.6 Producing the Report.

This is the last part of the TA process. This part puts into writing the analysis and meaning of the themes drawn from the data analysis. It is the bringing together of the deductions in the summary of all major themes and these deductions and the major theory aimed at explaining the major themes, concepts, patterns and structures that arose in the text (Attride-Stirling, 2001). This final phase loops back to the research questions and addresses the questions with arguments grounded in the patterns that emerged in the interactions and analysis of the data. Clark and Braun (2013, p. 122) summarise that this phase "involves weaving together the analytic narrative and (vivid) data extracts to tell the reader a coherent and persuasive story about the data, and contextualising it in relation to existing literature". It is the pinnacle of the entire TA and communicates the outcome of the whole analysis process.

The six phases were followed bearing in mind that the phases (familiarisation with the data; coding; searching for themes; reviewing themes; defining and naming themes; and writing up) are not a linear model and the steps could be dealt with in a manner to suit the needs of the researcher

(V. Clarke & Braun, 2013, pp. 3–4). In undertaking the six phases, looping and hopping from one step to the other happened in the data analysis and this helped in attaining clarity in the eventual development of the themes.

5.8 Rigour and Trust Worthiness

Literature suggests a three stage procedure of analysing data: preparing the data for analysis by transcribing, reducing the data into themes through coding and representing the data (J. Creswell, 2013; Miles & Huberman, 1994). Patterns were highlighted through a detailed interaction with the data so as to achieve data familiarisation, undertake data coding and theme development (Braun & Clarke, 2006; Judger, 2016). The audio recordings of all the 30 respondents were listened to several times so as to attain accurate transcription and recording of the verbatim. The transcriptions were carried out in Microsoft Office Word.

5.9 Results and Discussion

This section discusses the findings of the qualitative phase of the study on a research question basis. The questions being addressed under each section have been itemised in 5.2 above. The presentation of the results is structured into three parts: 5.9.1 which discusses the findings from analysing the effect of economic, social and demographic factors in the insurance purchase decision; 5.9.2 discusses the findings from the analysis of the data pertaining to other risk coping mechanisms (ORCMs), Beliefs and the IPD; and lastly 5.9.3 discusses the results from the analysis of the data under the role that insurance practice and management should play in promoting insurance consumption. The findings of the qualitative phase are then collated with the corresponding results in the quantitative phase so as to highlight similarities, if any. The presentation of the findings follow.

5.9.1 The effect of economic, social and demographic factors on the insurance purchase decision-making.

The research investigated the effect of the economic, social and demographic factors on the IPD. The starting point was to establish whether or not people faced risks in life, an aspect that would merit having means of coping with the risks. Under the economic factors, questions were framed that aimed at getting an insight into what the respondent population's inclination towards insurance consumption would be if their income levels rose; or if the price of insurance reduced. The respondents were also asked on whether they regarded insurance as an investment, as a form of protection or as a way of saving.

The social and demographic factors were investigated so as to establish their effect on the IPD. The effect of the changes in the key variables on the IPD were investigated. The variables of interest were the availability of preferences; degrees of Loss Aversion (LA); the level of understanding of insurance (Bounded Rationality); the effect of Framing on the IPD; beliefs that people have; and also the other risk coping mechanisms that people used. The results follow.

5.9.1.1 Economic Factors and the IPD.

The respondents were asked questions around whether or not they face risks; what their inclination to purchase insurance would be if their income rose and if the price of insurance reduced. An assessment was made to understand how the respondents regarded insurance: as an Investment, as a form of protection or as a way of saving. The results are in the figure that follow.

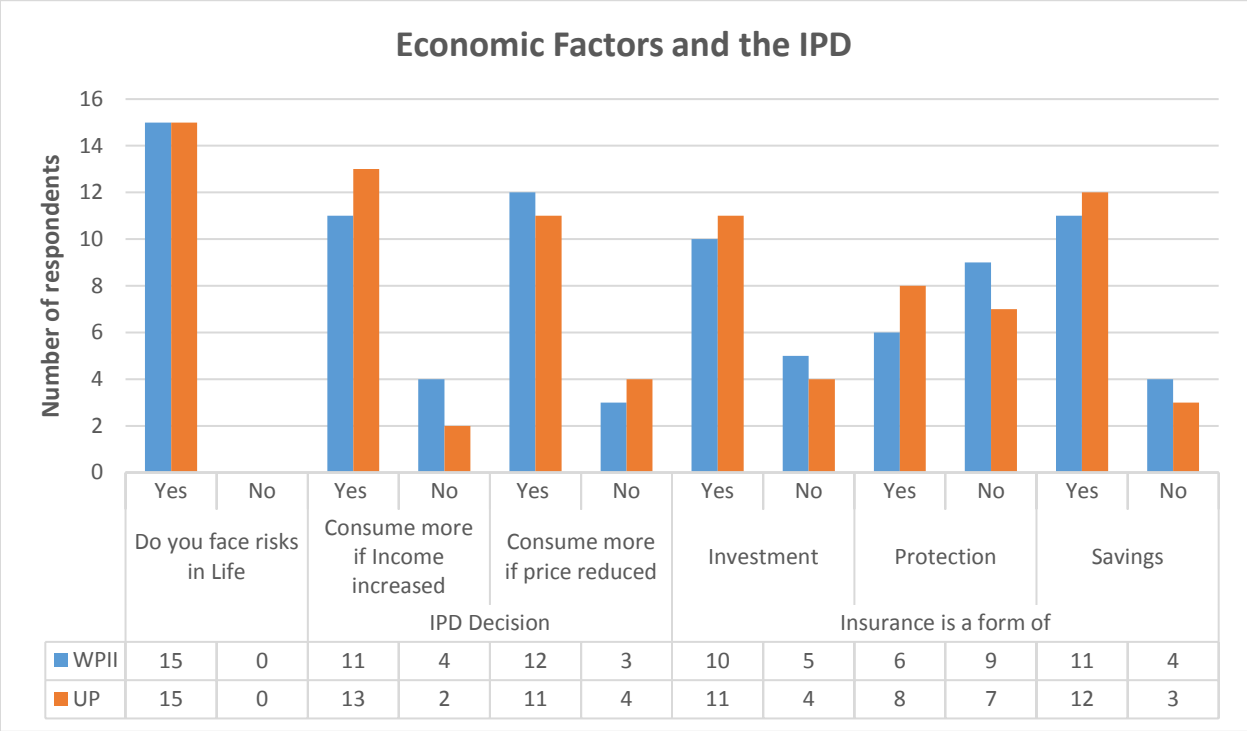

Figure 10: The distribution of responses on Economic Factors and the IPD.

5.9.1.2 Facing Risks.

All the 15 respondents from both populations indicated that they face risks in life. Risk exists in people's lives on a daily basis and as such there is need to manage these risks, an aspect that speaks to the importance of insurance and ORCMs. There is a niche in the market that insurance practice and management should take advantage of if they have to increase their GWP.

5.9.1.3 IPD when income increases.

The two populations indicated willingness to purchase more insurance if their income increased. With regard to the WPII, 11 out of the 15 respondents indicated that they would buy more insurance if their income increased (4 out of the 15 respondents indicated that they would not buy insurance even when their income increased). On the other hand, 13 out of the 15 respondents

among the UP indicated that they would buy more insurance if their income increased (2 out of the 15 respondents indicated that they would not buy insurance even when their income increased). The data indicates a similar inclination between the two populations.

The results are indicative of the perception on the pricing of insurance. The result is in agreement with the findings by Buric *et al* who concluded that people would purchase more insurance if their income increased (Buric et al., 2017, p. 147). The results are also in agreement with the findings of other reserach where there is a conclusion that income influences the consumption of insurance (Etrata Jr & Montemayor, 2019; H.-S. Lee et al., 2018, p. 12; Ondruška et al., 2018; Zerriaa & Noubbigh, 2016, p. 509).

5.9.1.4 IPD when insurance price reduces.

The two respondent populations indicated that a general drop in the price[27] of insurance would make people consume more insurance. The results were similar between the two populations: 12 out of the 15 respondents among the WPII indicated that they would buy more insurance if the price reduced (3 out of the 15 respondents indicated that they would not buy insurance if the price reduced); 11 out of the 15 respondents among the UP indicated that they would buy more insurance if the price reduced (4 out of the 15 respondents indicated that they would not buy insurance if the price reduced).

The population has exhibited a willingness to purchase more insurance if the service is made affordable (Asmare & Worku, 2018; Munir et al., 2012). This poses a challenge to the insurance practitioners in that they need to come up with micro insurance products that would speak to people's income levels. Such products, if tailored towards the needs of the people, would have potential to attract more people towards insurance consumption. Government subsidies on

[27] The price in this case refers to the insurance premiums that are paid when one purchases an insurance policy.

insurance services could also lead to a reduction in the price of insurance and may have a multiplier effect on increasing insurance consumption among the population.

5.9.1.5 Perceptions on insurance.

The respondents were asked to ascertain how they regarded insurance: as an Investment, as a form of protection or as a way of saving; and the two populations exhibited similarities in their responses. Some respondents regarded insurance as a form of an investment (WPII: 10 out of the 15 respondents; UP: 11 out of the 15 respondents) while others did not regard insurance as a form of an investment (WPII: 5 out of the 15 respondents; UP: 4 out of the 15 respondents). Investment related products are bound to receive more acceptance among the population in their quest of making investments and insurance practice and management could capitalise on such issues.

Less people regarded insurance as a form of protection, compared to those who regarded insurance as a form of an investment (WPII: 6 out of the 15 respondents; UP: 8 out of the 15 respondents). There were others who did not regard insurance as a form of protection (WPII: 9 out of the 15 respondents; UP: 7 out of the 15 respondents). Messages connoting insurance as a form of protection would receive less attention from would be consumers as few of them regard insurance as a form of protection.

The respondents were also asked to indicate if they regarded insurance as a form of a saving: the results were uniform among the two populations with more respondents regarding it as a way of saving with 11 out of 15 respondents among the WPII and 12 out of 15 respondents among the UP regarding insurance as a way of saving (4 out of the 15 respondents among the WPII and 3 out of the 15 respondents among the UP did not regard insurance as a way of saving). The population is indicative of the fact that tailoring savings related products that speak to specific population groups would be one way of eliciting more insurance consumption.

Overall, the results of the qualitative study are in agreement with the findings of the quantitative phase of the study where there was confirmation that the EFs impacts the IPD positively with

p=0.000. Downward adjustments in price and improvements in people's welfare would promote more consumption of insurance. This result is uniform for both respondent populations: indicating that if welfare increased, people would look for and consider methods of managing their risks and insurance consumption would be one of those methods. The results of the research are in agreement with the conclusion by other research that economic and demographic factors affect insurance consumption (Alhassan & Biekpe, 2016; H.-S. Lee et al., 2018, p. 13).

5.9.3 Preferences and the IPD.

The availability of preferences was investigated during the research. The aim of the investigation was to establish whether or not people had preferences (other options of managing risks) that made them not consume insurance. The research sought to understand whether societal ties (family or the community one lives in) had any impact on the IPD and if it was regarded as a form of insurance. The effect of the family size on the IPD of the respondent was also investigated. The research sought to understand the effect of the behaviour of others on the IPD of a respondent. This was aimed at understanding whether negativities from others would affect the eventual IPD of the respondent. The results are in Figure 11.

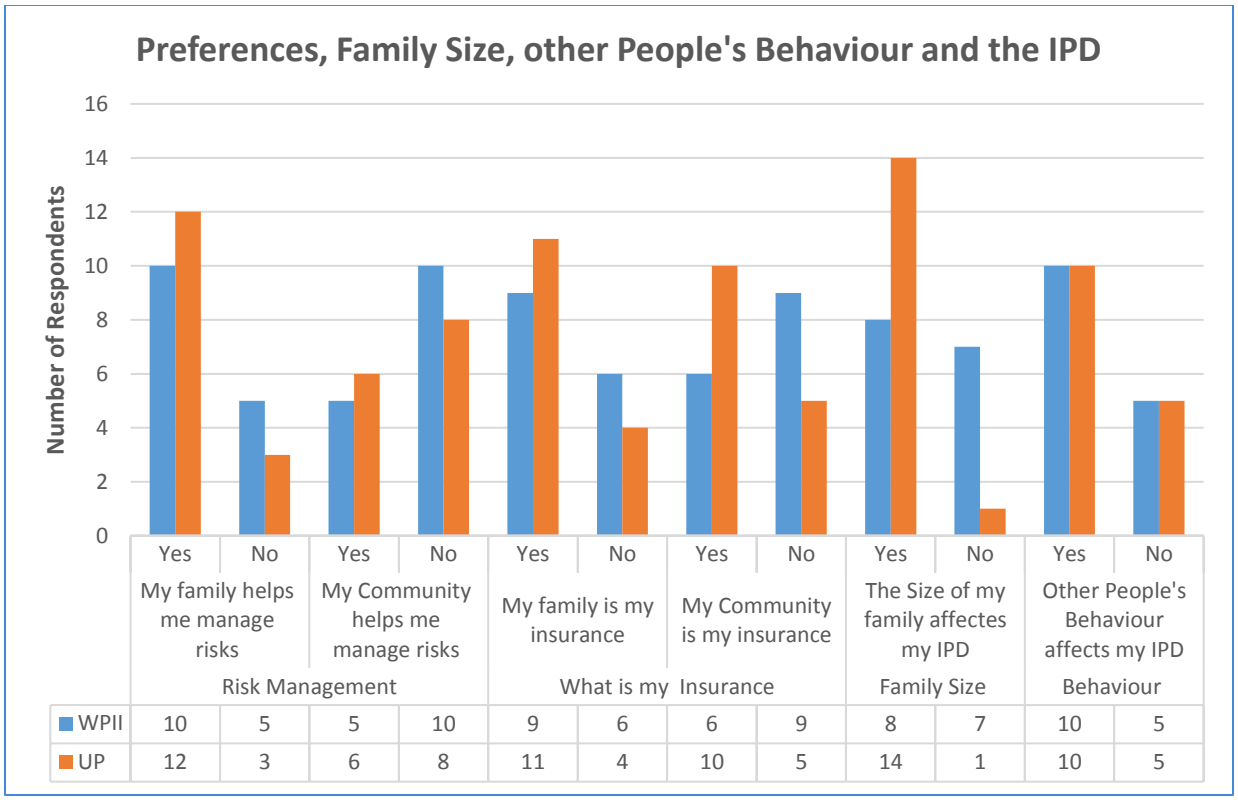

Figure 11: The distribution responses on Preferences, Family Size, Other People's Behaviour and the IPD.

5.9.3.1 Preferences in Risk Management and Insurance.

A comparison into the risk management preferences that the respondent populations have showed similarities in the results. Of the WPII, 10 out of 15 respondents indicated that they get help from their families while 5 out of the 15 indicated that they did not get any help from their families. The UP had a similar result with 12 out of 15 respondents indicating that they get help from their families and 3 out of 15 indicated that they do not get help from their families.

When it comes to the community one lives in, 5 out of the 15 respondents from the WPII indicated that they get support from the communities they live in (10 out of 15 respondents did not get support from the community they live in). Under the UP, 6 out of the 15 respondents indicated that they get support from the community they live in (while 8 out of the 15 respondents do not get support from the community they live in).

The urban poor had a higher number of people who get support from their families, as well as the communities they lived in, an aspect which would be indicative of more social ties among families and access to more help when one faces life risks.

More respondents among the UP, compared to the WPII, regarded the family as a form of insurance: 11 out of 15 respondents among the UP regarded the family as a form of insurance while only 9 respondents out of 15 among the WPII regarded their families as a form of insurance (6 out of 15 respondents from among the WPII did not regard the family as a form of insurance while 4 out of 15 respondents among the UP did not regard the family as a form of insurance).

The urban poor regarded the community more as a form of insurance compared to the WPII (10 out of 15 UP respondents regarded the community as a form of insurance whereas only 6 out of 15 WPII respondents regarded the community as a form of insurance). The WPII had more respondents who did not regard the community they live in as a form of insurance (9 out of 15 for the WPII compared to 5 out of 15 of the UP).

These results could be reflective of more community ties among the communities of the UP compared to the communities of the WPII. The pattern of the responses show that the respondents from the high density areas have more family and community ties (making them help one another more when they face life risks).

A comparison of the results between the quantitative and qualitative phase of the study on preferences available for risk management is as follows:

a) The findings under the qualitative study are incongruent with the findings in the quantitative study regarding the populations having similar ways of managing risks. The UP exhibited limited ways of managing risks whereas the WPII showed advanced methods of managing risks which included investment in equities, insurance wealth products among others. On the other hand, the UP showed strong inclination to informal kinds of business ventures and at a very small scale. The UP also exhibited having non-formal ways

of saving money through some village banking related arrangements, locally called '*Chilimba'.*

b) There was retention of the null hypothesis with regard to the nuclear and extended family and the community one lives in being regarded as a form of insurance under the quantitative phase of the study. The qualitative phase of the study highlighted congruence with the quantitative study in that the two populations both regarded the nuclear and extended family, as well as the community one lives in as a form of insurance.

5.9.3.2 Effect of the Family Size on the IPD.

The family size would affect the IPD of the UP more compared to the IPD of the WPII: 14 out of 15 respondents among the UP indicated they would increase insurance consumption if they went into the habit of consuming insurance and their family sizes increased, whereas only 8 out of 15 respondents from the WPII indicated they would buy additional insurance if their family sizes increased. The WPII had a bigger number of those who would not buy insurance if their family sizes increased (7 out of 15 respondents) compared to the urban poor (1 out of 15 respondents).

The results would be indicative of a scenario where the UP have less avenues to rely upon for risk management and hence their desire to purchase more insurance with increases in family size (Asmare & Worku, 2018, p. 151); whereas the WPII could have alternative ways of managing their risks and hence having less inclination to purchase additional insurance if their family size increased.

5.9.3.3 Effect of other people's behaviour on the IPD.

The last component to be investigated under preferences was the effect of other people's behaviour on the respondents' IPD. The results were uniform across both respondent populations indicating that the behaviour of other people would affect the respondents IPD: 10 out of 15 respondents

from both populations indicated that the behaviour of other people would affect their IPD (while 5 out of 15 respondents from both populations indicated that the behaviour of other people would not affect their IPD).

This observation is in agreement with the findings under the quantitative phase where the Levene's Test for Equality of variances highlighted a *p-value* less than 0.05. The two populations are thus uniform in the way their IPD would get affected by the behaviour of others. This aspect emphasises the importance of managing the client experiences well. If the clients are dissatisfied and feel that they have not been treated fairly, they are bound to spread negative information to other insurance consumers, or would be consumers, an aspect which will make marketing insurance a difficult task.

5.9.4 Bounded Rationality and the IPD.

The concept of Bounded Rationality (BR) was investigated with an aim of establishing whether or not people understood insurance. An assessment was made into gauging the levels of trust that the respondent populations had towards insurance companies and whether or not they needed a trusted insurer. In order to understand the adequacy of insurance products on the market, the respondents were asked what their view was in relation to the products on the market (whether their insurance needs were adequately covered or not). The respondents' were also asked whether or not they were willing to receive further knowledge on the subject of insurance. The tabulation of the results are in Figure 12.

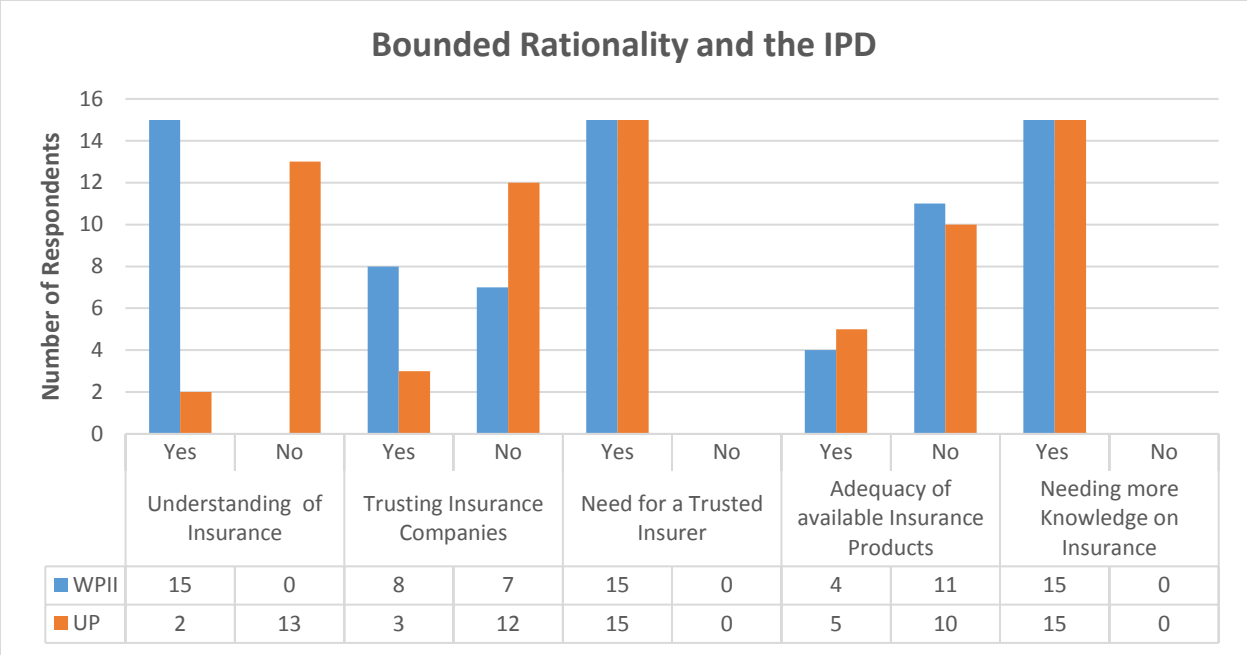

Figure 12: The effect of Bounded Rationality on the IPD.

5.9.4.1 Understanding of and the need of more knowledge on Insurance.

All respondents under the WPII exhibited understanding of insurance. Of the UP respondents, only 2 out of 15 indicated understanding insurance (13 out of 15 indicated that they did not understand insurance). Both populations (15 out of the 15 respondents) indicated the need for more knowledge on insurance. The results on understanding of insurance are congruent with the expectation as a result of how savvy the WPII are compared to the UP with regard to understanding insurance aspects.

The findings are congruent with the findings under 4.4.4 in Chapter 4 where it was concluded that a significant difference in the level of education between the two populations existed. The results indicate that education affects the level of consumption of insurance, an aspect which is attributable to the level of understanding of the phenomenon (Buric et al., 2017, p. 147; H.-S. Lee et al., 2018, p. 12), and education has been cited as key determinant of insurance consumption (Buric et al., 2017, p. 147; Ondruška et al., 2018, p. 11); as it is assumed to increase the understanding on the use and the need for insurance (Ćurak & Kljaković-Gašpić, 2011; Etrata Jr

& Montemayor, 2019; Satrovic & Muslija, 2018). Imparting more financial knowledge on people would enhance their decision-making abilities on financial products, including insurance consumption, and this would ultimately increase their levels of financial literacy, which has been reported as an aspect that positively affects insurance consumption (Dalkilic & Kirkbesoglu, 2015; Etrata Jr & Montemayor, 2019) and it also elicits the manifestation of positive financial behaviour and consequences which would benefit financial services consumption (Allgood & Walstad, 2016; Asmare & Worku, 2018; Greenberg & Hershfield, 2019; Lusardi & Mitchell, 2014; J François Outreville, 2015; Xiao & Porto, 2019).

The fact that there is willingness to receive more knowledge is an issue that can be capitalised upon to try and persuade the population to consume more of insurance services. The willingness to receive more knowledge creates a niche that requires satisfying and insurers could take advantage of this aspect. Policy makers could also take advantage of the people's need for knowledge on insurance and this would make awareness activities more appealing to people as they would be more receptive.

5.9.4.2 Trusting and needing a trusted Insurer.

With regard to trusting insurers, varied results arose. Among the WPII, only 8 out of 15 respondents trusted insurers (7 out of 15 did not trust the insurers). Among the UP, only 3 out of 15 respondents trusted insurers (12 out of 15 did not trust insurers). The result is unusual in that even those who work in the pensions and insurance industry do not trust the behaviour of their employers (the insurers). With such a situation, it becomes difficult for the WPII to instil trust to would be consumers if they themselves do not trust the insurance companies. Such gaps of mistrust would inevitably reflect in the marketing staff who try to sell insurance as some of them could be having inner conflicts on the trustworthiness of the insurers, let alone the products.

In terms of needing a trusted insurer, both populations indicated that they needed a trusted insurer fully (all the 15 respondents from both populations indicated needing a Trusted insurer). It would

be in the best interest of the insurers operating in Zambia if they did their business honestly[28] and this would act as a silent selling point which would attract more people to consume insurance services. The respondents highlighted the following:

> *"Yes I need a trusted insurer. There is need for a trusted insurer because you are putting aside a premium, a certain amount of money aside in terms of a premium with a view that in the event of a risk, I should be able to be put back where I was. So there is need for Trust."*
>
> Semi-Structured interview with a WPII A2

> *"I do not trust Zambian insurance companies. I have had bad experience that is why am with a different company now. I appreciate and trust the big players but the small players no."*
>
> Semi-Structured interview with the UP B9

The results are in agreement with the findings under the quantitative phase of the study where there was retention of the null hypothesis on needing a trusted insurer across both respondent populations. The aspect of Trust of the insurers is critical as what is offered is a service and consumers are bound to relate more to the company that they trust[29], an aspect which is supported by other research (Cai & Song, 2017; Casaburi & Willis, 2018; Guiso, 2012; Hill et al., 2016; Maiyaki & Ayuba, 2015).

[28] This refers to aspects of them honoring their contractual obligations on time and paying up claims without finding unnecessary reasons not to honor claims.
[29] Trust is equally a necessary prerequisite for patronage of insurance services even under Islamic insurance (Maiyaki & Ayuba, 2015)

5.9.4.3 Adequacy of Products.

The two populations suggested inadequacy of the current insurance products available on the market. Among the WPII, 11 out of the 15 respondents indicated that the insurance products were not adequate (whereas 4 out of the 15 respondents indicated that the products available on the market were adequate enough to meet all their insurance needs). With regard to the UP, 10 out of the 15 respondents indicated that the available products were not adequate to meet all their insurance needs (5 out of the 15 respondents indicated that the available products were adequate to meet all their needs). Some of the respondents elucidated as follows:

> *"…according to the Zambian Market and industry, I think the products are not adequate to meet my needs. There are needs that are not insured."*
>
> Semi-Structured interview with a WPII A1

> *"The current products do not address all my needs. Insurance providers are very rigid, they want to provide traditional insurance but risks are changing so insurance is not moving in to address these new risks that were non-existent before.*
>
> *One of the areas that need products is in the investment classes that is coming up now. There are a lot of Unit Trusts coming up where from inception they put a disclaimer that share prices can rise or fall. As a person who is saving I want surety that I will get back my money. Insurers can work with such services so that from where I stand as a person who is risk averse I feel protected."*
>
> Semi-Structured interview with a WPII A3

> *"No the products are not adequate. I can give an example of education for a small child. There is no insurance company that offers a policy for my child: I want to insure school fees for primary, secondary and tertiary education. None of them does that. If you want the policy it means you have to do three different policies for one person."*
>
> Semi-Structured interview with a WPII A5

"Not all of them because most of these products are more or less picked from developed countries and then brought into Zambia, all they do is they change the wording and the currency that is there. So you find that the economic situations that are found in those countries do not really speak to us here in Zambia. So there is need to re-design some of the products to meet the economic conditions of Zambia."

Semi-Structured interview with a WPII A9

"I don't think the current products do address all my needs because there are times when… say for example the insurance policy lasts for a year, then there are times when you have not claimed anything from insurance but nothing comes back to you."

Semi-Structured interview with an UP B8

"No not all the needs. There are products that I would want to be there. To cover risks for example, I would love a situation where they can cover damages caused by public nuisance and riots."

Semi-Structured interview with an UP B8

The concerns raised by respondent *A9* calls for domesticated products that speak to the local population in terms of their needs and reflects the local economic fundamentals. Another critical issue is what A3 and B8 raise: products should respond to evolving times to cover risks that arise as a result of new financial products on the market. On the hand, insurers should be able to underwrite products for things such as public nuisance. The call is for domestication and expansion of available product lines so as to capture more market and bring those uncaptured into consumption of insurance services. With regard to the UP, there is need for insurance products that speak not only to their needs, but their risk profiling and levels of income. This is a niche that micro insurance products tailored towards the UP could be introduced.

5.9.5 Loss Aversion and the IPD.

The respondent population was subjected to a test on their degree of Loss Aversion (LA). The first questions asked the respondents to rate themselves as to whether they were risk takers or not. The second question posed a situation of gambling where from the tossing of a fair coin a respondent could either win K50, 000 or lose K30, 0000. This question had only two outcomes: of winning and losing and as such it was a pure gamble. The third and last question gave a scenario which depicted a pilot program where lives could be lost or saved and it had an element of uncertainty (probability) of more lives being saved if the program worked well. The results are in the Figure that follow.

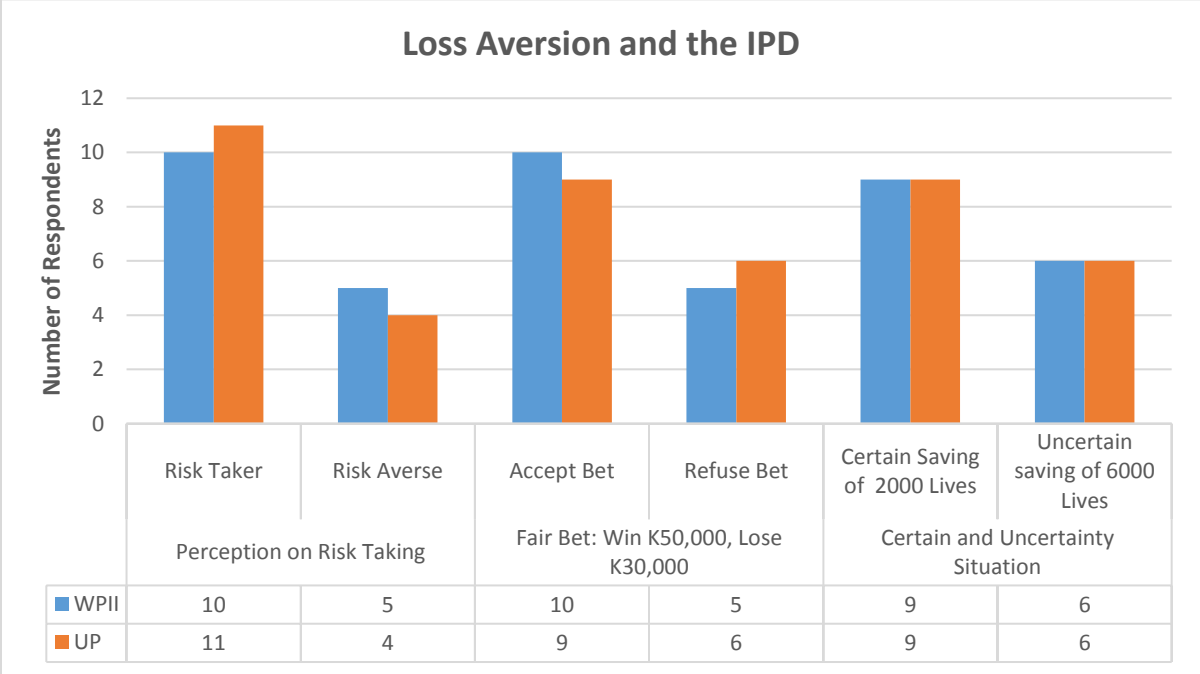

Figure 13: The effect Loss Aversion on the IPD.

5.9.5.1 Status on Risk Undertaking.

The respondent populations showed homogeneous inclination towards their perception on risk taking. Of the 15 respondents from the WPII, 10 indicated that they were risk takers with only 5 indicated that they were risk averse; whereas 11 respondents among the urban poor indicated that they were risk takers while 4 indicated that they were risk averse.

With regard to willingness to take chances, both populations showed willingness to take chances: 10 out of 15 from among the WPII indicated acceptance of the bet while 5 indicated they would not accept the bet. Among the urban poor, 9 indicated acceptance of the bet whereas 6 indicated non-acceptance of the bet.

Both populations have indicated their willingness to take chances and this is an aspect that can be capitalised upon (they would be open to take chances on consuming insurance irrespective of what the outcome would be).

5.9.5.2 Certainty and uncertain scenarios.

Using a situation that depicts loss of life, the pattern of the responses change. The respondents showed more inclination towards a sure way of saving a certain number of people and opted not to gamble with an option of saving an uncertain higher number of people. Both populations had 9 respondents opting for the certain outcome while 6 opted for the uncertain outcome of a probability of saving more people. This is indicative of people wanting to align themselves to certain outcomes as opposed to uncertain options (Richter et al., 2019; Ruß & Schelling, 2018).

Insurance comes with elements of uncertainty and it could be this notion of pure uncertainty which could be the reason as to why people are not purchasing insurance. If only the situation of pure uncertainty would be certain (a sure and known chance of an incident occurring and an insured being paid there claim) people would be inclined to purchase more insurance. As long as insurance

remains uncertain, people's inclination towards insurance would vary. A comparison of the LA results between the quantitative and qualitative study is as follows:

a) *Status on risk undertaking* – both populations had similar results in the quantitative and qualitative phase vis-à-vis their levels of risk taking. The respondents regarded themselves as risk takers and as such this trait could be harnessed to increase insurance uptake as people are willing to take chances (which would be inclusive of purchasing insurance).

b) *Certainty and uncertain scenarios* – the quantitative phase of the study indicated that both populations differed on their extent of taking chances given a certain and an uncertain scenario. In the qualitative study, the population showed affinity towards a sure scenario as opposed to a situation with pure uncertainty (the results were the same for the two populations).

The qualitative data shows that people desire sure outcomes. Insurance being a phenomenon with uncertainty, poses a challenge in that people are not sure whether they will suffer the insured risk and make a claim or not. In the absence of profit sharing policies (like under takaful), the population would be discouraged to take up further insurance if they never get to make any claims. The insurance practice could design products around profit sharing or a highly pronounced No Claim Discount (NCD) regime which has no limit of accrual, on policies targeted at increasing insurance consumption. For the UP, increasing the level of education could mitigate the perceptions on how insurance is only regarded as a way of losing money (at least when there is no claim in the period of insurance).

5.9.6 Framing and the IPD.

The effect of framing on the decision making was investigated. The population was subjected to two questions whose answers were the same but framed differently: depicting a negative situation as well as depicting a positive situation. The two questions looked at making a choice between two beef options (one which is 95% lean and one which is 5% fat) and a scenario where there would

be a loss of 10 out of 100 people or a saving of 90 out of a 100 people. The results are in Figure 14.

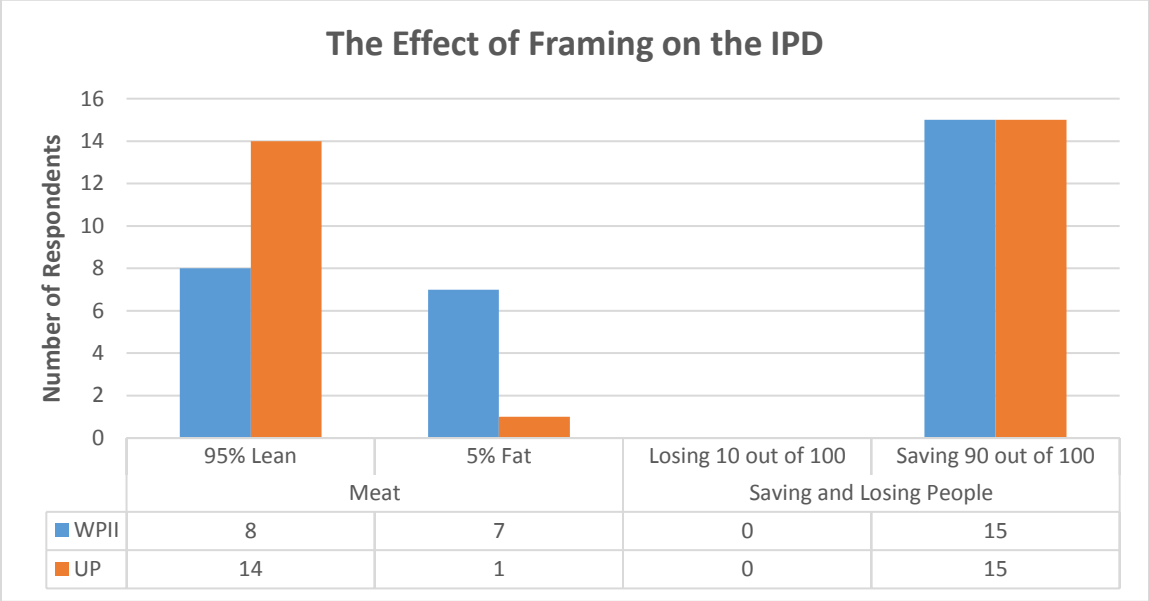

Figure 14: The Effect of Framing on the IPD.

The options on meat revealed varying responses from both populations. With regard to the WPII, 8 out of the 15 respondents indicated choosing 95% lean meat whereas 7 out of 15 chose fat meat. The urban poor had more skewed responses with 14 out of 15 choosing lean meat and only 1 out of 15 chose fat meat.

With regard to the option of either losing 10 out of a 100 lives or saving 90 out of a 100 lives, both respondent populations exhibited homogeneous options: all the respondents chose saving 90 out of a 100 lives.

The situation of lean compared to fat beef raised mixed choices: those choosing for and against fat or lean meat. For situations depicting life aspects (losing and saving lives), the inclination of people is to go for the positive outcome, that of saving 90 out of a 100 lives. Insurance promotional messages should be crafted in a way that makes people chose the positive outcome. If messages

are not tailored in a clear manner to indicate a negative or a positive, the population would depict situations of mixed choices. Positively worded insurance campaigns should be able to solicit more positive uptake than messages that depict loss and or instil fear in the would be consumers (Guillemette et al., 2018; E. J. Johnson et al., 1993, p. 49; J. Zheng, 2018, p. 14).

A comparison of the Framing results between the quantitative and qualitative study highlight that: the way a scenario is worded affects the choices that the respondents would make. In the quantitative phase of the study, there was retention of the null hypothesis (the populations did not differ in their decision-making) on the choices of the two populations given a positively or negatively worded situation. The qualitative phase of the study shows congruence of results with those of the quantitative phase of the study. The findings in this research are in agreement with other research which concluded that framing affects the insurance purchase decision making (Kurniawan & Murhadi, 2018). Care should be taken when designing insurance products as well as when coming up with insurance promotional messages as the respondents are more inclined to respond to what is positively framed (Kurniawan & Murhadi, 2018; Mitchell, 2018; Richter et al., 2019, p. 186; Serfilippi et al., 2019, p. 19).

5.9.7 Other Risk Coping Mechanisms (ORCMs), Beliefs and the IPD.

The quantitative survey had questions asking individuals whether or not they had ORCMs besides insurance. The questionnaire did not make a listing of the option available. In the qualitative phase of the study, the ORCMs that WPII and the UP use were investigated further. This was with the aim of understanding the risk coping mechanisms that people use with an aim of highlighting how insurance practice and policy making could structure the insurance financial inclusion interventions so as to increase the uptake of financial services in the country. The other objective of delving into the ORCMs was to understand what effect the ORCMs would have on insurance consumption (if the ORCMs affected people's inclination to consume insurance or whether or not people would still consider insurance if they had ORCMs in place). The results are in e Figure 15.

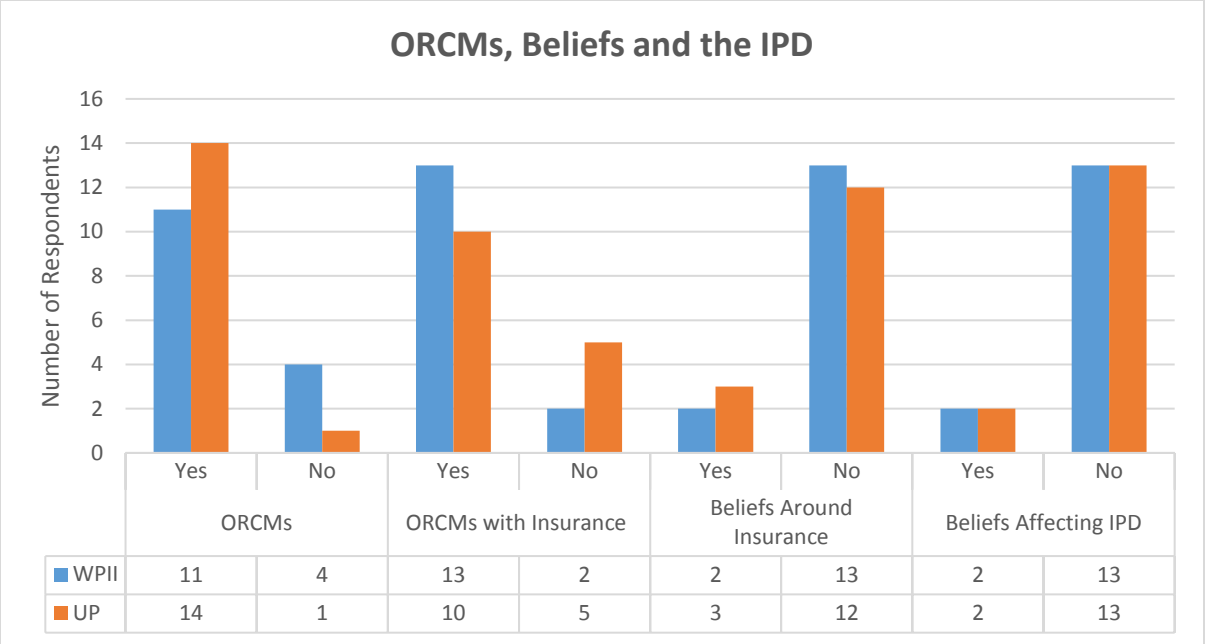

Figure 15: The effect of the Other Risk Coping Mechanisms and Beliefs on the IPD.

5.9.7.1 Having ORCMs.

Both respondent populations indicated that they had other risk coping mechanisms besides insurance and those ORCMs would not influence their decision to purchase insurance. 11 respondents from the WPII indicated having ORCMs whereas 4 respondents indicated not having ORCMs. With regard to the urban poor, 14 respondents indicated having ORCMs whereas only 1 respondent indicated that they did not have any ORCMs. The higher number of the urban poor having ORCMs would be indicative of the almost non-optional nature of having ORCMs due to not having taken up any insurance cover.

5.9.7.2 Taking up ORCMs with Insurance.

A question was posed to the respondents on whether or not they would consider ORCMs if they were covered under some insurance policy. The distribution of the responses is as in Figure 15 above. From the WPPI , 13 out of the 15 respondents indicated that they would still consider

ORCMs even if they purchased insurance, while two respondents indicated that they would not consider ORCMs if they have purchased insurance. The results from the WPII show differences with those of the UP: 10 out of 15 respondents indicated that they would still consider ORCMs even if they purchased insurance whereas 5 out of 15 respondents indicated that they would not consider ORCMs if they had insurance.

Such variations in the response would be indicative of the understanding levels as to what benefits could be derived out of purchasing insurance. The seven respondents (two from the WPII and five from the UP) mentioned that there would be no need for ORCMs if they purchased insurance.

The ORCMs impacts positively on the IPD and the result in the qualitative phase agrees with the findings in the quantitative phase under H_5 where ORCMs were found to affect the IPD positively and with a $p=0.000$ which confirmed the null hypothesis. The fact that there are alternative ways of managing risks, affects the eventual decision to consume insurance. This poses a challenge to insurers to structure products that would still be competitive considering ORCMs. However, it is important to note that the ORCMs that the two populations exhibit differ, an aspect which may be reflective of the societal ties in the community one lives in and their overall economic standing in society (and exposure to information).

5.9.7.3 Types of ORCMs used by the respondents.

The two respondent populations exhibited uniformity in terms of the types of the ORCMs that they used. A discussion on the different methods that the respondents employ in their risk management follow.

5.9.7.3.1 Investments.

The respondents highlighted that they undertook investments as a way of managing risks. The respondents invested in informal business undertakings which generated money that they would use should they face risks in life. Some of the businesses highlighted included *trading* in household consumables and *owning real estate* which was let out to generate rental income. The other 'non-traditional' investment highlighted by one respondent was the time they invested in belonging to and being part of a church grouping. The respondent mentioned that belonging to a church group was one sure way of getting help when one faced risks in life.

> *"I invest mostly in real estate from which I collect rentals and I save the money. The saved money helps me when I have funerals and other unforeseen life challenges."*
>
> Semi-Structured interview with a WPII A1

> *"I engage in real estate investment as a way of managing my risks. I also save money in the bank. This is the money that I collect from my real estate investments."*
>
> Semi-Structured interview with an UP B3

> *"I belong to a Church group as a way of managing risks. It is very informal but it is a sure way of getting help when one is in need."*
>
> Semi-Structured interview with a WPII A9

The results indicate that people undertake investments, even though the magnitude may be small, and these investments help them in mitigating life risks. Insurers should find a way through which they could cover some of the risks that the small businesses would face. This would entail structuring micro products that speak to the informal, small business undertakings that are prevalent among the respondents from the UP group.

Another approach that could be taken would be targeting to sell insurance through church groupings where people feel safe and comfortable. This would equally entail designing products

that are not traditional in nature and could be targeted at religious groupings with a listing of the covered population.

5.9.7.3.2 Savings.

The respondents indicated that they engaged in savings as another risk coping mechanisms. The savings indicated were through bank accounts (mostly from the WPII) and through mobile money accounts (mostly from the UP respondents).

> *"…ORCMs are alternatives to insurance in the sense that there is a chance that depending on the conditions that the insurer is providing, I may not have met the condition for my claim to be honoured and the loss may not be paid so I put aside something else that is dependent on me in terms of putting aside a certain amount of money."*
>
> Semi-Structured interview with a WPII A3

> *"… I also save money in the bank. This is the money that I collect from my real estate investments."*
>
> Semi-Structured interview with an UP B3

> *"I have mobile money accounts where I save money."*
>
> Semi-Structured interview with an UP B7

The responses are indicative of how inaccessible the banks are for the urban poor and they feel more comfortable opening mobile money accounts from roadside kiosks due to ease of depositing, withdrawing and sending money to whomever they want to. The key lesson arising from this is the aspect of 'informalising' financial services provision (such as bank accounts) so that people from different walks of life could be able to open bank accounts without being intimidated by the

banking environment (which is too formal). This would entail diluting the customer due diligence[30] (CDD) processes which intimidate the UP.

5.9.7.3.3 Livestock.

Both the urban poor and the workers in the Pensions and insurance industry indicated that they kept livestock as a way of managing their risks. The respondents indicated that they would sell the livestock they kept so as to help themselves when they faced life risks.

> *"Keeping livestock is one way through which I manage risks."*
>
> Semi-Structured interview with a WPII A5
>
> *"…as a way of managing my risks, I keep livestock on the farm which I sell whenever a calamity befalls me."*
>
> Semi-Structured interview with an UP B6

Livestock is one way that the respondents indicated they use to manage their risks. The livestock they keep included, inter alia, poultry, cattle, pigs, goats and sheep. The respondents indicated that they do not get any animal insurance. The findings of this research are in agreement with the findings by Karanja *et al* (2016) who concluded that, "the positive associations between livestock wealth and distance to local markets suggest that households consider livestock wealth an acceptable risk management strategy in the absence of market mediated risk reduction strategies (Karanja Ng'ang'a et al., 2016, p. 52)" and it is also a means that people use to attain risk diversification (Chantarat et al., 2013; Mude et al., 2007). This is a niche that the insurance industry could tap into. However, this would call for domestication of products that purely speak to the needs of such peasant farming communities. MI products would be very useful in this regard.

[30] This is an aspect that may have to be undertaken with utmost care as the screening of who is poor and who is not would always be a moving target. Some people could find this as an opportunity to engage into Money Laundering vices due to reduced CDD which would not be permissible.

5.9.8 Beliefs and the IPD.

An inquiry was made to assess whether or not people had beliefs (religious, cultural or traditional beliefs) that would impinge on their IPD. Both populations exhibited strong inclination to having no beliefs that affected or would affect their IPD. In terms of having beliefs, 2 out of 15 respondents from the WPII and 3 out of 15 respondents from the UP indicated that they had beliefs around the subject of insurance. With respect to beliefs affecting the IPD, only two respondents from each respondent group indicated that they had beliefs that would affect their IPD. The summary of the results is as indicated in Figure 15 above. Of interest was to find out what the beliefs that affected the IPD were. The following were highlighted:

> *"Hmmmm, around the subject of insurance, aaaahhh, there are some beliefs that prevent people from buying insurance, like more especially the funeral policies. They say if you buy funeral policies you are wishing people to die early in your family. So a lot of people stay away from buying those funeral policies."*
>
> Semi-Structured interview with a WPII A1

> *"Yes the beliefs are there. For example when I wanted to do an insurance policy for my mother who is getting into her evening of her life, … I was discussing it with a few of my relatives and my wife, more like a joking issue:… I plan to buy an insurance policy for my mother in case she dies today. Everyone was like aaah, do you wish your mother to die today? I tried to educate them saying this is an issue (death) that whether we like it or not it will come. They posed a question to me that suppose you die first, I said of course I would have left insurance cover for my mother. So there is that belief that say when you buy, for example funeral insurance for your mother that I want her to have a decent funeral, or a decent burial so to say, you are more like wishing whoever you are buying the insurance policy for to die there and then. So I think traditionally yes I have had challenges, I have encountered such."*
>
> Semi-Structured interview with an UP B4

"Yes they are there because you would hear people saying like for instance buying a graveyard which was done a long time ago, they would buy graves for themselves before they die, but traditionally they would say you are just inviting death. Why insure for a funeral, are you dying? So those are some of the negative things people would say on such insurance like the funeral one."

Semi-Structured interview with an UP B12

The major beliefs highlighted as those that would affect the IPD are beliefs pertaining to funeral related policies. In an African set-up, the respondents believe that preparing for death is a taboo and as such they are not positively inclined to purchase funeral related policies. This poses a challenge on demystifying death and preparing for a decent burial. Death risks are the ones that the respondents highlighted as posing a challenge for them to manage and leaving them to look out to the community they live in for help. Insurance practice needs to find ways of demystifying funeral policies if they are to realise an increased uptake of such products.

The results under the beliefs are in agreement with the findings under hypothesis H_4 where there was confirmation of the hypothesis that BFs impacts positively on the IPD ($p<0.05$). If a particular belief in question is negative, it would affect the IPD negatively and the opposite is true.

5.9.9 The role insurance practice and management can play in promoting insurance consumption.

The last question among the research questions as indicated under 5.2 above sought to investigate the role that insurance practice and management should play in promoting insurance consumption. In order to answer the above question, two questions were asked with possibility of follow up questions in some instances where the answer given by a respondent was not clear. The main question was:

What role can insurance practice and management play in promoting insurance consumption?

The main question was split into two-sub questions: the first part focused on what the players in the insurance industry should do to enhance insurance consumption; whereas the second one focussed on the role that the government should play to promote insurance consumption. The questions were phrased as follows:

i. What role should insurance companies play to promote (to make more people buy) insurance consumption?
ii. What role should the Government play to promote insurance consumption?

The data was subjected to thematic analysis and the analysis followed the steps described in 5.7 above. Coding was done manually. The data was systematically analysed with an aim of identifying all potential codes and themes. After coding all the data, data with similar codes were collated together. The different codes were then sorted into potential themes. The grouping of the codes into potential thematic areas is twofold: on the role that insurance practice should play to enhance insurance consumption; and the role that the government should play to promote insurance consumption.

The findings of the thematic analysis, arising out of the two questions above, are presented under the headings 5.9.9.1, 5.9.9.2 and 5.9.10 with a summary under 5.9.11.

5.9.9.1 The Role insurance companies should play to promote insurance consumption.

A number of codes arose under the role that insurance companies should play. These codes have been grouped into three (3) broad categories and then analysed further to come up with themes. The codes were grouped as follows.

5.9.9.1.1 Individual needs for insurance Consumption.

This theme was made up of a subset of codes. Some codes formed main themes or sub-themes. All the codes raised were grouped into themes and there were no outliers in the codes. The first theme that arose focussed on the ***individual needs for insurance consumption***. Under this theme, a number of codes arose and these were summarised into the benefits of insurance, knowledge and understanding of insurance, Education on insurance and publicity of insurance services.

The two populations did not differ in terms of the codes that arose from the analysis of the role that insurance companies should play in order to promote insurance consumption. Convergence of themes was attained.

5.9.9.1.2 Benefits of Insurance.

Respondents from both populations expressed the need for them to understand the benefits they would get under insurance. The data indicated lack of understanding on the nature and type of benefits that one would accrue if they bought an insurance policy and the risks insured materialised.

> *"…what needs to be done is that the investment that insurance companies do are not really seen to benefit people. I think that the Government needs to come in to force the campaign with the population so that insurance is seen as a critical component of our everyday lives."*
>
> Semi-Structured interview with a WPII A5

> *"…I do not think a lot of people really know what insurance is all about and the benefits it has for their lives."*
>
> Semi-Structured interview with an UP B1

The key element arising out of this is the need for people to satisfy themselves that there is a benefit in them accruing insurance. Once people are made aware of how they would benefit when they take up insurance, it makes it easier for them to buy insurance.

5.9.9.1.3 Knowledge and Understanding of insurance.

The two populations highlight the need for enhanced knowledge and understanding of insurance. Both the urban poor and the workers in the pensions and insurance industry exhibited lack of detailed understanding of what insurance is, the complicacies it comes with and why people should take up insurance.

> *"Like in Zambia, a lot of people do not know what insurance is."*
>
> Semi-Structured interview with a WPII A1

> *"... I feel like we are lagging behind in so many areas more especially on giving insurance knowledge to the public. It is not like the public really understand the value of insurance ...so those are the things that we are really lagging behind on. I have come across a lot of clients who normally do not know anything about insurance, when they suffer a loss they come to you and when you start explaining one or two things to them, at the end of the day they start blaming you, mentioning that you never obviously fully explained at inception."*
>
> Semi-Structured interview with a WPII A2

> *"Insurance should be made simple for those that are not educated, through usage of simpler terms for them to understand the benefits and the procedures and everything, maybe that way people would feel that it is important for them to insure. As an individual, I really don't understand insurance and most people who pass the information also seem not to be that well informed, so why should I buy insurance when the person enticing me to buy does not really understand what they are*

explaining to me, and these people selling insurance do not have any insurance policies themselves."

Semi-Structured interview with an UP B11

The public have little insurance knowledge which makes it impossible for them to understand insurance and make informed decisions to purchase insurance. The sales staff from the insurance companies also exhibit traits of not understanding insurance owing to them failing to explain things in detail.

The other aspect that respondent *B11* highlights is that those who go to sell insurance (the marketing staff) do not have any insurance policies themselves. This is an aspect that makes it difficult to persuade would be clients to purchase insurance. The aspect of people associating with a success story comes to play even on insurance consumption: would be consumers would be easily persuaded to purchase insurance if the person selling insurance to them consumes insurance and the opposite is also true if the one selling insurance to them does not consume insurance.

The people trait of reference arise in such a situation and would be consumers fail to aspire to those selling insurance to them owing to their exhibited lack of understanding of insurance. There is need for the insurance practice to consider reference traits and ensure that would be consumers are aspiring to the consumption state of their sales/marketing staff: entailing that the sales staff should have purchased some form of insurance. Once the population understand the benefits of purchasing insurance, they have knowledge and understanding of insurance, and can make positive reference to those selling insurance to them, positive strides could be realised on insurance consumption.

5.9.9.1.4 Education.

Education was another pronounced code from both populations. The aspect of education can be related to the aspects of knowledge and understanding of insurance. Education has a positive effect on the understanding and consumption of insurance (H.-S. Lee et al., 2018; Satrovic & Muslija,

2018). Some respondents lamented the lack of education on the need for and the importance of insurance:

> *"Insurance companies need to educate more citizens on the needs for and importance of insurance because some people think that insurance is just a cost, when in actual sense it is actually a saving on the part of the client and consumers."*
>
> Semi-Structured interview with a WPII A1

> *"Financial education in Zambia is very low…insurance companies should improve and contribute towards enhancing the public knowledge and awareness on the importance of insurance and available products."*
>
> Semi-Structured interview with a WPII A1

> *"… there is lack of education in the general population about what insurance can do… as a result, an ordinary citizen thinks that buying insurance is a waste of time."*
>
> Semi-Structured interview with an UP B8

> *"…they need to educate people more about insurance, because not many people know the advantages of being insured."*
>
> Semi-Structured interview with an UP B8

> *"There should be more education about insurance*"
>
> Semi-Structured interview with an UP B8

Other respondents highlighted the need to educate the younger populations. This is an area that the respondents viewed as one that would have a long lasting impact if and only if the younger generations grew up with the right attitude towards financial products such as insurance:

> *"There is need for insurance companies to invest in education: educating the future generations as well as those that impart knowledge to others (the Teachers).*

Education of the younger population would have a higher impact as their mentality would change at an early stage in life."

Semi-Structured interview with a WPII A9

The responses from the two populations indicate the fact that education would contribute positively towards enhancing the consumption of insurance and this is in line with other research that concluded that education has a positive effect on insurance consumption (Etrata Jr & Montemayor, 2019; H.-S. Lee et al., 2018). Another important aspect that arise out of this code is the fact that the generational 'non-appreciation of insurance' should be curtailed by beginning to teach the population about insurance at a tender age. This would entail tinkering the education curriculum so that it involves aspects of financial education such as insurance. This is envisioned as an aspect that would increase insurance consumption in the long term.

5.9.9.1.5 Publicity.

Publicity (in the form of advertising and marketing, awareness, and sensitisation) was another sub theme that arose in the data analysis. Both respondent populations highlighted the absence of publicity leading to low levels of awareness and a population that is not informed on the benefits and usefulness of insurance. Respondents mentioned that people did not know the importance of insurance in their lives:

"Insurance companies should do a lot of sensitisation, awareness and marketing. Like in Zambia, a lot of people do not know what is insurance, I think if you even talk about the penetration levels in the industry, maybe it is even less than 3%."

Semi-Structured interview with a WPII A1

"…Ahhh the insurance industry in Zambia has not distributed more information to the people. As a result, most of the people are not aware of insurance. So I feel in terms of information we haven't sensitised people a lot."

Semi-Structured interview with a WPII A6

"I think the first thing that insurance companies need to do is to sensitise people. I don't think a lot of people really know what insurance is all about and the importance it has in their lives."

Semi-Structured interview with an UP B1

"I think people need to be sensitised more about insurance. Like make it simple for those that are not educated, explain it in simpler terms for them to understand and really understand the benefits and the procedures and everything. Maybe that way, people would feel it is important to insure."

Semi-Structured interview with an UP B11

Publicity is an activity that is needed if the market is to appreciate the insurance phenomenon. The population (both the workers in the pensions and insurance industry and the urban poor) lament the absence of publicity activities such as advertising and marketing, awareness and sensitisation. The absence of advertising and marketing were highlighted as having a negative impact on the awareness of the population on insurance services. Insurance companies should invest in publicity activities as this would have a positive impact in people getting to know about insurance and what they would benefit should they consume insurance.

5.9.9.2 Insurance practice requirements to enhance insurance consumption.

Two major themes/codes arose under the insurance practice requirements: these were service quality and honouring of contractual obligations. The two populations converged in terms of what they would want to see pertaining to the practice of insurance companies.

5.9.9.2.1 Service Quality and honouring of contractual obligations.

The respondents lamented the poor service that they receive(d) from insurance companies: They complained of having experienced poor service from the insurance companies. In the instances where a respondent had not encountered the poor service themselves, they indicated knowing someone close to them who was a victim of poor insurance service. The respondents also experienced, or knew someone who experienced, non-honouring of obligations by the insurance companies. Insurance companies were being cited as delaying the payment of premiums, finding unfounded reasons so as to make the claims inadmissible, and in some instances accepting the claim but having no liquidity to pay the claim. This made many clients question the need for insurance if when a risk befalls one they cannot even be restored to their original position.

> *"I think the first thing the insurance companies would need to do is to improve their claim settlement; if the clients claims experience is bad, it reduces their willingness to purchase insurance and even the message they pass on to their friends and other people would be negative such that even the people who do not yet have insurance would not be very positive about it."*
>
> Semi-Structured interview with a WPII A10

> *"…the attitude of the insurance companies where they take a month or two months to process claims, I think it hinders more people getting into insurance consumption."*
>
> Semi-Structured interview with an UP B4

> *"Insurance companies should attend to their clients in good time instead of delaying payments unnecessarily. In short they just need to improve their capacity especially small insurance companies."*
>
> Semi-Structured interview with an UP B8

This findings in the qualitative phase confirms the findings under the quantitative phase where people indicated that they would spread negativities about insurance and their decision-making is affected by the negativities they hear about insurance service provision.

5.9.9.2.2 Policy/Regulation as a methods of enhancing consumption – Mandatory (Compulsory Insurance).

Arising out of the thematic analysis were matters on how the policy on the existence of insurance business should be: whether insurance should be made mandatory or not.

The two populations exhibited differences when it came to regulatory methods that they consider as ones that would enhance insurance consumption in Zambia. The major codes that arose in the data from the workers in the pensions and insurance industry delved around making insurance mandatory (compulsory). The respondents were of the view that if insurance was to be made mandatory under the law, people would have no option and would buy insurance and only then would they understand the need of having insurance.

> *"Insurance companies should lobby the government so that there is compulsory insurance for everyone in one way or another, whether one is in the formal or informal economy. People are not taking up insurance and as such insurance should become compulsory by law."*
>
> Semi-Structured interview with a WPII A5

> *"Insurance should be made mandatory by law. If insurance is made mandatory by law, there will be more people taking up insurance."*
>
> Semi-Structured interview with a WPII A6

However, such a response is biased to one sample (the workers in the pensions and insurance industry), which would be indicative of their inclination to sell more through compulsion as opposed to engaging into client mobilisation through marketing and other promotional activities.

This is indicative of the self-interest aspects that those who work in the insurance industry are only premised on maximising their GWP without being very concerned of the key fundamentals (peoples understanding of insurance benefits, their knowledge on insurance, the benefits they would derive out of insurance etc.) that would lead to sustainable insurance industry growth. This equally highlights the pitfalls of a liberalised market where entities are purely concerned about the profits they would derive out of their investment and not very concerned about the expenditures that connote traits of a public related nature.

The urban poor, on the other hand, would want to see a situation where the insurance companies reach out to them, simplify the message, and make insurance more understandable. The data indicate that once the population understands the benefits of taking up insurance, they are bound to consume more insurance.

5.9.10 The Role the Government should play to promote insurance consumption.

The last part of the question looked at the role that the government should play to enhance insurance consumption. The thematic analysis yielded few and homogeneous codes among both populations. These codes have been grouped into two (2) broad categories and further analysed to come up with themes. The grouping follows.

5.9.10.1 Affordability, Subsidies and Incentives.

The aspect of affordability of insurance arose. The respondents indicated that the taxes[31] lumped on insurance should be scrapped so as to make insurance cheaper and accessible by low income populations.

> *"… Government should consider scrapping-off some of the taxes put on insurance, like the insurance levy and others, so as to make insurance more affordable."*
>
> Semi-Structured interview with a WPII A9

The population showed willingness to purchase insurance should it be cheaper and within their income thresholds. The levels of what thresholds of income would trigger insurance consumption are, however, subjective. Government might wish to look at the taxation structures of insurance services and work around the tax rates so as to make insurance more affordable.

Other respondents proposed introduction of subsidies on insurance services which would make insurance affordable and would promote financial inclusion.

> *"Government should put a subsidy on the cost of insurance on some products so as to make them more affordable for the people."*
>
> Semi-Structured interview with an UP B1

> *"The Government needs to come in and subsidise insurance so that people can afford it."*
>
> Semi-Structured interview with an UP B6.

[31] As at March 2018 there is a 3% insurance ley collected by the Zambia Revenue Authority and the insurance companies pay regulatory levies (at a rate of 0.8% of the GWP for the GI and 0.5% for the LI) to the Regulator.

Incentivising the market players was one common code that emerged. The respondents highlighted the lack of incentives when it comes to insurance companies setting up in the rural areas. Government could consider introducing incentives so as to allow the insurers set up base in rural areas, an aspect which will bring the service closer to the people and would have a positive impact in promoting financial inclusion for the excluded populations.

> "*In terms of government contribution towards insurance consumption, what the government needs to do is to scrap off the 3% insurance levy, doing that would mean premiums going down and it will be more affordable for clients to access insurance."*
>
> Semi-Structured interview with a WPII A9

> "*The Government should provide incentives in form of tax breaks for insurance companies that are setting up in rural areas and especially those that are promoting climate resilience products."*
>
> Semi-Structured interview with a WPII A9

> *"Government needs to create some enabling environment for those insurance players that want to set up in rural areas where the return will definitely be low. Government has to create an enabling environment through tax incentives so as to motivate insurance companies."*
>
> Semi-Structured interview with a WPII A9

Setting up entities in the rural areas would be one way that would force insurance companies to innovate away from the traditional products that appeal to town dwellers through considering products that are of a MI nature and would appeal to the rural population and also domesticating the traditional products to those that would appeal to the needs of the rural population. The data indicates that the cost of insurance is high and as such it affects financial inclusion. Introduction of subsidies, making insurance more affordable and incentivising insurers to set up in rural areas would enhance the consumption of insurance services and thus contribute to financial inclusion.

5.9.10.2 Policy on Insurance – Compulsory/ Mandatory.

There was thematic convergence between the two populations with regard to the regulatory policy on insurance. Both population would want to see a regulatory regime that made insurance compulsory or mandatory.

> *"Government can contribute towards the enhancement of other forms of insurance consumption by making it compulsory just as they have done with motor vehicle insurance. People have a tendency to learn from others, so if insurance is made compulsory it is going to increase the chances of people suffering losses and being compensated."*
>
> Semi-Structured interview with a WPII A3

> *"Government needs to make insurance compulsory. Basically it would benefit insurance companies but the government will also benefit through tax income that will go into the Government coffers."*
>
> Semi-Structured interview with a WPII A5

> *"The Government should make all insurance mandatory by law just as they have made it mandatory for motor vehicle third-party insurance."*
>
> Semi-Structured interview with an UP B5

> *"The Government should make insurance mandatory for everyone so that no one depends on others when a calamity affects them."*
>
> Semi-Structured interview with an UP B12

The two respondent populations were of the view that if insurance was made compulsory, people would be forced to purchase insurance and would thus realise the benefits of insurance. The key reference point was that of third-party motor vehicle insurance which is mandatory by law. The population felt that making insurance mandatory would force people to buy and appreciate insurance and would be one way of increasing insurance consumption.

5.9.11 Summary of the Thematic Analysis of the role that insurance practice and management should play to enhance insurance consumption.

The role that insurance practice and management should play highlighted three key themes: financial literacy; Service Quality and Regulation. The diagrammatic representation of the thematic analysis follow:

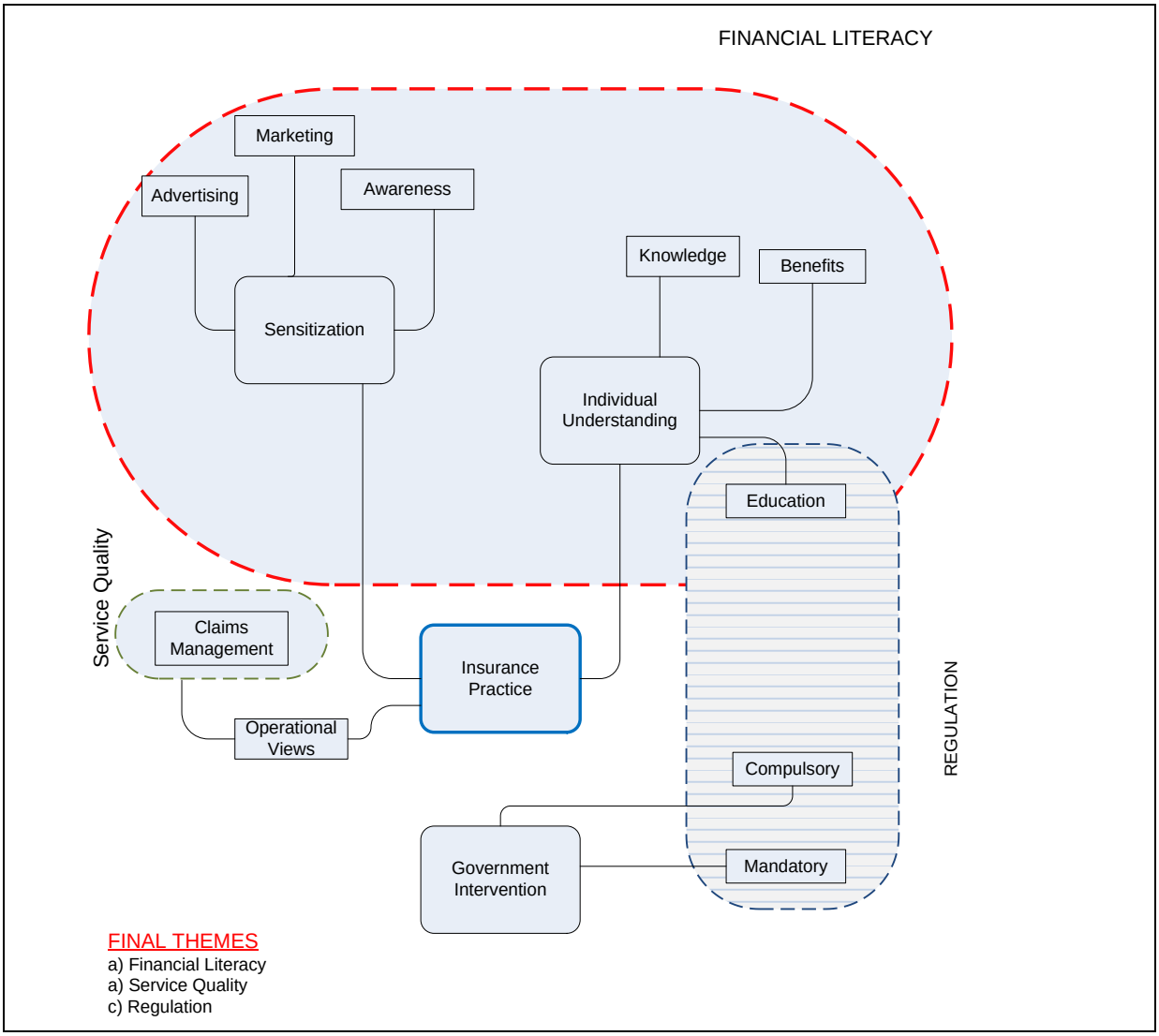

Figure 16 : Summary of the Role that should be played by Insurance Practice and Management Should and the Government to enhance insurance consumption.

5.10 Summary of Chapter

The analysis of the qualitative results has evidenced varying results between the WPII and UP both in the quantitative and qualitative phase of the study. Some findings are congruent in both studies and highlight issues of paramount interest; the TA has highlighted the themes that arise out of the role that insurance practice and management and the government should play in enhancing insurance consumption. Other findings are incongruent and point to areas requiring further research.

Economic factors have shown a positive relationship with the IPD. The respondents indicated facing risks in their day to day life, an aspect which, normally would, necessitate insurance consumption. Income has a positive effect on the IPD: the more income the population has, the more inclined they would be to purchase additional insurance. However, some of the respondents indicate that they would not purchase additional insurance owing to their current consumption being adequate. Price equally affects the IPD of the people: the population indicated an inclination to purchase more insurance if the price of insurance reduced. However, it was pointed out by the respondents that the reduction in price should not be as a result of making the service quality poor. If the EFs were favourable and other factors also improved, the population would be inclined to purchase more insurance.

The research has highlighted how people categorise insurance in their experiences of insurance. Most of the respondents regard insurance as a form of an investment. This would entail that people expect a return at the end of the investment period. With conventional insurance where there is no profit sharing (other than accruing NCDs), it becomes a difficult undertaking to sell insurance as an investment if the consumers do not get to realise a reasonable return on the *endowment policies* that they purchase. An opportunity arises in that the insurance practice could come up with more products that make an *'investment appeal'* to the population. There was congruence of results between both populations in that they did not regard insurance as a form of protection. On the other hand, the respondents from the two populations regarded insurance as a way of saving. In line with the aspect of insurance being regarded as an investment, insurance practice and

management could take advantage of the inclination of the population by coming up with products that are of a savings nature (or have a savings component).

An analysis of the preferences indicated that both populations get support from their nuclear and extended families whenever a risk befell them. The UP had more support from the community they live in compared to the WPII, a situation which could be indicative of the extent of social cohesion in their localities. Both populations regarded their families as a form of insurance whereas there were differences in regarding the communities the respondents lived in as a form of insurance. The WPII did not regard the community they live in as a form of insurance while the opposite was true for the UP. The family size was highlighted as affecting the IPD: the bigger the family, the more the respondents would be inclined to purchase insurance, all things being equal. The other area of congruency was on the effect of other people's behaviour on the IPD: both populations indicated the behaviours of others would affect their IPD. The conduct of insurers should always be beyond reproach if negative messages are to be stopped from filtering to the community.

The level of understanding insurance differed between the two populations with the WPII having a higher level of understanding of insurance compared to the UP. The WPII were split into half in terms of trusting insurance companies (half did not trust insurance companies while the other half trusted insurance companies) while the UP did not trust insurance companies. However, both populations indicated that they needed a trusted insurer always. This points to the importance of honouring contractual obligations by the insurers. The market does not have adequate insurance products to cover the populations' needs. More product that are domesticated to the local conditions of the country (economically and on the aspect of risk profiling) would be one way to capture the probable consumers. There was agreement in the need for further insurance knowledge among the population: the population is willing to be educated on insurance matters.

The degrees of LA differed among the respondents with both populations indicating that they were willing to take risks. In terms of taking bets, the population exhibited positive inclination to taking bets. However, the results indicate an inclination towards more certain outcomes when it comes to

saving lives. Most data shows that people are more inclined to positive outcomes if lives are concerned. This resonates with the framing aspects of the decision-making as highlighted below.

Framing has an effect on the decision-making of the population. The way an option is framed would either encourage consumers to make a decision for or against a particular item. The two populations showed inclinations to positive outcomes (both in terms of food as well as saving lives). Lessons could be drawn on how to frame insurance promotion messages so that what is reflected is a positive outcome.

The population highlighted having other methods of managing their risks and they would still use the ORCMs even if they bought insurance. Understanding these ORCMs in detail would inform insurance practice on how to appeal to the populations' interest. The respondents highlighted that they did not have beliefs around the subject of insurance and there were no beliefs that were affecting their IPD. However, life insurance policies (funeral policies in particular) were highlighted as an area that requires more work to demystify the perception that people have towards life insurance products.

With regard to Thematic Analysis (TA), three major themes emerged: *financial literacy, service quality and regulation*. The population is in need of further financial literacy particularly in areas of insurance. The appreciation of the intricacies of insurance could be a positive step towards increasing insurance consumption. The population is desirous of high quality insurance service that responded to the needs of the people and honoured the contractual obligations that are specified in the policy documents. The last thing that arose was on the regulation of insurance. Government should look into the aspects of regulation: the population was of the view that insurance consumption should be made compulsory (at least for some policies). However, there were differences in the inclination towards making insurance compulsory with the WPII more inclined to have insurance mandatory, whereas the UP did not indicate any inclination towards making insurance mandatory.

Chapter 6: Summary, Reflections and Conclusion

6.1 Introduction and Importance of the Study

The thesis has discussed the insurance purchase decision-making in Zambia using a mixed methods sequential explanatory study. The increasing importance of the financial literacy themes and the financial literacy agenda justified the research topic.

The prior research surveyed in the research looks at the determinants of the insurance purchase decision-making in different jurisdictions focussing on various variables of interest. Prior research on insurance consumption has purely been quantitative in nature.

Emanating from the review of prior research in Chapter 2, it was highlighted that the research agenda on insurance consumption has not delved into the qualitative domain of research and thus could be missing out on individual experiences on the phenomenon of insurance consumption. The insurance purchase decision-making has not been investigated via a dual prism of mixed methods and the particularities of the consumer behaviour have not been subject of exhaustive research (Ulbinaite et al., 2013, p. 144). This research combined both the quantitative and the qualitative methods via the mixed methods approach while employing behavioural economics tenets. The methods chosen led to a deeper understanding of the insurance purchase decision making in Zambia. The gaps highlighted in the literature informed the research framework and design of the thesis highlighted in Section 3.4 of Chapter 3.

6.1.1 Structure of the Chapter.

This chapter gives the context and background to the study and highlights the gaps in the relevant prior research. Section 6.2 recaps the research questions that emanated from the gaps in the literature. Section 6.3 summarises the methodological orientation of the thesis and highlights how the methodology adopted addresses the research questions better. Section 6.4 integrates the

findings and highlights the contributions thereto and also proposes areas for future research. Section 6.5 outlines the limitation of the thesis while section 6.6 concludes the thesis.

6.2 Overview of the Research Questions

The thesis started with a premise that research questions should emerge from the research process rather than being determined at the outset of the research (Hopper & Powell, 1985). However, an over-arching mixed methods research question that directly addressed the research objectives was set:

> *To what extent and in what ways do qualitative interviews with the urban poor and workers in the pensions and insurance industry explain in detail the causal relationship between insurance consumption decision-making and economic, social, demographic factors and information availability, via a complimentary mixed methods analysis?*

To fully address the above research question, preliminary sub-research questions were defined and these were divided under the two phases of the study, the quantitative and the qualitative phase:

6.2.1 Quantitative Research Questions.

The questions below informed the quantitative phase of the inquiry.

i. What is the effect of economic, social, structural factors and demographic factors on the decision-making in the purchase of insurance in Zambia?
ii. Do people have sufficient information with which to make insurance consumption decisions?

6.2.2 Qualitative Research Questions.

The qualitative research questions were to be developed from the analysis of the quantitative data. However, preliminary questions were set to be used as a guide in informing the qualitative inquiry. There was no deviation from the preliminary questions set out in chapter one as bellow.

i. How do the economic, social and demographic factors affect decision-making in the purchase of insurance?
ii. What other risk coping strategies do employees in the pensions and insurance industry and the urban poor use?
iii. What role can insurance practice and management play in promoting insurance consumption?

Both the quantitative and qualitative questions were investigated during the research so as to fully gain insight into the main research question.

6.3 Overview of the Thesis Conceptual and Methodological Framework

The aim of the thesis was to investigate the determinants of the insurance purchase decision-making in Zambia and compare the decision criteria between two populations of interest: the urban poor and the workers in the pensions and insurance industry. The major interest was to understand how the urban poor and the workers in the pensions and insurance industry compare in their decision-making on insurance purchase as well as understanding the perceptions on insurance and the risk coping strategies that the two populations use.

The research questions were investigated through a two phased mixed methods sequential explanatory study where the qualitative findings were used to explain the quantitative findings in detail. The qualitative enquiry was structured following areas that remained unanswered in the quantitative phase and also to provide detailed understanding on areas that required more personal interactions with the respondents.

The first phase of the study was the quantitative part which collected data using a survey questionnaire. The respondents from the survey were drawn from the workers in the Pensions and Insurance industry and the urban poor. The urban poor were drawn from the Mandevu high density area in the Lusaka district of Zambia. The data was analysed using IBM's SPSS Version 25 and AMOS Version 25. Some areas of the analysis gave conflicting results that necessitated a follow-up in the qualitative phase of the study.

The second phase of the study was the qualitative part that delved into detail on the aspects from the quantitative part of the study that were not clear enough or had conflicting results. The respondents were drawn from those who participated in the quantitative phase of the study. The preliminary questions in the research were used as well as the areas that arose in the quantitative results that needed further investigation. Data analysis was done using frequency tabulation so as to establish decision congruity with the quantitative results. Thematic Analysis was used on two questions that were of a free narrative in nature.

The integration of the quantitative and qualitative results follow in section 6.4 where the contribution of the thesis are also highlighted aimed at providing insight and context to the subjective, objective and individual factors that have a bearing on the insurance purchase decision-making in Zambia.

6.4 Discussion of Results

This section discusses the results of the thesis on an objective by objective basis. The discussion incorporates findings from both studies: the quantitative and qualitative phases. Exploring the research objectives required utilisation of both quantitative and qualitative methods. The qualitative methods were used to explain in detail the areas that could not be explained using quantitative methods, following a sequential design. The data collected from the questionnaire was analysed statistically using IBM SPSS 25 and AMOS 25. Some of the questions were analysed using Thematic Analysis (TA). The areas requiring further detail were investigated further through

interviews. The interviews were conducted from among the respondents who took part in the quantitative phase of the study. The respondents were from the urban poor and the workers in the pensions and insurance industry and drawn from areas as specified in chapter 3 and 6.3 above.

6.4.1 Objective One: Assessing the Decision-Making process in the Consumption of Insurance.

The research sought to assess the decision-making process in the consumption of insurance. The analysis revealed a very complex decision-making process that both populations of interest undergo. The decision-making process is made complex as a result of the interaction of a number of factors among them Economic Factors, Social and Cultural Factors and personal and demographic factors. The ever presence of behavioural factors makes the insurance purchase decision-making more complex.

The consumers of insurance have to strike a balance in terms of financial resources owing to competing needs from the same resource envelope. The decision-making process is one that is affected by the social environment (influence from peers and relations) a particular person finds themselves in and their economic situations (levels of income) at the time of making a decision. Not only do the economic and social factors affect the decision-making, the behavioural factors also have a bearing on the decision-making process.

The findings are in agreement with the other research that have concluded that the decision-making process in insurance consumption is a complex one and is affected by a number of factors as highlighted in objective 2 under 6.4.2 that follow.

6.4.2 Objective Two: Understanding the effect of Economic Factors, Social and Cultural Factors, Structural Factors, and personal and Demographic Factors in the process of Decision-Making in the Consumption of Insurance.

The analysis of the results in both studies revealed that the insurance purchase decision-making was affected by economic factors, social and cultural factors, structural factors and personal and demographic factors. Both respondent populations showed that these factors affect their IPD. However, the effect was different between the two populations: an aspect which would entail the differences in the levels of education, exposure to information and understanding of the aspects around the phenomenon of insurance.

With regard to economic factors (price and income levels), the analysis indicate that EFs affect the IPD of the respondent population. Social and cultural factors (perceptions, Experiences) were also cited as affecting the IPD. Demographic factors (changes in family size) was also cited as an aspect that would affect the IPD of the respondents.

The consumers' decision-making was impacted by the variables under this objective, an aspect in agreement with other research as indicated in Chapter 5 above.

6.4.3 Objective Three: Assessing whether people have sufficient information with which to make insurance Consumption Choices.

The analysis of the results reveal significant differences across both populations in terms of the level of education, an aspect which has a bearing on the understanding of insurance and the eventual purchase decision that would be made. The workers in the pensions and insurance industry exhibited more understanding of the phenomenon of insurance compared to the urban poor. The urban poor, on the other hand, lacked detailed understanding of insurance and this aspect left them prone to making incorrect decisions on the subject of insurance.

The findings are in agreement with the findings by other research that have indicated that education makes people more aware of the risks they face and as a result they are able to make appropriate choices in managing the risks that they face in life[32] (Buric et al., 2017; Ondruška et al., 2018).

The respondent populations exhibited willingness to receive more knowledge on the subject of insurance, an aspect which is a positive trait in terms of enhancing financial literacy. The efforts of making the recipients of the financial information more receptive would be minimal as the population has showed willingness to receive more information.

6.4.4 Objective Four: Assessing the (potential) contribution of insurance practice in promoting insurance consumption.

The thesis investigated what the respondents viewed as actions that the insurance practice and management could do to contribute towards the enhancement of insurance consumption. The inquiry also delved into what government could do to promote insurance consumption. This objective was assessed from the (would be) consumers' perspectives on actions that they judge as ones that would enhance insurance consumption. The questions addressing this objective were of a free narrative in nature and allowed the respondents to fully articulate themselves on what needed to be done. The data was analysed using Thematic Analysis as indicated in chapter 5 above.

The analysis of the results revealed a number of *codes* that the respondent population felt needed to be looked into if insurance consumption was to improve. The *codes* that arose were summarised into three major *themes* as the ones that would contribute to increased insurance consumption in Zambia.

[32] Some of the ways of managing the risks would be through insurance.

6.4.4.1 Financial Literacy.

The analysis of the data indicated that Financial Literacy was an aspect that would positively impact insurance consumption. Financial literacy would enable people understand insurance more and it would enable them make informed decisions on risk management aspects including insurance consumption. This would entail undertaking more advertising, marketing, awareness campaigns and sensitisation activities. Financial literacy would also include people having more understanding on the benefits of insurance. Financial literacy would increase consumption of financial services including insurance consumption (Dalkilic & Kirkbesoglu, 2015).

6.4.4.2 Service Quality.

Service quality came out as another critical theme that insurance practice and management needs to work on particularly as it relates to honouring of contractual obligations as and when they fell due. The theme on service quality bordered on aspects of claims management and operations of the insurer. The respondents indicated general dissatisfaction with the way some insurers managed their claims and ultimately their operations (as relating to refusal to honour claims). Service quality is critical in the enhancement of insurance consumption and the findings are in agreement with other research on this phenomenon (Ali & Tausif, 2018; Gunawardane et al., 2016; Mohammad & Abu-Laimon, 2013).

6.4.4.3 Regulation.

The analysis indicated that the aspect of regulation is one theme that should be taken into account if insurance consumption is to improve. It is an aspect that points to the government involvement in the Regulation of insurance. The respondents indicated that some insurance products should be made compulsory so that people are forced to insure and in this way the problem of low insurance consumption would have been addressed. There would also be more stories on insurance if more people consumed more insurance.

However, making insurance compulsory may be an aspect that benefits the insurers more than the consumers and should be done with care especially as the insurance market is a liberalised market.

The views that the respondents raise on what insurance practice and management should do informs the insurance practitioners on what the would be consumers expect and this makes it possible for them to target the promotional messages to what the consumers would need. Addressing the highlighted aspects would have (potential) positive effects on the IPD.

6.5 Implications of the Findings for the future development of the insurance industry in Zambia

This study would not be complete without highlighting how insurance consumption, developmental improvement to the industry as a whole and overall financial inclusion might be developed in Zambia. The mixed methods used in exploring the insurance purchase decision-making maybe useful in highlighting areas that may play a critical role in the enhancement of insurance consumption in Zambia.

6.5.1 Change in insurance practice and management.

Insurance practice and management needs to begin to change their modus operandi in relation to the interactions that they have with their clients. The key change that is required of insurance practice and management is in the area of service quality, particularly claims handling. There is need for improved claims handling and honouring of obligations by the insurance companies as and when they fall due.

This aspect may speak to the extent of regulation on these companies particularly on market conduct related issues (the facet under which claims handling falls). Improvements are needed in service quality if the consumers are to trust that the insurers will honour their obligations as and

when they fall due. Once the service quality improves, there would be more positive stories on insurance consumption and this could enhance the levels of insurance consumption owing to high confidence in insurance products.

6.5.2 Government intervention in enhancing insurance consumption.

Further to the discussion above, government needs to intervene in instances where there is market conduct failure by the insurers (failure to honour matured obligations and unnecessary refusal of claims). The conduct of the insurers need to be looked into so that the consumers feel protected and this would build more confidence in the market. Another area of intervention would be through provision of an enabling environment which encourages private sector involvement in businesses in the rural areas.

6.5.3 Increased financial literacy.

There is need for increased insurance literacy which would in turn lead to increased financial literacy among the population. This would be undertaken through revisions to the education curricula[33], marketing, advertising, and awareness and sensitization activities. This is an agenda that would require concerted efforts of the Government and insurance practice and management. Increases in financial literacy would enable the consumers understand the benefits of getting insurance, their obligations and rights. Increased financial literacy would abate instances of misinformation from the sellers of insurance.

[33] It is imperative that the interest in financial services consumption is taught early in schools and this could have a (potential) positive effect as children would grow up with an informed mind and the correct perception towards insurance consumption.

Undertaking financial literacy would require combined efforts of the insurers and the government (the government efforts may be through the Regulatory Authorities). Messages should be targeted at areas where the consumers lack detailed information. During such information and knowledge sharing sessions, there should be enhanced interactions with the (would be) consumers of insurance.

6.5.4 Role of the academia and financial sector regulatory bodies in Zambia

In addition to the above implications, the academia and the financial sector regulators have a critical role to play in as far as undertaking research which would expose the current under-consumption of insurance. Such research should be encouraged and could look at disaggregated elements in society so that targeted interventions can be made. The academia could combine efforts with the financial sector regulators so as to undertake the research in a more targeted manner.

On the other hand, there should be deliberate policy undertakings aimed at promoting insurance consumption among the population in Zambia. Decisions should be made on which insurance products are to be made compulsory (after a detailed analysis of the multiplier effect on the overall insurance consumption). Government, through the regulatory institutions, may wish to undertake their own detailed analysis aimed at informing the decision to be made on whether or not some insurance policies should be made mandatory.

6.6 Thesis Contribution and Suggestions for Future Research

6.6.1 Research Contributions.

The research has primarily contributed to the literature on the insurance purchase decision-making. The contribution to the IPD literature has been attained through a detailed analysis of the insurance purchase decision-making using the mixed methods research approach while comparing two different populations: the workers in the pensions and insurance industry (who are assumed to be

knowledgeable about insurance) and the urban Poor (who are assumed not to be knowledgeable on insurance matters). The differences in the insurance purchase decision-making of the two populations adds new knowledge to the insurance consumption literature.

Before this research, little is known about the insurance purchase decision-making in Zambia, let alone among the urban poor. With regard to the urban poor, this is the only study which has delved into the nuances of the insurance purchase decision-making thereby highlighting pertinent areas that require attention in order to improve insurance consumption among the urban poor and in Zambia at large. This thesis, therefore, contributes towards the existing literature by taking into account the understanding of the urban poor's insurance purchase decision-making and their risk coping strategies. This research has contributed towards improving the general understanding of the insurance purchase decisions of the urban poor.

While historical research on insurance consumption has used a quantitative orientation to elucidate on insurance consumption, by using mixed methods, this research has brought out the unexplored arena of using qualitative methods so as to understand the phenomenon of insurance consumption, and as a result, the findings give a new dimension on the phenomenon of insurance consumption from the actual interaction and experiences of the respondents. This aspect has enriched the findings of the thesis.

The research contributes towards a better understanding of the potential consumers' needs and inclinations and how the market can be segmented for penetration purposes. Understanding of the consumers' behaviour and emotions potentially contributes towards targeted policy making and insurance practice decision-making.

By comparing the insurance purchase decision-making of the workers in the pensions and insurance industry and the urban poor, the research optimise the insurance needs of the two populations: their expectations, experiences, understanding and perceptions and how these can be harnessed to increase insurance consumption in Zambia.

6.6.2 Suggestions for Future Research.

Due to the lack of research on insurance consumption in Zambia, there are many avenues for future research. Given the broad suggestions highlighted in 6.5 above, one avenue for future research may involve research on the other risk coping mechanisms of the urban poor so as to delve into more detail on the sufficiency of these risk coping mechanisms. Such research has potential to inform and shape insurance practice and policy towards tailoring products that would be responsive to the urban poor and this would have potential to contribute towards increasing insurance consumption in Zambia. Increased insurance consumption would contribute positively towards the GDP of the country.

The feasibility of selling insurance, more especially micro insurance products, through groupings is another avenue of possible research. These groupings could be communal or religious groupings. This research has indicated that people are more comfortable with their groupings, especially religious groupings. Researching on how acceptable insurance would be to such groupings and then working on the product design and delivery would add value to the body of knowledge on insurance. Selling of insurance products through communal and religious groupings would provide a new and untapped channel of distribution which would benefit from the cohesion of the group as a result of communal and religious ties[34].

This research has indicated that the workers in the pensions and insurance industry do not trust the insurers (even when these insurers are their employers). This is another area that might benefit from research and it would have potential to inform the insurers as to why they are not trusted even by their own employees. Such a research would equally highlight what would be needed if the insurers are to be trusted by their own employees.

[34] The communal and religious groupings have authority structures that people in those groupings obey and these authority structures would act as decision enforcers in the purchase of insurance.

Further research could be undertaken to understand the mechanisms of incentivising insurers that are willing to set up base in rural areas, or to tailor MI products to the needs of the poor populations. This would help Government come up with incentive structures that will promote rural set up by the insurers.

6.7 Limitations of the Study

This research, like any other research, has limitations. Even though uniformity is desirable on how insurance should be viewed, there were intra and inter differences on how insurance is viewed among the workers in the pensions and insurance industry and the urban poor. While effort was made to harmonise the intra differences, there is a possibility that full uniformity in view may not have been attained owing to the two groups not being homogeneous.

The sample of the respondents selected were the workers in the pensions and insurance industry and the urban poor from Mandevu constituency of the Lusaka district. This might not be representative, therefore, of all the workers in the pensions and insurance industry and the urban poor. The choice of the respondent sample may neglect potentially beneficial responses from respondents from other area and industries.

The views on insurance consumption that are raised in this research, are therefore, limited to the sample of the participants in the research and no claims can be made of their generalisability. Therefore, the understanding of the insurance purchase decision-making emanating from this study is peculiar to the respondent population. This study is more practically driven (through insurance practice and management) and makes suggestions on how insurance consumption might be increased in Zambia. Allowing the social aspects of insurance consumption into the product design would allow for more acceptable insurance products.

This study analysed insurance consumption at a Micro level and may thus not be broadly applicable to macro-level without having to make adjustments in the aggregation. Differences in

the aggregation of views from other areas may lead to distortions in the macro-level picture of insurance consumption.

6.8 Concluding Statement

This chapter gives the summary, reflections and conclusion of this thesis. This thesis found that the insurance purchase decision-making is one which involves a lot of considerations among the consumers: economic factors and behavioural attributes have an impact on how the insurance purchase decision-making evolves.

The research findings in this thesis render reasonable explanations on the insurance purchase decision-making among the workers in the pensions and insurance industry and the urban poor and highlights that:

a) The degree of understanding of insurance and loss aversion differs among the workers in the pensions and insurance industry and the urban poor;
b) Framing affects the insurance purchase decision-making and the design of insurance products should consider issues to do with framing;
c) There exists other risk coping mechanisms that the workers in the pensions and insurance industry and the urban poor use for risk management and these include the nuclear family and the community one lives; and
d) Keeping of livestock and near money assets is one of the risk mitigating measures that the workers in the pensions and insurance industry and the urban poor use.

Using thematic analysis, this thesis found out that increasing financial literacy, improving of service quality provided by the insurers would be ways that would help in increasing insurance consumption among the population. This thesis also highlights that regulatory interventions in curbing malpractice in the industry and in making some lines of insurance mandatory is another way that would increase insurance consumption in Zambia.

Based on the findings, this thesis has attempted to suggest some implications for the future development of insurance consumption, financial literacy and overall financial inclusion in Zambia. The propositions made are broad but represent an attempt to indicate how insurance consumption might be increased in Zambia taking into account the behavioural and the economic orientations of the consumers. This thesis has also highlighted the contribution of the research to the extant insurance consumption literature and it has also made propositions on potential future research areas; it also makes a contribution to the manner in which insurance consumption topics can be approached through the use of mixed methods so as to incorporate multidisciplinary influences from the respondents.

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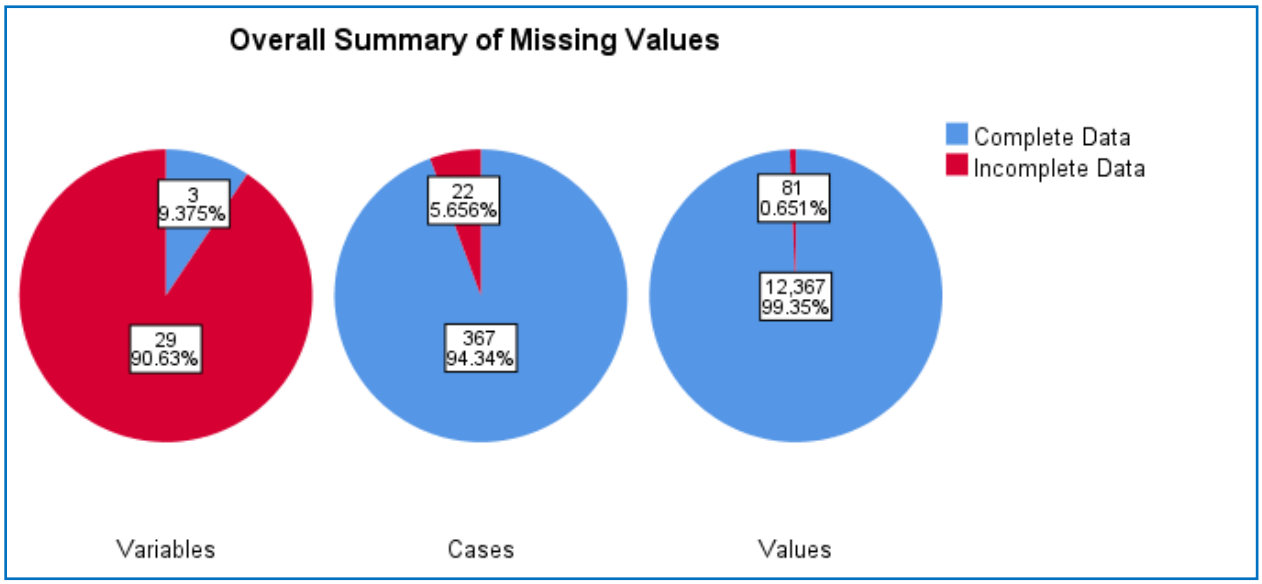
Appendix A – Missing Value Analysis



Appendix B – Univariate and Multivariate Normality, Multivariate Outliers

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q1	389	1.00	2.00	1.5039	.50063	-.015	.124	-2.010	.247
Q2	388	1.00	5.00	2.9588	1.20436	.151	.124	-.872	.247
Q3	385	1.00	5.00	1.5429	.80936	1.845	.124	3.851	.248
Q4	389	1.00	4.00	2.0797	.74011	.256	.124	-.283	.247
Q5	388	1.00	5.00	1.7010	.97424	.730	.124	-1.250	.247
Q6	389	1.00	6.00	3.0643	1.81729	.137	.124	-1.585	.247
Q7	386	1.00	7.00	1.8342	.97153	1.021	.124	2.163	.248
Q8	387	0	1	.60	.490	-.419	.124	-1.834	.247
Q9	383	0	1	.73	.447	-1.017	.125	-.972	.249
Q10	386	0	1	.41	.493	.359	.124	-1.881	.248
Q11	386	0	1	.41	.493	.359	.124	-1.881	.248
Q12	383	0	1	.57	.495	-.291	.125	-1.925	.249
Q13	384	1.00	5.00	3.1380	1.61559	.066	.125	-1.681	.248
Q14	382	1.00	5.00	3.2618	1.55884	-.045	.125	-1.615	.249
Q15	387	1.00	5.00	3.0620	2.85328	1.152	.124	2.772	.247
Q16	387	1.00	5.00	2.9664	1.35677	.380	.124	-1.216	.247
Q17	387	1.00	5.00	3.1059	1.34343	.276	.124	-1.294	.247
Q18	388	1.00	5.00	3.2448	1.45540	.190	.124	-1.674	.247
Q19	383	1.00	5.00	3.6110	1.46068	-.251	.125	-1.700	.249
Q20	383	1.00	5.00	3.3786	1.67996	-.211	.125	-1.748	.249
Q21	388	1.00	5.00	2.8995	1.23586	.192	.124	-1.035	.247
Q22	388	1.00	5.00	2.2861	1.09644	1.211	.124	.976	.247
Q23	383	1.00	5.00	3.3838	1.56247	-.182	.125	-1.616	.249
Q24	388	1.00	5.00	3.2268	1.30398	.079	.124	-1.146	.247
Q25	388	1.00	5.00	2.6804	1.45951	.728	.124	-1.022	.247
Q26	384	1.00	5.00	3.4010	1.60306	-.225	.125	-1.639	.248
Q27	388	1.00	5.00	3.5077	.73484	.444	.124	-.089	.247
Q28	388	1.00	5.00	3.5026	.75568	.136	.124	.244	.247
Q29	388	1.00	5.00	3.2887	.93409	-.069	.124	-.019	.247
Q30	388	1.00	5.00	3.0876	1.01541	.359	.124	-.602	.247
Q31	388	1.00	5.00	3.4459	.91762	.049	.124	-.548	.247
Q32	388	1.00	5.00	3.6005	.82136	.209	.124	-.518	.247
Eco	379	5.00	67.00	15.5409	6.52308	1.511	.125	2.690	.250

Trust	382	5.00	25.00	15.3901	5.07448	-.012	.125	-1.218	.249
Exp	383	4.00	20.00	12.6841	5.06471	.205	.125	-1.317	.249
Beliefs	388	4.00	15.00	10.2990	2.16701	.544	.124	.004	.247
Orcm	388	5.00	15.00	10.1340	2.33113	.494	.124	-.394	.247
Valid N (listwise)	367								

Appendix C – Influential Outliers

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Q13	389	100.0%	0	0.0%	389	100.0%
Q14	389	100.0%	0	0.0%	389	100.0%
Q15	389	100.0%	0	0.0%	389	100.0%
Q16	389	100.0%	0	0.0%	389	100.0%
Q17	389	100.0%	0	0.0%	389	100.0%
Q18	389	100.0%	0	0.0%	389	100.0%
Q19	389	100.0%	0	0.0%	389	100.0%
Q20	389	100.0%	0	0.0%	389	100.0%
Q21	389	100.0%	0	0.0%	389	100.0%
Q22	389	100.0%	0	0.0%	389	100.0%
Q23	389	100.0%	0	0.0%	389	100.0%
Q24	389	100.0%	0	0.0%	389	100.0%
Q25	389	100.0%	0	0.0%	389	100.0%
Q26	389	100.0%	0	0.0%	389	100.0%
Q27	389	100.0%	0	0.0%	389	100.0%
Q28	389	100.0%	0	0.0%	389	100.0%
Q29	389	100.0%	0	0.0%	389	100.0%
Q30	389	100.0%	0	0.0%	389	100.0%
Q31	389	100.0%	0	0.0%	389	100.0%
Q32	389	100.0%	0	0.0%	389	100.0%
EFs	389	100.0%	0	0.0%	389	100.0%
TUoIns	389	100.0%	0	0.0%	389	100.0%
EoIns	389	100.0%	0	0.0%	389	100.0%
BFs	389	100.0%	0	0.0%	389	100.0%
ORCMs	389	100.0%	0	0.0%	389	100.0%

Appendix D – Identified Factors, their Statements and Measures

Nr	Statement	Factors and their measures		Cronbach Alpha
		1	2	
	Economic Factors			
13	Price is a factor I consider when buying insurance.	0.829		0.750
14	I am inclined to buy insurance if the amount of the premium reduced.	0.784		
15	Insurance is one way of saving money.	0.410		
16	Insurance is a form of an investment.	0.741		
17	If my income was higher, I would use this money to buy insurance	0.623		
	Trust and Understanding of Insurance			
18	I trust insurance companies.	0.730		0.773
19	The quality of service I get from insurance companies is good.	0.763		
20	I pay attention on how my claims are handled and settled by an insurer.	0.792		
21	I understand insurance very well.	0.602		
22	I need a trusted insurer to make me understand insurance.			
	Experiences on Insurance			
23	I pay attention to the behavior of the insurance company employees when deciding to buy insurance.	0.783		0.873
24	I (am inclined to) spread my negative opinion about an insurance service to others.	0.712		
25	I (am inclined to) spread my positive opinion about an insurance service to others.	0.821		
26	My experience on insurance consumption determines my decision to continue using insurance or not.	0.788		
	Beliefs (Cultural) Factors			
27	My religious beliefs affect my decision to purchase insurance.		0.753	0.866
28	My cultural/ traditional beliefs affect my decision to purchase insurance.		0.726	
29	My friends and family affect my decision to purchase insurance.	0.537		
	Other Risk Coping Mechanisms			
30	I have other ways of managing my risks other than insurance.	0.555		0.797
31	My nuclear and extended family is my insurance		0.748	
32	The community I live in is my insurance		0.762	

Appendix E – Permissions to Conduct Research

AFRICAN LIFE
FINANCIAL SERVICES (Z) LIMITED

5 September 2017

Mr. Haamukwanza Leo Chimuka
C/O Pensions and Insurance Authority
Private Bag 30X RW, Ridgeway,
LUSAKA

Dear Sir,

PERMISSION TO CONDUCT RESEARCH AT AFRICAN LIFE FINANCIAL SERVICES ZAMBIA LIMITED

The above subject refers.

We thank you for your letter dated 5 September 2017. We confirm that we will allow you access to our premises and our employees for purposes of data collection. Further note that our expectation is that the standard principles of research including confidentiality of the information provided shall be observed.

We wish you all the best in your studies.

Yours sincerely,

Geoffrey Musekiwa
Chief Executive Officer

Registrar of Pensions & Insurance
RECEIVED
06 SEP 2017
P/Bag 30X Ridgeway, Lusaka

Making a better life possible ... for you
All correspondence to be addressed to the Chief Executive
74 Independence Avenue, P.O. Box 51331 Lusaka Tel 260 1 254-841 Facsimile 260 253-112

BENEFITS
CONSULTING SERVICES LTD
Your future, our concern

Head Office: Mpile Office Park, 74 Independence Avenue,
PO Box 31986, Lusaka Zambia.
Tel: +260 211 254517/252265/250190/251057,
Cell: +260 977 740 265/966 552 265,
Fax: +260 211 251926.
Kitwe: Plot 300, Corner Freedom/Independence Ave,
PO Box 22090, Kitwe Zambia.
Tel: +260 212 229090. Fax: +260 212 229086.
Email: info@bencon.co.zm. Website: www.bencon.co.zm

6th September 2017

Mr. Haamukwanza Leo Chimuka
c/o Pensions and Insurance Authority
Private Bag 30X RW
Ridgeway
LUSAKA

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH AT BENEFITS CONSULTING SERVICES LIMITED

The above subject refers.

We thank you for your letter dated 5th September 2017. We wish to indicate that we will allow you access to our premises and our employees for purposes of data collection.

We wish you all the best in your studies.

Yours sincerely,

Bryson Hamanzuka,
CHIEF EXECUTIVE OFFICER

OFFICE OF THE HON. MEMBER OF PARLIAMENT

MANDEVU CONSTITUENCY

National Assembly
Parliament Buildings

BOX 31299 Lusaka.10101
Tel: + 260 211 292425-36
Fax: + 260 211 292252
Email: info@ parliament.gov.zm

P O BOX 35702
LUSAKA.
Mobile: + 260 966 598208
Tel: +260-211-840356

12th September, 2017

Mr. Chimuka Leo Haamukwanza,
C/O Pensions and Insurance Authority,
P/Bag 30X RW, Ridgeway,
Lusaka

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH IN MANDEVU CONSTITUENCY

Reference is made to the above mentioned subject matter.

The office of the area MP, Mandevu Constituency Office acknowledges receipt of your letter dated 5t September, 2017, requesting to conduct a research on the Determinants of the Insurance Purchase Decision-Making in Zambia. To this regard, we write to inform you that you have been granted permission to go ahead with the research by collecting data from willing participants.

Wishing you the best of luck in your studies.

Yours sincerely,

Hon Jean Kapata MP.

Minister of Lands, Natural Resources & Environment Protection.

Cc: File

MUKUBA
PENSION TRUST
Your Pension, Your Future

MPT/CEO/233/2017

5 September 2017

Mr Haamukwanza Leo Chimuka
C/0 Pensions and Insurance Authority
StandNo. 4618 Lubwa Road
Private Bag 30X
Ridgeway
LUSAKA

Dear Sir

PERMSSION TO CONDUCT RESEARCH AT MUKUBA PENSION TRUST, KITWE

The above subject refers.

We thank you for your letter dated 5 September 2017. We wish to confirm that we will allow you access to our premises and our employees for the purpose of data collection.

We wish you all the best in your studies.

Yours faithfully
for and on behalf of
MUKUBA PENSION TRUST

Raphael C Kumwenda
CHIEF EXECUTIVE OFFICER

Mukuba Pension House, President Avenue, Kitwe, Zambia, P.O. Box 23570 Tel: 260-21-2-220884,
260 21-2-221331, Cell: 097 7770255, 097 7770256, 096 6998159, Fax: 260-21-2-220479
Website: http://www.mukuba.com.zm
All Correspondence to be addressed to the Chief Executive Officer

NICO Insurance
associated with Sanlam group

Plot 1131, Corner
Parirenyatwa & Protea Roads, Fairview
P. O. Box 32825, Lusaka, Zambia
Tel.: +260 21 1 222 862 / 226 547 / 226 456 ,
232 670, Fax: +260 21 1 222 863 / 232 562
Mobile: +260 96 677 0848 / 097 777 0848
E-mail: nicozam@zamnet.zm
Website: www.nicoinsurance.co.zm

5 September 2017

Mr. HAAMUKWANZA Leo Chimuka
C/O Pensions and Insurance Authority
Private Bag 30X RW, Ridgeway,
LUSAKA

Dear Sir,

PERMISSION TO CONDUCT RESEARCH AT (COMPANY NAME)

The above subject refers.

We thank you for your letter dated 5 September 2017. We wish to indicate that we will allow you access to our premises and our employees for purposes of data collection.

We wish you all the best in your studies.

Yours sincerely,
For and on behalf of NICO Insurance Zambia limited

Geoffrey Chirwa
Chief Executive Officer

Kitwe Branch: 1st Floor City Gate Building, Plot No. 1299, President Avenue, Town Centre, P. O. Box 22908, Kitwe, Zambia Tel.: +260 21 2 221 088 / 227 733 Fax: +260 21 2 221 089, Mobile: +260 977 891459, E-mail: nicokitwe@nicoinsurance.co.zm
Livingstone Branch: 81 John Hunt Way, P. O. Box 60466 Livingstone, Zambia, Tel: +260 21 3 320 765 / 320 752, Fax: +260 21 3 320 751, Mobile: +260 95 3 553214 E-mail: nicolivingstone@nicoinsurance.co.zm
Chipata Branch: Plot No. 469, Luangwa Road, Building next to Veterinary Office, Main Town Area, P. O. Box 510284, Chipata, Zambia, Tel: +260 21 6 222 327 Fax +260 21 6 222 328, E-mail: nicochipata@nicoinsurance.co.zm
Acacia Branch: Plot No. 22768, Off Thabo Mbeki Road, Acacia Park, P. O. Box 32825, Lusaka, Zambia, **Tel**: +260 21 1294 485 / 294 486, Fax: +260 211 294 488 E-mail:acciapark@nicoinsurance.co.zm
Ndola Branch: Rekay's Shopping Mall, Unit # 5 of building # 4 President Avenue, Ndola, Zambia, Cell: + 260 955 883477, E-mail: zmukelabai@nicoinsurance.co.zm
A member of the NICO Group of Companies

PRUDENTIAL

PRUDENTIAL LIFE
ASSURANCE ZAMBIA
Prudential House,
Thabo Mbeki Road
PO BOX 31357, LUSAKA
ZAMBIA

TEL +26021-1-222 223/222 233/4

5th September 2017

Mr. Haamukwanza Leo Chimuka
C/O Pensions and Insurance Authority
Private Bag 30X RW, Ridgeway,
LUSAKA

Dear Sir,

PERMISSION TO CONDUCT RESEARCH AT PRUDENTIAL LIFE ASSURANCE ZAMBIA

The above subject refers.
We thank you for your letter dated 5th September 2017.

We wish to indicate that we will allow you access to our company premises and employees for purposes of data collection.

Any information that is provided will be on a confidential basis and will be anonymised in the research paper although PLAZ's name can be referenced as a source

As part of our confidentiality policy you will be required to sign a Non- Disclosure Agreement (NDA), which is attached. Kindly sign it and return it to us.

Also, kindly note that you will be provided audience with Mr. Kachiza Kwenda, the Head of Risk and Compliance on 22th September 2017, for any expert questions and pointers you may have and need. Kindly communicate your availability on the said date.

We wish you all the best in your studies.

Yours sincerely,

Krishnaswamy Rajagopal
Managing Director

Sanlam Life Insurance

6th September 2017

Mr Haamukwanza Leo Chimuka
C/O Pensions and Insurance Authority
Private Bag 30X RW Ridgeway
Lusaka

Dear Mr Chimuka

RE: REQUEST TO CONDUCT RESEARCH AT SANLAM LIFE INSURANCE ZAMBIA LIMITED

Reference is made to your letter dated 5th September 2017 in which you sought approval to visit our premises and collect data from willing participants for your research.

This letter serves to inform you that your request to access our premises and our employees for purposes of data collection has been approved.

For any queries please do not hesitate to contact the undersigned.

Yours sincerely

Chanda E. Mwila
HEAD OF HUMAN RESOURCES

Cc Chief Executive Officer

Sanlam Life Insurance Zambia Limited
Sanlam House, Corner Ituna and Nasser Roads
PO Box 31991, Lusaka, Zambia

T +260 211 257713-15
F +260 211 257711

Directors: Michael M. Mundashi SC (Chairman), Simachila M. Makwembo (Chief Executive Officer), Gaffar Hassam, Cornie Foord, Thian Fick, Munakupya Hantuba, Caleb Mulenga, Monica Musonda

www.sanlam.co.zm

Appendix F – Participant information Sheet

University of Witwatersrand (Wits)
Wits School of Governance
Public &Development Management (P&DM)

PARTICIPANT INFORMATION SHEET – RESPONDENTS

Title of Project: ***A mixed methods Sequential Explanatory Study of the Determinants of Insurance Purchase Decision-Making in Zambia.***

My name is ***Chimuka Leo HAAMUKWANZA*** and I am a postgraduate student registered for a Doctor of Philosophy in Public and Development Management with the Wits School of Governance at the University of the Witwatersrand in South Africa. As part of the requirements for the degree am conducting research into the Insurance Purchase Decision-Making in Zambia.

Purpose of the Study
The study is aimed at understanding how decisions to purchase insurance are made in the day-to-day lives of people concentrating on what mechanisms people use to guard against the many life risks that they encounter.

What will be required of you should you wish to participate
Should you wish to participate in the research, you will have to complete the questionnaire/respond to interview questions. Your identity will stay anonymous.

Confidentiality
All information you provide will be kept confidential. Your name and personal details will be kept confidential and no identifying information will be included in the final research report.

Rights to withdrawal
Participation in this study is voluntary and as such you may withdrawal from the study at any time. You are free to refuse to answer any question that make you uncomfortable.

Potential risks or discomforts
There are no antincipated risks in the research. There will be no physical risks or harm associated with this research.

What will be done with the information you provide?

The data that I will collect from you and others is purely for academic purposes. The information you provide will be written up in the report in an aggregate manner and as such you will not be identified by your name in my thesis or any reports or publication arising from the information you will provide. In the event that other academic colleagues use the information, you will not be identified in any way. The data gathered may be availed for subsequent academic purposes or as reference for future research projects or academic teaching and the principle of anonymity will still be upheld.

What will be the benefits of my participation?

There are no direct benefits for participating in this study. However, the study potentially affords you an opportunity to contribute towards understanding the decision-making process in insurance purchase. Please feel free to ask any questions regarding my study if you have any. I shall answer your questions to the best of my ability. I may be contacted on mobile number +260967906390 and email 1263189@students.wits.ac.za. My supervisor is **Dr. MASIE Desné** and she can be contacted on +44 75 9080 2538 and email desne.masie@gmail.com.

I would like to assure you that the proposed study has been reviewed and has received ethics clearance from the University's ethics clearance committee, details of which are provided above. The decision to participate in this study is solely yours and do not hesitate to share any concerns, questions or comments on the research at any time you feel ready.

I wish to sincerely thank you for taking time to consider participating in the study.

Yours Sincerely,

_____

HAAMUKWANZA Chimuka

Appendix G – Ethics Clearance Certificate

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Haamukwanza

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H17/10/06**
PROJECT TITLE	A mixed methods sequential explanatory study of the determinants of insurance purchase decision-making in Zambia
INVESTIGATOR(S)	Mr C Haamukwanza
SCHOOL/DEPARTMENT	Wits School of Governance/
DATE CONSIDERED	20 October 2017
DECISION OF THE COMMITTEE	Approved
EXPIRY DATE	17 December 2020

DATE 18 December 2017 **CHAIRPERSON** _____
(Professor J Knight)

cc: Supervisor : Dr D Masie

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

_____ 18 / 12 / 2017
Signature Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

Appendix H – Consent to Participate in Research: Qualitative Phase

University of Witwatersrand (Wits)
Wits School of Governance
Public &Development Management (P&DM)

CONSENT TO PARTICIPATE IN RESEARCH

Title of Research Project: ***A mixed methods Sequential Explanatory Study of the Determinants of Insurance Purchase Decision-Making in Zambia.***

Informed Consent:

- I have read the information sheet and the researcher has read it to me and explained it to me verbally so that I understand the project. I have asked all the questions I have about this project and I know what this is all about.
- I understand that my participation in this study is voluntary and I may refuse to answer any questions that I am not comfortable with.
- I understand that I have the right to withdraw from the study at any given time without any negative consequences.
- I know that I can stop my participation in the interview at any time and I do not have to answer all the questions.
- I understand that the researcher will anonymise my identity in the reports and any publications that may arise from this study.
- I know that my confidentiality in this study will be protected through the use of pseudonyms in all written records so my real name will not be used in any written records from this study.
- I have been requested that the interview be audio recorded and I have granted permission for the audio recording.
- I understand the study has been approved by the University of the Witwatersrand ethics committee and I am also free to contact the researcher regarding any questions I may have.

Please tick one option:

☐ **I would like to participate in this study**

☐ **I do not want to participate in this study**

Respondent's Name (PRINT): _____

Respondent's Signature: _____

Appendix I – Data Collection Instrument: Quantitative phase

University of Witwatersrand (Wits)
Wits School of Governance
Public &Development Management (P&DM)

QUESTIONNAIRE QUANTITATIVE PHASE

Section 1: Introduction

Dear respondent, my name is ***HAAMUKWANZA L. Chimuka*** and I am a student with the University of the Witwatersrand, in Johannesburg, South Africa. My research focus is *on the determinants of the insurance purchase decision-making*. You have been selected to give responses to this questionnaire. The results of this questionnaire shall be strictly confidential and only used in aggregate form for educational purposes. By completing and submitting the questionnaire, you have consented to participate in the study.

I therefore kindly request you to spend a few minutes filling in (or marking with an X in the boxes provided) the questions below.

Section 2: Background Information

1. What is your sex? Female ☐ Male ☐
2. What is your age? 21-25 ☐ 26 - 30 ☐ 31-35 ☐ 36-40 ☐ > 40 ☐
3. What is your marital status?
   Married ☐ Single ☐ Divorced ☐ Widow ☐ Widower ☐
4. What is your family size? <2 ☐ 3-5 ☐ 6-8 ☐ >9 ☐
5. What is your religious denomination?
   Pentecostal ☐ Muslim ☐ Catholic ☐ Hindu ☐
   Other (specify)……
6. What is the highest level of education you have reached? Bellow G12 ☐
   Grade 12 ☐ Certificate ☐ Diploma ☐ Degree ☐ Masters and above ☐
7. What is your monthly income level? K0 – K3,000 ☐ K3,001 – K6,000 ☐
   > K6,000 ☐

Section 3: Decision-Making Information

8. You are offered a bet: depending on a fair coin, you either win K50,000 or you lose K30,000. Would you accept this bet? A] Accept Bet B] Refuse Bet
9. You are in a ferry and the engine has malfunctioned. You have two options, choose one:

   A] The risk of losing 10 out of a 100 lives ☐

   B] The opportunity to save 90 out of a 100 lives ☐
10. You have invited your best friend for a meal. You are aware that your friend is conscious of eating meat with too much fat. You are in a supermarket and you want to buy quality beef to prepare for the meal. You have two options, choose one:

    A] Beef that is 95% lean ☐

    B] Beef that is 5% fat ☐
11. The Ministry of Health is preparing for the cholera outbreak in Chawama, which is expected to kill 6,000 people. A program to combat the disease has been proposed. Assume that the exact scientific estimate of the consequences of the program is as follows:

    A] If the program is adopted, 2,000 people will be saved; and

    B] If the program is adopted, there is a one-third probability that 6,000 people will be saved and a two-thirds probability that no people will be saved.

    Which option would you choose: A ☐ B ☐
12. Using the same scenario in the above question, what will be your option given that:

    C] If the program is adopted, 4,000 people will die; and

    D] If this program is adopted, there is a one-third probability that nobody will die and a two-thirds probability that 6,000 people will die.

    Which option would you choose: C ☐ D ☐

Section 4: Insurance Specific Statements

Scoring Grid: 1 = Strongly Agree; 2=Agree; 3= Disagree; 4= Strongly Disagree; 5= Not Sure

13. Price is a factor I consider when buying insurance.
14. I am inclined to buy insurance if the amount of the premium reduced.
15. Insurance is one way of saving money.
16. Insurance is a form of an investment.
17. If my income would be above K6,000, I would use this money to buy insurance.

18. I trust insurance companies.
19. The quality of service I get from insurance companies is good.
20. I pay attention on how my claims are handled and settled by an insurer.
21. I understand insurance very well.
22. I need a trusted insurer to make me understand insurance.
23. I pay attention to the behavior of the insurance company employees when deciding to buy insurance.
24. I (am inclined to) spread my negative opinion about an insurance service to others.
25. I (am inclined to) spread my positive opinion about an insurance service to others.
26. My experience on insurance consumption determines my decision to continue using insurance or not.
27. My religious beliefs affect my decision to purchase insurance.
28. My cultural/ traditional beliefs affect my decision to purchase insurance.
29. My friends and family affect my decision to purchase insurance.
30. I have other ways of managing my risks other than insurance.
31. My nuclear and extended family is my insurance.
32. The community I live in is my insurance.

- End of Questionnaire –

Appendix J – Data Collection Instrument: Qualitative phase

University of Witwatersrand (Wits)
Wits School of Governance
Public &Development Management (P&DM)

IN-DEPTH INTERVIEW GUIDE

Research Topic: ***A mixed methods sequential explanatory study of the determinants of insurance purchase decision-making in Zambia.***

INTRODUCTIONS

1. Respondent Bio Data:
   (i) Name: Numbering of respondent.; Family Situation: Marital Status and Family Size

2. How do you earn your living? Working / Self-employed / none?
   (i) Do you own any assets (e.g. fridge, furniture, car, house, etc.) [YES/ NO]
3. Who makes financial decisions in your house? What of insurance purchase decisions?
4. Have you bought insurance before? [YES / NO]. If yes, do you have any active policies?

5. **Economic Factors**

   (i) Do you face any risks that can cause you to lose some of your assets?
   (ii) If your income increases, would you consume Insurance?
   (iii) If the price of insurance reduced, would you buy insurance?
   (iv) Would you regard insurance as any of the following: A form of an investment or a way of saving?

BEHAVIOURAL ECONOMICS AND INSURANCE DECISION-MAKING

6. **Preferences And Insurance Purchase Decision**

   (i) How do you manage your risks?
      i. Do you get support from your Nuclear or extended Family?
      ii. Do you get support from your Community one lives in?
      iii. Do you regard your nuclear or extended family as insurance?
      iv. Do you regard the community you live in as a form of insurance?
   (ii) Does your family size affect your insurance purchase decision?
      i. If your family size increased, would you consume insurance?

(iii) Does the behavior of other people influence the decisions you get to make on insurance purchase?

7. **Loss Aversion And Insurance Purchase Decision**

(i) How would you rate yourself: as a risk taker or not?

(ii) Given a situation, what would be your decision?

Situation 1 – *You are offered a bet: depending on a tossing of a fair coin, you either win K50, 000 or you lose K30, 000. Would you accept this bet? A] Accept Bet B] Refuse Bet*

Situation 2 – *The Ministry of Health is preparing for the cholera outbreak in Chawama, which is expected to kill 6,000 people. A program to combat the disease has been proposed. Assume that the exact scientific estimate of the consequences of the program is as follows:*

A] If the program is adopted, 2,000 people will be saved; and

B] If the program is adopted, there is a one-third probability that 6,000 people will be saved and a two-thirds probability that no people will be saved.

Which option would you choose: A B

8. **Framing And Insurance Purchase Decision-Making**

(i) Does the way a situation is put affect your decision-making on it?

Situation 1 – *You have invited your best friend for a meal. You are aware that your friend is conscious of eating meat with too much fat. You are in a supermarket and you want to buy quality beef to prepare for the meal. You have two options, choose one:*

A] Beef that is 95% lean B] Beef that is 5% fat

Situation 2 – *You are in a ferry and the engine has malfunctioned. Choose one out of two options:*

A] The risk of losing 10/100 lives B] The opportunity to save 90/100 lives

9. **Bounded Rationality And Insurance Purchase Decision-Making**

(i) Do you understand insurance? If not, what areas are not understood?

(ii) Do you trust insurance Companies? If a trusted insurer was available and you have money, would you purchase insurance?

(iii) What is your view about insurance in general terms: do the current insurance products address your needs?

(iv) Would you want to receive knowledge on insurance?

10. **Insurance Purchase Decision, Beliefs And Other Risk Coping Mechanisms**

Other Risk Coping Mechanisms

(i) Have you put in place other risk coping mechanisms? If yes, what are they?

(ii) If you bought insurance, would you consider having ORCMs in (i) above? If yes, why?

Beliefs and insurance

(iii) What beliefs do you have around the subject of insurance?

(iv) Do these beliefs shape your decision-making on insurance? And if so in what ways?

11. **Practice And Management Role**

(i) What role do you think insurance companies need to play to promote insurance consumption?

(ii) Is there a role you feel the government needs to play for you to consume insurance?

End