INFLUENCE OF ENTREPRENEURIAL ORIENTATION ON MICROINSURANCE UPTAKE BY MICRO AND SMALL ENTERPRISES IN NAIROBI COUNTY, KENYA

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Influence of Entrepreneurial Orientation on Microinsurance Uptake by Micro and Small Enterprises in Nairobi County, Kenya

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DECLARATION

This thesis is my original work and has not been submitted for examination in any other University.

Signature……. Date…….

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This thesis has been submitted for examination with our approval as University supervisors.

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DEDICATION

Dedicated to my loving family and parents

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ABBREVIATIONS AND ACRONYMS

AVE	Average Variance Extracted
CGAP	Consultative Group to Assist the Poor
EO	Entrepreneurial Orientation
GDP	Gross Domestic Product
IAIS	International Association of Insurance Supervisors
ILO	International Labour Organization
IRA	Insurance Regulatory Authority
LAC	Latin American Countries
MFIs	Micro Finance Institutions
MSEA	Micro and Small Enterprises Authority
MSEs	Micro and Small Enterprises
NACOSTI	National Commission of Science, Technology and Innovations
OLS	Ordinary Least Square
RESET	Ramsey Regression Specification Error Test
SMEs	Small and Micro Enterprises
SPSS	Statistical Package for Social Science
VIF	Variance Inflation Factor

OPERATIONAL DEFINITION OF TERMS

Competitive Aggressiveness: is defined as consisting of tolerance for ambiguity, opportunity recognition and locus of control (Haron, 2010).

Entrepreneurial orientation (EO): defined as a firm's level strategy making process, managerial philosophies and firm's behaviour which are entrepreneurial in nature (Anderson, Covin & Dennis, 2009).

Innovativeness: is the ability to make the opportunities work in practice by working out new markets, new products, new processes and new combinations and seeing new ideas through to the end (Madhousi et al., 2011).

Micro enterprise: is defined as a firm, trade, service, industry or a business activity which employs less than ten people and has an annual turnover that does not exceed Kenya shilling, five hundred thousand (RoK, 2012).

Micro insurance: is the protection of low income people and MSEs against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved (Saalfrank, 2012).

Micro insurance uptake: refers to the action of taking up or making use of small scale insurance through risk management, proactiveness, innovativeness and entrepreneurial drive by low income people for their businesses against specific perils that is available as measured by the sales volume and the total premium (Wipf & Garand, 2010).

Proactiveness: refers to taking initiatives, anticipating and carrying out new opportunities, and creating new markets or participating in emerging ones. It is also associated with entrepreneurship, and is an important dimension of EO (Dai, Maksimov, Gilbert & Fernhaber, 2014). Proactiveness consists of firmness of purpose, relentless pursuit of an opportunity, being competitive in attaining goals and the ability to recommit.

Regulatory Framework: is defined in terms of forces that are beyond the control of MSEs and pose threats as well as opportunities to firms and includes all legislation impacting on the delivery of insurance, includes a number of Acts and their Regulations beyond the Insurance Act which forms part of the regulatory scheme and help determine the larger regulatory environment for microinsurance. The literature identifies three dimensions that collectively shape this environment namely: licensing, capital requirements and distribution systems (Williams, 2010).

Risk taking: refers to a firm's tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes (Pfeffer, 2013).

Small enterprises: is defined as a firm, trade, service, industry or a business activity which employees between ten and fifty people and has an annual turnover that ranges between Kenya shilling five hundred and five million (RoK, 2012).

ABSTRACT

The uptake of micro-insurance by MSEs has been very low over the years. The low microinsurance uptake could be influenced by various factors among them entrepreneurial orientation. There is dearth of literature that focuses on the role of entrepreneurial orientation on uptake of microinsurance among owner managers of MSEs. This study sought to establish the influence of entrepreneurial orientation on microinsurance uptake by MSEs in Kenya. Specifically, the study sought to: examine how risk taking, proactiveness, innovativeness, competitive aggressiveness influences microinsurance uptake by micro and small enterprises in Kenya; and establish the moderating effect of the regulatory framework on relationship between entrepreneurial orientation and microinsurance uptake by micro and small enterprises in Kenya. The study adopted descriptive and explanatory research designs. The target population was 297,340 MSEs in Nairobi County. The study utilized a sample of 400 MSEs. Stratified random sampling was used to select the sample from the population. A structured questionnaire was used to collect data from owner managers of MSEs. The questionnaire was pilot tested for reliability using Cronbach's alpha while convergent validity was tested using Average Variance Extracted (AVE) and discriminant validity was tested using cross loading. The study utilised factor analysis, correlation analysis and multiple linear regression method to analyse the collected data. The study found that risk taking and proactiveness behaviour increases the likelihood of entrepreneurs of MSEs purchasing micro insurance policies while competitive aggressiveness negatively influences entrepreneurs of MSEs decision to purchase micro insurance policies. Innovative behaviour of entrepreneurs of MSEs does not influence uptake of micro insurance by MSEs in Kenya. Regulatory framework negatively influences entrepreneurs of MSEs decision to purchase micro insurance policies but does not moderate the relationship between entrepreneurial orientation and uptake of micro insurance. The study recommends that entrepreneurs who are risk averse could cushion themselves by purchasing micro insurance policies consequently enabling them achieve their firms' objectives, government through various state owned enterprises that focuses on MSEs could start training programs that build entrepreneurs capacity and skills to be proactive in their businesses hence increasing uptake of micro insurance. Further, the study recommends that although entrepreneurs may not find it worthwhile to purchase micro insurance policies when the competition is very stiff, it is advisable for them to insure against other type of eventualities by purchasing micro insurance policies and government should review existing micro insurance policies with the aim of designing them in a way that they create conducive environment for entrepreneurs to purchase micro insurance policies.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This study seeks to establish entrepreneurial orientation and micro insurance uptake by micro and small enterprises in Kenya. Insurance is a risk management system under which individuals, businesses, and other organizations or entities, in exchange for payment of a sum of money, premium, share the risk of possible financial loss through guaranteed compensation for losses resulting from certain perils under specified conditions (Saalfrank, 2012). Micro-insurance refers to insurance to the low-income people and MSEs (Huckstep, 2015). Micro-insurance is different from insurance in general as it is a low value product, involving modest premium and benefit package, which requires different design and distribution strategies such as premium based on community risk rating as opposed to individual risk rating and active involvement of an intermediate agency representing the target community (Mathur, 2010). For the purposes of this study an insurance product is deemed to be a "micro insurance product" if the providers either target or sell the product to low-income people and MSEs.

1.1.1 Micro and Small Enterprises

A micro-enterprise (or microenterprise) is generally defined as a small business employing nine people or fewer, and having a balance sheet or turnover less than a certain amount (such as 2,000,000 euros or PhP 3,000,000) (Bridge & O'Neill, 2012). The terms microenterprise and microbusiness have the same meaning, though traditionally when referring to a small business financed by microcredit the term microenterprise is often used. Similarly, when referring to a small, usually legal business that is not financed by microcredit, the term microbusiness (or micro-business) is often used (Bolton, Mehran, & Shapiro, 2015). Internationally, most microenterprises are

family businesses employing one or two persons. Most microenterprise owners are primarily interested in earning a living to support themselves and their families.

Micro and small enterprises provide much of the competition that characterizes free enterprise. Micro and small enterprises fill market gaps quickly by serving highly specialized markets and or markets with limited demand, new markets which will eventually become mass markets, and markets affected by new economies of scale. Recent studies indicate that these MSEs receive less formal on the job training than those in medium and large firms, but they are more likely to obtain training from other sources, such as vocational and apprenticeship programe (Liedholm & Mead, 2013). Micro and small enterprises are the first employers of large proportion of workers. Micro and small enterprises provide two out of three workers with their first jobs (Liedholm & Mead, 2013).

Ghanem (2013) described MSEs as efficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines. Even in the developed industrial economies, it is the SME sector rather than the multinationals that is the largest employer of workers. The development of MSEs is seen as accelerating the achievement of wider economic and socio-economic objectives, including poverty alleviation (Bruhn, Karlan, & Schoar, 2013). Marcucci (2014) stated that micro and small enterprises (MSEs) share a key role in generating and sustaining economic growth and equitable development in almost all economies. The exploitation of the potential of the indigenous sector that uses local resources and appropriate technology as an engine for growth is seen as an alternative development model to the traditional large-scale intensive model in developing economies.

In Europe, MSEs accounted for 71.4% of the increase in employment in 2014 (European Commission, 2016). The MSE sector in Africa is a lively example of small enterprises activities leading to successful growth and development of their emerging economies (Kebede & Atomsa, 2015). Despite their great importance, the increase in market

competition especially from modern and big competitors makes it difficult for MSEs to survive. The problems MSEs are facing made worse by remoteness to various services, difficulties of accessing information, finance and lack of institutional support (Menezes & Quiggin, 2012). Large number of enterprises may dissolve in the process and only very few (about 1%) enterprises grow to medium and higher level (Dávila, North & Varvakis, 2016).

In South East Asia MSEs are in fact reputed to be behind most of the socio-economic transformation which created the new economic giants, also known as the Economic Tigers. In Bangladesh, a large proportion of all the establishments are accounted for by MSEs (Islam *et al.*, 2011). Countries in the Middle East and Africa region such as Kenya and Tanzania have been aiming to build stable and sustainable economies through diversifying and expanding an enterprise base across a range of different sectors. By enlarging the MSE base, these countries hope to create opportunities for locals and motivate innovation in higher value-added sectors. According to the United Nation Industrial Development Organization (2014), for Egypt, MSEs account for about 99% of private enterprises.The Egyptian private sector is characterized by the presence of many MSEs having up to 99 employees and operating at high levels of informality, with low value-added, low production quality and poor export performance (Nasr & Abdelkader, 2013).

In South Africa for example, the future of MSEs is not very bright as the small enterprises are likely to cease operations before the fifth year (Chiliya & Roberts-Lombard, 2012). This makes South Africa to be one of the poorest performers in the informal sector. Luck of financial acumen, weakness in innovation, marketing entrepreneurial flair, practical knowledge and human resource management have been cited as some of the challenges of this sector.

In Kenya, MSEs, are reputed for their contribution of jobs accounting for over 50 percent of new jobs (Ndede, 2015). The potentially large size of the global micro-

insurance market plus the growing expectation that micro insurance could be an effective mechanism for reducing world poverty has generated considerable interest among financial institutions eager to expand their business activities outside of the saturated traditional markets in developed countries, and international agencies (for example, the World Bank, USAID, ILO) concerned with promoting sustainable development in emerging economies (Butt, 2010). In this paper, the relationship between entrepreneurial orientation and micro insurance uptake by micro and small enterprises in Kenya will be analyzed by highlighting the current entrepreneurial initiatives being contemplated to strengthen micro insurance activity in the country, and suggest specific ways that can help promote micro insurance to the target segment.

1.1.2 Microinsurance Uptake

Micro-insurance is one segment of microfinance, the sector that provides financial services to the poor. In addition to the better known micro-credit, micro-insurance plays a significant role in the development efforts (Olaosebikan & Adams, 2014). Microinsurance provides risk protection for low income groups and MSEs and is part of the growing international micro-finance industry that emerged in the 1970s (Bhattacharya & Londhe, 2014). Approximately, 135 million people worldwide currently hold micro-insurance policies with annual rates of growth in some emerging markets such as; Seychelles and South Africa estimated to be up to 10% per annum (Loewe & Zaccar, 2012).

Micro insurance is the protection of low-income people against specific perils in exchange for regular premium payment proportionate to the likelihood and cost of the risks involved (Elabed, & Carter, 2015). Micro insurance can also be said to be insurance with low premiums and low caps or coverage but run in accordance with generally accepted insurance practices which should include the ICP (Mathews, 2015). Importantly this means that the risk insured under a micro insurance policy is managed based on insurance principles and funded by premiums (Ndirangu, 2015).

The micro insurance activity itself should therefore fall within the purview of the relevant domestic insurance regulator or supervisor or any other competent body under the national laws of any jurisdiction. This insurance operates by risk-pooling, is financed through regular premiums and is tailored to the poor who would otherwise not be able to take out insurance. Akotey, (2015) argued that micro insurance was directly related to the performance of insurance companies in terms of production and premium reporting. This relationship is widely affected by the size of the firm, reinsurance dependence, availability of resources and supportive company policy structures. He observed that the larger the company, the stronger the policies are fine-tuned towards MI development and the more the underwriting profits.

Owuor (2016) argued that customers would rather pay smaller monthly bills for the premiums while the insurer compensated the entire claim amount at once. This meant that few premiums received, were fully disbursed to claims regardless of full premium payment or not resulting to less profit for the firm in the long run. Under these conditions, the company had to get more resources from other activities to run the micro claims department successfully. Microinsurance is the protection of low-income people by the means of risk pooling (Bendig & Arun, 2016).

Microinsurance providers often sell their products together with other products or programmes that the potential customers come in contact with, such as seed or fertilizer retailers, mobile carriers, unions or other microfinance institutions (Yeboah, & Obeng, 2016). Another way that microinsurance often differs from regular insurance is the types of risks they cover, this is partly due to the fact that poor people are exposed to different kinds of risks than traditional insurance customers, but it also has to do with costs. In order to sell microinsurance the companies need to have a heavy focus on cost reduction which means that the types of risks covered need to be easily administered, cost-effective in distribution and claiming and justify low premiums.

In Africa, countries with comparatively high penetration rate of microinsurance include; Namibia (11.2%), Seychelles (9.9%), Tunisia (7.3%), Uganda (6.9%) and Senegal (4.9%). The total number of lives covered is highest in South Africa, 8.2 million, Uganda (1.5 million). Kenya has 1.1 million while Ethiopia has 1.0 million lives covered (Matul, McCord, Phily & Harms, 2010). In Kenya, the rate of microinsurance penetration is relatively low compared to the other African countries. Kenya has a microinsurance penetration rate of 8.1 % compared to South Africa, which has a penetration rate of 40.4 % (Table 1.1). This low rate of penetration could be attributed to low awareness of microinsurance products among the entrepreneurs.

Table 1.1: Microinsurance Penetration in Kenya

Total Number of lives covered	**Penetration rate for Different Types of Microinsurance**				
	Credit	Life	Health	Agriculture	Total
1,102,317	43.2%	1.5%	3.5%	0.0%	8.1%

Source: Matul *et al.* (2010)

Kenya has lagged behind its peers in East African in regards to growth of microinsurance uptake. As shown in Table 1.2, Tanzania has the fastest growth rate in microinsurance, 114%, followed by Burundi with a growth rate of 55 percent. Kenya is the second last with growth rate of 5% while Uganda has growth rate of 1% (Munich Re Foundation, 2013). The study did not indicate the growth rate of microinsurance in Rwanda due to data limitations.

Table 1.2: Microinsurance growth rates for East African Countries

Country	Growth in Covered Lives and Properties (2008-2011)	
	Total % Change	Compound Annual Growth Rate %
Tanzania	879	114
Burundi	274	55
Kenya	17	5
Uganda	2	1

Source: Munich Re Foundation (2013)

The low growth rate in Kenya might be explained by the fact that, low income market is generally ignored by the mainstream commercial and social insurance schemes and has not, for a long time, had access to appropriate micro-insurance products (Njuguna & Arunga, 2013). The low income earners face multitude risks such as disease and illness, substandard housing, food insecurity and natural disasters (Ramsay & Arcila, 2013). While over 90% of the population in Kenya is exposed to many risks in life, with the poor and MSEs being the most exposed, the overall insurance sector serves 8.4% of the total population.

Some of the factors that influence this low uptake of microinsurance include; low access, absence of a savings culture and low incomes (Ogodo, 2010). In addition, MSEs are exposed to numerous risks consequently depriving themselves of job creation, risk transfer and indemnification, enhanced productivity through insurance-backed risk management and avoidance of bankruptcies (Dionne, 2013). Nevertheless, MSE sector contributed about 79.8% of new jobs created in Kenya (RoK, 2014). Given the significant role played by MSEs, microinsurance remains a better option to cushion them from exposure (IRA, 2014).

1.1.3 Entrepreneurial Orientation

Entrepreneurial orientation is usually defined as a multidimensional construct, applied at the organizational level, which characterizes firm's entrepreneurial behaviour and includes one or several of these three dimensions: risk-taking, innovativeness and pro-activeness (Bisbe & Malagueño, 2015). The entrepreneurial orientation is crucial due to its positive influence in a firm's business performance (Wach, 2015). Some of the constructs of entrepreneurial orientation include; innovativeness, proactiveness, risk taking and competitive aggressiveness (Ekpe, & Mat, 2015). Entrepreneurial orientation and its influence on firm performance have been highlighted in both theoretical discussions and empirical research (Cavusgil, & Knight, 2015). Theoretically, entrepreneurial orientation has positive effects of firm performance.

Entrepreneurial orientation is the driving force behind entrepreneurial activities (Wales, Monsen & McKelvie, 2011; Covin & Wales, 2011; Runyan, Ge, Dong & Swinney, 2011). Some entrepreneurial behaviours include acceptance of uncertainty, ability to manage risk and perception of the situation (Bellu, 2010), tenacious, decisive and very persistent on problem solving (Longenecker, Moore & Petty, 2012; Schillo, 2011). Thus entrepreneurs who embrace this type of orientation are likely to benefit from improved financial performance of their enterprises (Jeraj, 2014). Entrepreneurial orientation is particularly useful because it contributes continuance satisfaction of an entrepreneur (Callaghan & Velter, 2011).

According to Andersen, Garvey and Roggi (2014), an organization has an EO when it is concurrently risk taking, innovative, proactive and competitively aggressive. In this respect, entrepreneurship is a unidimensional construct. After adding the dimensions competitive aggressiveness and autonomy, Lumpkin and Dess (1996) proposed that EO is a multidimensional construct. This means that the EO dimensions may vary independently, depending on the environmental and organizational context. Therefore an organization has an EO when it scores high on some of the EO dimensions, not on a

particular dimension or combination of dimensions (Joshi, 2013). The firms that adopted high entrepreneurial orientation achieved higher sales growth, higher profits and increased market share compared to those with low entrepreneurial orientation (Wales, Parida, & Patel, 2013). Entrepreneurial orientation has a positive effect on business performance of women-based SMEs (Carraher, & Paridon, 2015).

Shepherd (2015) argued that entrepreneurship is characterized by certain processes or characteristics related to the pursuit of opportunity that are associated with individuals or enterprises. Entrepreneurial orientation is therefore taken to represent the process of pursuing and seizing opportunities (Su, Xie, & Wang, 2015). Entrepreneurship might be considered to be bounded by three dimensions that relate to three questions: the why, the how and the what, relating to psychology and sociology, management, and economics respectively (Yusuf, 2012; Piperopoulos & Dimov, 2015). Furthermore, the influence of EO on performance is also context specific. Although only focusing on the dimensions by Stetz *et al.* (2010), Kreiser, Marino and Weaver (2012) have shown that the EO dimensions show high correlations and each having their own influence on performance. They have therefore shown that the EO construct is in fact multidimensional.

Globally, EO has been recognized as an important aspect of entrepreneur behaviour. Rajan and Zingales (2010) argued that entrepreneur's risk-taking behaviour influences the uptake of insurance products in the USA. Duong (2012) observed that SMEs or micro companies are often formed by partnerships or proprietorships, which hold a fact towards stakeholders and investors that this constitution of entity has higher operational risk rate for the lack of professionalism with only one or two key persons leading the organization. Brundin, Nordqvist and Melin (2010) noted that proactiveness is related to initiative and first-mover advantages, and to taking initiative by anticipating and pursuing new opportunities. Proactiveness is crucial to an entrepreneurial orientation because it suggests a forward-looking perspective that is accompanied by entrepreneurial activity.

Meissner (2012) noted that in Africa, there is need to put a strategy in place to ensure that insurance firms are proactively and effectively approaching new clients and properly managing the policyholders. In Ghana, Akotey (2015) asserted that adverse selection can have a destabilizing effect on an insurance system, because the mechanism of risk-pooling will not function effectively if only those adversely affected by a risky event buy the insurance product. In Kenya, Njuguna and Arunga (2013) noted that companies counter risks by using cost saving technologies and development of effective risk measurement models.

1.2 Statement of the Problem

MSEs, both in the developed and developing economies, have contributed significantly to economic growth, employment generation, innovation and poverty alleviation (Vega & Rojas, 2011; Venkateswarlu & Ravindra, 2012; ILO, 2013). In Kenya, MSEs contributed over 70% of the GDP and 79.8% of new jobs in 2013 (RoK, 2014). However, 60% of MSEs fail within few months of operation leading to low economic development and loss of jobs (Ngugi, Gakure & Kahiri, 2013).

MSEs continue to lose billions of shillings every year due to Economic shocks, vulnerability and exposure to numerous risks (Chodokufa & Chiliya, 2014). MSEs are exposed to risks such as death and illness of the entrepreneur, loss of property due to natural disasters and calamities among others. In the event of any of the risks materializing, the entrepreneurs result in disposing off the assets or appealing to well-wishers or the government for support.

Whereas these risks can be mitigated through micro-insurance which targets low income earners and MSEs, its uptake by MSEs remains very low (Matul *et al.*, 2013). Globally, approximately 135 million people hold microinsurance policies. This represents about 3% of the potential microinsurance market (Re, 2010). In Africa microinsurance penetration rate is low except in South African which has a rate of 40%. Namibia has a

penetration rate of 11.2%, Seychelles (9.9%), Tunisia (7.3%), Uganda (6.9%), Senegal (4.9%) and Kenya at 8.1% (Matul, McCord, Phily & Harms, 2010).

However, there exists limited literature focusing on the influence of E.O on microinsurance uptake. Previous studies focused on microinsurance in the context of social protection (World Bank, 2011) and the nature of the uninsured markets in various parts of the world (Churchill *et al.*, 2011). Other studies focused on provision of micro-health (Gitonga, 2009) and the need for government to support microinsurance (Makove, 2011). This study sought to bridge this gap by examining how EO influences micro-insurance uptake by MSEs in Kenya. The findings from this study provide relevant information necessary for policy formulation.

1.3 Research Objective

1.3.1 General Objective

The main objective of this study was to establish the influence of entrepreneurial orientation on micro insurance uptake by micro and small enterprises in Kenya.

1.3.2 Specific Objectives

i. To examine the influence of risk taking on micro insurance uptake by micro and small enterprises in Kenya.
ii. To assess the influence of proactiveness on micro insurance uptake by micro and small enterprises in Kenya.
iii. To explore how innovativeness influences micro insurance uptake by micro and small enterprises in Kenya.
iv. To determine how competitive aggressiveness influences micro insurance uptake by micro and small enterprises in Kenya.

v. To establish the moderating effect of the regulatory framework on relationship between entrepreneurial orientation and micro insurance uptake by micro and small enterprises in Kenya.

1.4 Research Hypotheses

The study had the following null hypotheses:

i. **H_0:** Risk taking has no significant influence on microinsurance uptake by micro and small enterprises in Kenya.

ii. **H_0:** Pro-activeness has no significant influence on microinsurance uptake by micro and small enterprises in Kenya.

iii. **H_0:** Innovativeness has no significant influence on microinsurance uptake by micro and small enterprises in Kenya.

iv. **H_0:** Competitive aggressiveness has no significant influence on microinsurance uptake by micro and small enterprises in Kenya.

v. **H_0:** The regulatory framework has no significant moderating effect on the relationship between entrepreneurial orientation and microinsurance uptake by micro and small enterprises in Kenya.

1.5 Scope of the Study

The study focused on the relationship between entrepreneurial orientation and the uptake of microinsurance by micro and small enterprises in Kenya. The study focused on risk taking, proactiveness, innovativeness and competitive aggressiveness as the study variables with the regulatory framework as the moderating variable. The study had a sample size of 400 MSEs. The MSEs were chosen because entrepreneurial orientation is known to play a big role in the performance of businesses. In addition, the MSEs plays a

critical role in contributing to GDP and employment of many Kenyans. The study was conducted within Nairobi County since majority of the MSEs are based in the County.

1.6 Justification of the Study

This study provides valuable and actionable insights for the microinsurance sector. The expectation is a deeper understanding of the landscape of entrepreneurial orientation and uptake of microinsurance by MSEs. The results of the study would influence the decisions of supporting actors such as regulators, policymakers, associations, donors, and investors and help them to recognize the gaps and activity trends within microinsurance sector.

Insurers and distributors would understand how to step up against the competition, benchmark key performance indicators, and identify opportunities in the market and expand their business activities outside the saturated traditional markets. For regulators and supervisors, the study findings provides relevant information necessary for devising legal frameworks that would enable development of sound and customer oriented microinsurance environment.

The study findings provides a foundation in which donors and international agencies can promote sustainable development in the microinsurance sector. The study enables donors and international agencies coordinate and focus funding on areas of greatest opportunity, need and impact. To policy makers, the research is helpful in highlighting areas of policy gap that require policy improvement within the MSE sector. It will result in improved policies that will promote business performance hence increased employment, economic growth, market competitiveness and technological innovativeness.

The results of this study brings to participants in the microinsurance market a broader perspective on the industry in their countries and helps them identify opportunities for designing new business models, products and strategies for expanding insurance

offerings for the low income population and MSEs in Kenya. To future researchers and academicians, this study contributes immensely to existing literature on entrepreneurial orientation and microinsurance uptake by MSEs. The study will also be a source of reference material for future researchers on other related topics and also identify gaps for further research.

1.7 Limitations of the study

This study anticipated facing some limitations while carrying out the research. The confidentiality policy of the firms restricted some entrepreneurs from filling in the questionnaire for fear of exposing the firms' private information. This was mitigated by assuring the respondents of utmost confidentiality and anonymity of the information they provided. An introduction letter was obtained from the university and was presented to the firms' management in order to eliminate suspicion and enable the respondents to disclose the information sought.

Other challenges included some of the respondents not filling or completing the questionnaire correctly because of misunderstanding some issues. This was mitigated by the clarification of issues that were not easily understood by respondent. Other challenges included inadequate responses to questions and unexpected occurrences like respondents being leaving before completing the questionnaire. These challenges were mitigated through constant reminders and revisit to the respondents during the survey period. To ensure high response rate, SMSs, telephone calls, emails were constantly used for follow up. There could be the errors in the information provided which could lead to ultra-vires data. This was mitigated through data cleaning.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review on entrepreneurial orientation and microinsurance uptake by micro and small enterprises. The chapter begins with the review of theories on which the study variables are anchored. The chapter then presents a conceptual framework followed by empirical studies and their critique. Lastly, the research gaps of the study were identified.

2.2 Theoretical Review

This section reviews various theories that are related to entrepreneurial orientation and uptake of insurance products. The theories reviewed are based on the key variables. These theories are; Frank Knight's risk bearing theory, theory of cognitive dissonance, Schumpeter's innovation theory, Mclelland's psychological theory and expected utility theory.

2.2.1 Frank Knight's Risk Bearing Theory

The Knight's Theory of Profit was proposed by Frank Knight, who believed profit as a reward for uncertainty-bearing, not to risk bearing. Simply, profit is the residual return to the entrepreneur for bearing the uncertainty in business (Knight, 2012). Knight had made a clear distinction between the risk and uncertainty. The risk can be classified as a calculable and non-calculable risk. The calculable risks are those whose probability of occurrence can be anticipated through a statistical data. Such as risks due to the fire, theft, or accident are calculable and hence can be insured in exchange for a premium. Such amount of premium can be added to the total cost of production.

While the non-calculable risks are those whose probability of occurrence cannot be determined, such as the strategies of a competitor cannot be accurately assessed as well as the cost of eliminating the completion cannot be precisely calculated. Thus, the risk element of such events is not insurable. This incalculable area of risk is the uncertainty. Due to the uncertainty of events, the decision-making becomes a crucial function of an entrepreneur or manager. If the decisions prove to be correct by the subsequent events, an entrepreneur makes a profit and vice-versa. Thus, the Knight's theory of profit is based on the premise that profit arises out of the decisions made under the conditions of uncertainty (Festinger & Carlsmith, 1959).

Knight (1921) introduced the dimension of risk-taking as a central characteristic of entrepreneurship. The author made a clear distinction between uncertainty and risk and argued that due to this uncertainty perfect competition would not eliminate all the profits. According to Knight (1921) it will appear that a measurable uncertainty or "risk" is so different from an immeasurable one that it is not an uncertainty at all. Therefore there should be a differentiation between "risk" and "uncertainty". The entrepreneur as an economic actor has, according to Knight (1921), the function to bear this "true" uncertainty.

Knight (1921) goes even further by stating that the entrepreneurial ability of an individual is defined by how well a given individual is able to deal with this "true" uncertainty and that the entrepreneurial success is determined by it. As a consequence, the benefits of bearing this uncertainty finally accrue to society. One alternative interpretation of the risk-bearing theory is that entrepreneurs bear the aggregate risks, rather than idiosyncratic ones. Then if one assumes that there is no possibility for entrepreneurs to insure against these risks, while workers are perfectly insured, one can easily show that the poor (and highly risk averse) agents become workers while the wealthy (and less risk averse) become entrepreneurs. But once again, this fails to correspond to optimal risk sharing. For instance, it is not hard to show that if there is only aggregate risk, entrepreneurs will bear a risk that is proportional to his initial

endowment (Rothschild & Stiglitz, 1976). It can therefore be concluded that risk-bearing, or according to Knight (1921), “true” uncertainty bearing is a central function of the entrepreneur. In addition, the difference in the capability and ability between individuals to bear this uncertainty is an important determinant of the success of a venture. This theory instigates research hypothesis that: entrepreneurial risk taking does not influence uptake of microinsurance by micro and small enterprises in Kenya.

2.2.2 Theory of Cognitive Dissonance

The Theory of Cognitive Dissonance was developed by (Festinger, 1957) postulates that the simultaneous existence of elements of knowledge (cognition) which, in one way or another, are conflicting (dissonance), hence motivating a person to make efforts to make them consonant (reduction of dissonance). This theory relates to self-justification, resulting from a person’s desire to appear rational in their act or decision, whereby people will appear bias to their attitudes on the given experimental task positively, in an attempt to justify their previous behavior (Festinger & Carlsmith, 1959). The application of proactiveness in the academic literature by psychologists encompasses a multitude of settings, each with its own set of goals and methods. Proactiveness theories have played a role in numerous fields of research. The concept of proactiveness has been applied to the fields of management such as entrepreneurship and company administration, much extensively in the context of organizational and work proactiveness (Meyer & Maltin, 2010; Swailes, 2004).

Wach (2015) defined proactiveness as a process of acting on future needs by seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of the lifecycle. Proactiveness is often associated with striving for the first-mover advantage. It refers to the firm’s ability to anticipate future consumer problems and needs and to make necessary changes ahead of competitors. Proactive firm is a leader rather than a follower because proactiveness

involves forward-looking perspectives and new opportunities which are accompanied by innovative activities (Nassr, & Wehinger, (2015).

Proactiveness is related to initiative and first-mover advantages and to taking initiative by anticipating and pursuing new opportunities. Akin to a dictionary definition of acting in anticipation of future problems, needs, or changes, Lumpkin and Dess argue that proactiveness may be crucial to an entrepreneurial orientation because it suggests a forward-looking perspective that is accompanied by innovative and entrepreneurial activity (Ratajczak-Mrozek, 2015). In terms of this, proactiveness is considered according to range of conceptions, and the implications of these according to predicted associations are outlined. According to Lonial and Carter (2015) proactiveness is associated with seizing initiative and acting opportunistically in order to shape the environment, that is, to influence trends and increase demand, then growth willingness is considered to represent the intent of proactiveness.

Growth willingness is a measure of the degree to which the intention to increase demand exists, and growth willingness is therefore taken to represent a measure of proactiveness. Growth willingness for an entrepreneur may be influenced by education directly and indirectly because individuals with higher education are likely to have higher aspirations in general, and indirectly through more self-confidence in managing growth and better ability to spot growth opportunities. A positive and significant association between educational contextual factors and proactiveness is predicted in terms of this Some optimum level of proactiveness as contributing to performance might be expected to exist in terms of a specific context (Pratono, & Mahmood, 2015). This theory instigate research hypothesis that: entrepreneurial proactiveness does not influence uptake of microinsurance by micro and small enterprises in Kenya.

2.2.3 Schumpeter's Innovation Theory

Schumpeter (1934) outlined the role of innovation in the entrepreneurial process. The author describes a process of "creative destruction" where wealth creation occurs

through disruption of existing market structures due to introduction of new goods and services that cause resources to move away from existing firms to new ones thus allowing the growth of the new firms. Accordingly, Schumpeter calls innovation the specific tool of entrepreneurs, the means by which entrepreneurs exploit change as an opportunity for a different business or a different service. Schumpeter (1942) stressed the role of entrepreneurs as primary agents effecting creative destruction, and emphasized to the entrepreneurs the need to search purposefully for the sources of innovation.

The changes and their symptoms indicate opportunities for successful innovation; as well as their need to know and to apply the principles of successful innovation. Currie e*t al.* (2008) posits that in an external setting that is ever changing, innovation and entrepreneurial conduct are processes that are holistic, vibrant and complementary fundamental to an organization's sustainability and success.

According to Oslo Manual (2005) an organizational innovation is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations. Innovations can be classified by the degree of novelty. It is well known (e.g., Schumpeter, 1934; Oslo Manual, 2005; Greenhalgh & Rogers, 2010; Allen & Yago, 2010; Pain, 2011) that innovation not necessarily means the introduction of radically new products and processes. In financial services, especially in insurance industry, innovations are more often incremental in their nature (Pain, 2011). In this regard, depending on the degree of radicalism, innovations can be divided into incremental, evolutionary and transformational (Pain, 2011).

This Schumpeterian vein of thinking has been carried forward by successive scholars and researchers (Drucker 1985; Shane, Kolvereid, & Westhead, 1991). On his part, Drucker (1985) held out the entrepreneur always searching for change, responding to it, and exploiting it as an opportunity, and engaging by this means in purposeful innovation. Lumpkin and Dess (1996) saw the process of creative destruction as initiated by an entrepreneur, which makes innovation an important success factor within EO. Furthermore, the link between entrepreneurship and innovativeness is supported by the results of Shane, Kolvereid and Westhead (1991), who found that innovation is among the key motives to start a business.

Innovativeness is the proclivity and tendency of the firm to engage in and support new ideas, novelty, experimentations and creativity which lead to the creation of new products, services or technological processes (Love & Roper, 2015). Innovativeness reflects the firm's willingness to depart from existing practices and technologies, and open its organizational culture to new ideas and combinations. Innovativeness is related with creativity and without it there will be no force to be innovative. It reflects a firm's propensity to engage in and support the generation of new ideas and creative processes that may lead to new markets (Tomlinson & Fai, 2013). The entrepreneurship view, innovation can be radical or incremental and both contribute to a firm's competitiveness. A firm's innovativeness is the willingness to seek and support creative or novel solutions to problems and needs (Ebersberger & Herstad, 2013).

Innovativeness as an entrepreneurial orientation dimension concerns the willingness of firms to pursue new ideas and to explore and experiment with them creatively (Trianni, Cagno, & Worrell, 2013). Innovativeness ranges from a willingness to try new products or services, to a commitment to be at the cutting edge of practice moving beyond the current state of the art (Mahmood, & Hanafi, 2013). It is demonstrated by problem solving, finding creative solutions and developing new products and services (Bouncken, & Kraus, 2013). Innovativeness involves conceptualization of the market changes and competition and taking the right action to remain competitive. Saunila and

Ukko (2013) define of innovation as the process of developing and implementing a new idea through a recombination of old ideas.

Innovation can also be termed as a scheme that challenges the present order, a formula or a unique approach that is perceived as new by the individuals involved. In addition, the EO conceptualization of innovativeness fits Anderson and Eshima, (2013) discussion of firm innovativeness as the propensity for a firm to innovate or develop new ideas or to adopt innovations. Therefore, the EO conceptualization of innovativeness broadly relates to the literature on innovation. It also does not consider specific aspects of innovation such as the nature, type, stages, means, and aims of innovation or the social context, which Baregheh (2009) explain are major topics in the innovation literature, which spans various disciplines. According to Hwang and Hyun, (2016) innovativeness is defined as the firm's propensity to engage and support new ideas, upgrading, experimentation and creative processes which may produce a variety of products, services or new processes. Hence, innovativeness could be considered a treat to the existing business practices and technology (Vanhala & Ritala, 2016). This theory instigated the research hypothesis that: entrepreneurial innovativeness does not influence uptake of microinsurance by micro and small enterprises in Kenya.

2.2.4 McClelland's Psychological Theory

Psychological theory views entrepreneurs as people with unique values, attitudes, and needs that drive them and differentiate them from non-entrepreneurs (Cunningham & Lischeron, 1991). Researchers maintain that a person's needs, drives, attitudes, beliefs, and values are primary determinants of a particular behavior. Lachman (1980) suggests that people who possess psychological characteristics have a greater tendency (or potential) to perform entrepreneurial acts than people who do not possess such characteristics. Moreover, Mitton (1989) describes entrepreneurs as having certain psychological characteristics such as a total commitment to their cause, a need for total control, and a liking for uncertainty and challenge. Some of the main psychological traits

identified in entrepreneurship literature are need for achievement, locus of control, willingness to take risk, self-efficacy, and innovativeness. A similar focus is found in locus of control theories that conclude that an entrepreneur will probably have strong internal locus of control (Amit *et al.*, 1993).

This means that an entrepreneur believes in his or her capabilities to commence and complete things and events through his or her own actions. In particular, internal LOC gives rise to heightened alertness which is necessary for incidental learning such as the recognition of profit opportunities once they are encountered. Spontaneous learning in turn ultimately results in entrepreneurial behavior. The above psychological theories of David McClelland may be applicable today in the Kenyan context where entrepreneurs in pursuit of need to achieve will apply entrepreneurial values in the uptake of micro insurance by MSEs. This theory instigate research hypothesis that: entrepreneurial competitive aggressiveness does not influence uptake of microinsurance by micro and small enterprises in Kenya.

2.2.5 Expected Utility Theory

The intellectual origins of expected utility theory date back to the 18th century in proposed solutions to the Saint Petersburg paradox. Expected utility theory is felt by its proponents to be a normative theory of decision making under uncertainty. The expected utility theory is also used to understand decision-making about insurance. Most people are assumed to have a preference for avoiding at least some level of risk (Eeckhoudt *et al.,* 2005). Uncertain expenses to which MSEs are exposed prevent them from maximizing utility and therefore, under specific conditions, it is optimal for MSEs to insure against them (Arrow, 1964; Mossin, 1968; Feldstein, 1973). One important element of the expected utility theory is that it assumes that entrepreneurs who are risk averse will have a concave utility function and purchase full insurance at an actuarially fair price to maximize their expected utility (Pratt, 1964; Arrow, 1965). Under the assumption that there is perfect information, if there was insurance that would equal the

expected utility and individuals were risk averse, they would be willing to buy this insurance because it would maximize their utility. In practice, actuarially fair insurance is not attainable because the administration cost and the risk premium for the shareholders have to be added to the actuarially fair rate.

Administration costs are expenses made by the insurance company. The risk premium is a premium to the shareholders of the insurance company as payment for the risk they take in offering the insurance. In this way the premium that has to be paid is higher than the actuarially fair premium. In this case, if all other factors are constant the optimal level of demand is lower and the household will partially insure according to its risk preferences (Mossin, 1968; Doherty & Schlesinger, 1991). Under the assumption that wealth is inversely correlated with risk aversion, low-income households and MSEs, who are the targeted clients of microinsurance, are assumed to be more risk averse and purchase more insurance to avoid the risk of loss (Laffont & Mantoussi, 1995; Guiso & Jappelli, 1998). To cope with shocks, MSEs often rely on a diversity of existing strategies such as risk diversification, borrowing, using savings, depleting production assets and informal risk-sharing between households. Such activities, like insurance, have the objective of smoothing income and smoothing consumption (Chetty & Looney, 2011). Income smoothing or so-called ex-ante efforts to reduce risk exposure refer to activities which MSEs undertake to protect themselves from adverse income shocks before they occur (Alderman & Paxson, 1994). Since MSEs already have existing mechanisms for dealing with uncertain expenses, what does this mean in the light of the demand for an external insurance mechanism such as microinsurance?

Research shows that the level of consumption smoothing which MSEs achieve in the light of idiosyncratic shocks through existing activities is not sufficient to allocate risk within communities or provide permanent income over time. Idiosyncratic shocks are shocks that are specific to a household and not correlated to shocks that other households experience such as breaking a leg or getting a heart attack (Kazianga & Udry, 2006). This implies that if MSEs would be utility maximizers and could afford the

insurance premium that they would take up at least a certain level of micro insurance, if it were available to them. This theory instigate research hypothesis that: entrepreneurial competitive aggressiveness does not influence uptake of microinsurance by micro and small enterprises in Kenya.

2.3 Conceptual Framework

Myers (2009) suggests that a conceptual framework explain graphically the general constructs of the variables to be studied and the relationships amongst them. Different scholars define conceptual framework according to the subject under review but all point to the same type of methodology or maps of processes and procedures followed in solving a problem. Brouwer, Faramarzi and Hoogendoorn (2014) defines conceptual framework as a group of concepts that are systematically organized to provide a tool for interpretation of information. It is considered as a visual or written product, one that explains, either graphically or in narrative form, the main things to be studied, the key factors, concepts, or variables and the presumed relationships among them (Mohan & Ganesh, 2012). Conceptual framework can also be described as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Vasquez, 2011).

The conceptual framework of this study - the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs this research - is a key part of the design (Robson, 2011). The conceptual framework is primarily a conception or model of what is out there that is being studied, and of what is going on with these things and why - a tentative theory of the phenomena that is being investigated (Fayolle, Basso & Bouchard, 2013). The function of this theory is to inform the rest of the design, to help in assessing and refining the research objectives, develop realistic and relevant research hypothesis, select appropriate methods, and identify potential validity threats to the study conclusions. It also helps in justifying the research (Petrocelli, 2011). In this study, the independent variables are risk taking, proactiveness, innovativeness and

competitive aggressiveness with regulatory framework as the moderating variable. Since a conceptual framework for a study is something that is constructed and not found, it incorporates pieces that are borrowed from elsewhere, but the structure, the overall coherence, is something that is build, not something that exists ready-made (Maxwell, 2010). Therefore, based on review of the extant literature, and using the conceptual framework posited by Lumpkin and Dess (1996), a conceptual model regarding the relationship between EO and uptake of microinsurance was developed. This study's conceptualized framework is shown in Figure 2.1.

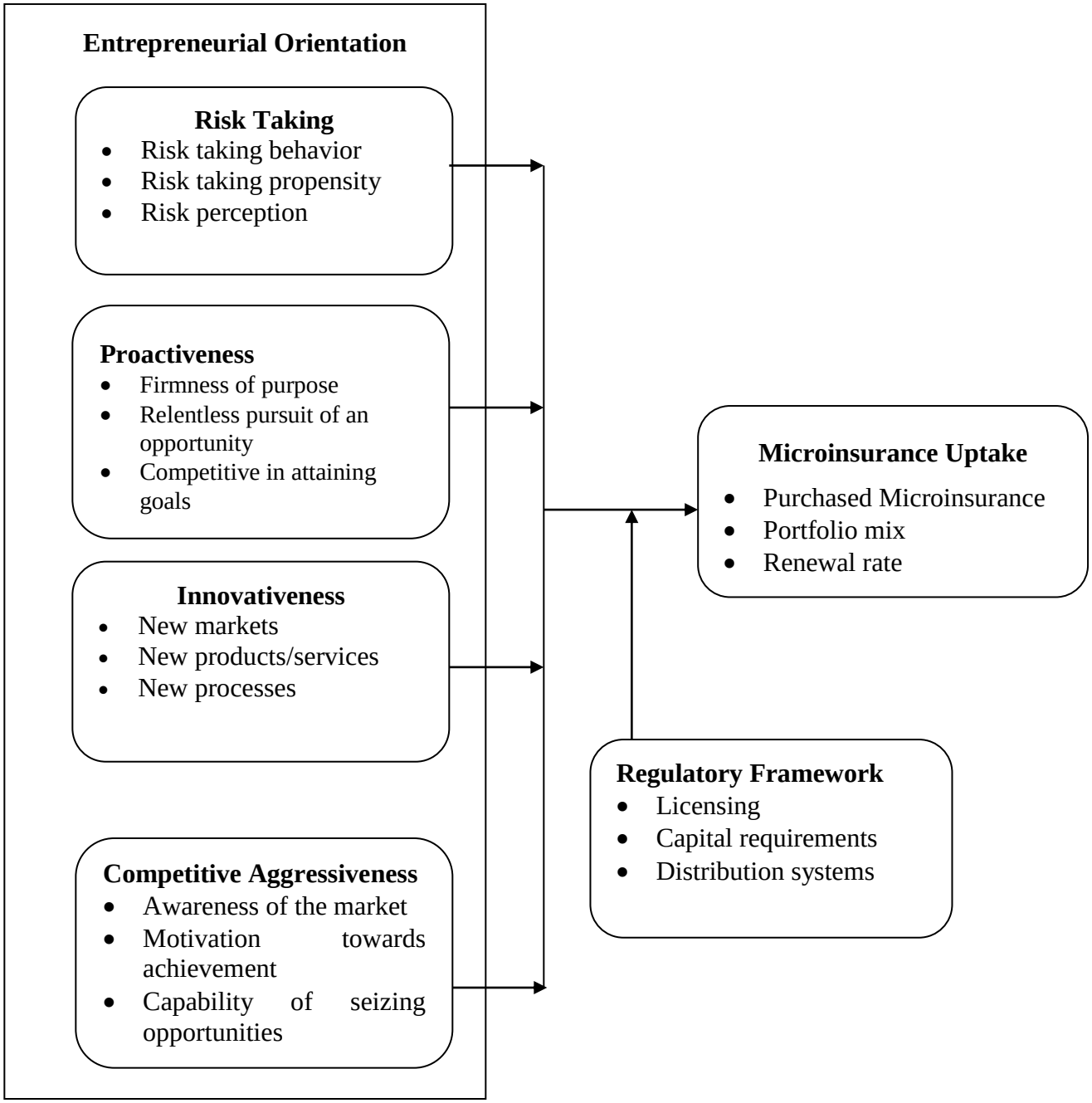

Figure 2.1: Conceptual Framework

2.3.1 Risk Taking

Risk-taking refers to the degree to which managers are willing to make large and risky resource commitments, that is, those which have a reasonable chance of costly failures. According to Eggers *et al.* (2013), risk-taking refers to the organization's agreement to commit resources with uncertain outcome. Risk-taking is an important dimension of EO as entrepreneurial firms tend to experience a higher level of external and internal uncertainty. Risk-taking is assessed by asking managers about the firm's propensity to engage in risky projects and managers' preference for bold versus cautious acts to achieve firm objectives.

Cheng *et al.* (2015) defined risk as a function of probability and magnitude of loss associated with a particular event. According to Hamid *et al.* (2014) risk taking behavior is influenced by risk taking propensity and risk perception. Sitkin and Wiengart (1995) describe risk perception as a firms' valuation on the integral risk in a particular situational problem influenced by a probable potential gain or loss. Risk perception was found to have a significant effect on risk taking behavior. Theory disputes on whether risk perception is shaped by the magnitude of risk or the probability of a perceived loss. Hamid *et al.* (2014) establishes the probability of a perceived loss plays a huge role in shaping the risk perception of an entrepreneur as compared to the anticipated magnitude of the loss in that particular situational problem.

The propensity of risk taking is generally the perceived probability of an entity or individual getting rewards associated with the success of a particular situation, required by an individual before he will subject himself to the consequences associated with failure, alternative situation providing less rewards as well as less severe consequences than the proposed situations (Brockhaus, 1980). In other words, the propensity to risk taking is the degree to which an entity or an individual is willing to take chances with respect to the risk of loss. Risk taking propensity is generally characterizes an entrepreneur as risk averse or risk seeking.

Risk averse entrepreneurs view the uptake of insurance as a risky investment in which they are bound to make losses (Hwang, 2016). Entrepreneurs according to the prospect theory often base their risk taking behaviour on a simple gain-loss value based on a reference point as compared to the final effect on general wealth gain (Brooks, Peters & Zank, 2013). Risk averse entrepreneurs find the uptake of micro insurance as a risky venture which will lead them to gain losses rather than profits (Parrino, Poteshman & Weisbach, 2012).

This conservative approach attitude towards risk therefore decreases the demand for insurance. However this contradicts to the utility theory, where it is expected that the risk averse will be inclined to higher demand in the uptake of insurance due to the hedging effect it has on their businesses when faced with a risk occurrence. Prospect theory indicates that entrepreneurs often neglect the diversification effect of the insurance (Kaluszka & Krzeszowiec, 2012). The focus then shifts on the loss incurred due to the purchase of the insurance and this becomes a reference point from which the entrepreneurs determine whether to take up an insurance cover (Hwang, 2016). A study on the relationship between risk preference and risk taking propensity shows that the effect of risk taking propensity is moderated by risk preference (Hamid *et al.,* 2014; Cheng *et al.,* 2015). That is when the perception of a loss probability is high, the risk taking preference tends to be low hence the entrepreneurs can be said to be risk averse.

2.3.2 Proactiveness

Proactiveness refers to a posture of anticipating and acting on future wants and needs in the marketplace, thereby creating a first-mover advantage Vis-a`-Vis competition (Querbes & Frenken, 2016). Proactiveness is significant for EO because of its forward-looking perspective (Portillo & Poldma, 2010). A proactive firm is able to identify possible emerging problems and find solutions for them (Dai, Maksimov, Gilbert & Fernhaber, 2014).Furthermore, proactiveness was conceptualized by Khan and

Kakabadse (2014), as a mindset that focuses on introducing new products or services in anticipation of future demand and shaping the environment.

According to Dai, Maksimov, Gilbert and Fernhaber (2014), proactiveness is not just about what is seen in the future in terms of new products and opportunities. Thus, proactiveness can refer to the introduction of completely new products and brands ahead of competitors, and also eliminating those operations which have turned or are turning unprofitable. Activities underpinning proactiveness include new opportunity identification and evaluation, identification and monitoring of market trends, and new venture team formation. As Schwartz, Teach and Birch (2005) once pointed out, opportunity recognition is one of the key elements of the entrepreneurial process.

2.3.3 Innovativeness

Schumpeter (1934; 1942) emphasized the role of innovation in the entrepreneurial process. He stated that this was a process of "creative destruction" where wealth was created when existing market structures were disrupted by the introduction of new goods or service that shifted resources away from existing firms and caused new firms to grow. Oscar (2013) believes that innovation is the specific tool for entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. In its original sense, innovativeness can be defined as the degree to which an individual or other entity is relatively earlier in adopting new ideas than the other members of a system (Oscar & Hassan, 2013). Ireland and Webb (2007) confirmed that Entrepreneurial orientation is manifest in product and process innovations. Innovativeness is an organization's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products. The adoption of innovation is a main vehicle for organization adaptation and change to improve firm performance especially under the conditions like scarce resources, dynamic business environment, intense competition and changing customers demand for better quality (Oscar *et al.*, 2013).

In an era of high competition, today firms are faced with the choice of being innovative or die, therefore to sustain survival the firms, should chose to innovate (Madhoushi, Sadati, Delavari, Mehdivand & Mihandost, 2011; Stock & Zacharias, 2010).Successful entrepreneurial business is usually based on significant innovation. The ‘‘innovativeness’’ dimension of EO reflects a tendency to engage in and support new ideas, novelty, experimentation, and creative processes, thereby departing from established practices (Lumpkin & Dess, 1996). A high rate of technological and or product market innovation, as encapsulated in this innovativeness dimension, can be used by the firm to pursue new opportunities.

Moreover, Kropp, Lindsay and Shoham (2006) identified that the innovativeness component of EO is important to the success of firms. Entrepreneurial firms operate in dynamic environments ‘‘where customer tastes, product-service technologies, and competitive weapons often change unpredictability (Heirati, O'Cass, Schoefer & Siahtiri, 2016). Indeed, innovativeness is required for product market development in these environments in order to grapple with the continuous change and uncertainty. The greater the environmental dynamism and hostility, it has been argued, the greater the innovation that is required (Wang & Chen, 2010). Muhammad *et al.* (2012) stated further that entrepreneurial Orientation can inhibit or foster innovation process. Several studies, according to them have stressed upon the ties between entrepreneurial orientation and innovation arguing that entrepreneurship in itself is a pragmatic manner leading towards innovation and new venture establishment by assuming higher risks and rewards associated with the new venture.

2.3.4 Competitive aggressiveness

Competitive aggressiveness has been defined as a firm’s tendency to intensely and directly challenge its competitors in order to outperform rivals in the marketplace by utilizing extraordinary strategies (Kothari, 2010). Giachetti (2015) studied performance implications of competitive aggressiveness and defined competitive aggressiveness as a

more general managerial disposition reflected in a firm's willingness to take on and desire to dominate competitors through a combination of proactive moves and innovative efforts. Competitive aggressiveness involves large amount of investment in marketing strategy to combat industry trends that threaten its survival or market position. It is also indicated by being the market leader and adopt “first in the market” strategy (Wirtz & Tang, 2016).

Sen (2013) noted that firms with aggressive orientation are willing to combat competitors by slashing prices and sacrificing profit in order to dominate market share or spend aggressively to acquire manufacturing capacity. Kreiser and Davis (2010) contend that aggressive firms may be very assertive in leveraging the results of other entrepreneurial activities such as innovativeness and proactiveness for firm development and growth. Competitive aggressiveness is an important entrepreneurial characteristic; since all businesses depend on the actions of entrepreneurs (Gamage, 2014). Henry, Hill and Leitch (2010) consider entrepreneurs to be enthusiastic people who take initiative and drive projects forward. These entrepreneurs are also believed to be people who are proactive and constantly searching and finding for opportunities. To endorse the importance of competitive aggressiveness as an EO dimension, Dean (2013) shows a high correlation of competitive aggressiveness with entrepreneurship on all levels of risking a study that compares companies in low- and high risk environments.

Liu and Hou (2010) outline three drivers for competitive behavior: awareness, motivation, and capability. In this study, we advance the idea that awareness, motivation, and capability are manifested as firm processes (Lin, Turkier & Chang, 2015) and suggest that these processes makes some firms more competitively aggressive than others. Awareness entails analysis of a firm’s rivals, real-time tracking of its rivals’ competitive actions, and dissemination of this information (Nadkarni, Pan & Xiao, 2014). There is substantial variation among firms in their demonstrated levels of awareness (Montgomery, Moore, & Urbany, 2013). Some of this variation is due to firms that shun such red ocean actions as they seek to innovate to blue oceans. The

primary reason behind the variation, however, is that the monitoring and analysis functions inherent in rival awareness are costly in terms of physical and cognitive resources of the firm (Nenzhelele, 2012). The most competitively-aggressive firms choose to invest in these processes and thus have a higher level of awareness (Stambaugh *et al.,* 2013). The second key factor behind competitive aggressiveness is motivation (Bulley, Baku & Allan, 2014).

There are two distinguishing characteristics of a highly competitively-aggressive firm in this regard. First, outperforming its rivals is important for an aggressive firm (Andrevski *et al.,* 2010). Other companies may choose other reference points, such as past performance or internal goals, and be satisfied with meeting such targets (Andrevski *et al.,* 2010), but competitively aggressive firms seek out information on the performance levels of their rivals and then compare themselves against their rivals' performance (Rodrik & Yoon, 2013).

The second characteristic of competitively aggressive firms is that they see the challenging of the rivals' positions as an appropriate and necessary step in furthering their own performance. Moreover, they may attribute any performance shortfall to the actions of a rival (Hannachi & Coléno, 2015). A high level of motivation and awareness, however, become salient only in the presence of the third factor, the firm's capability to launch and counter competitive attacks. Part of this capability is the tangible resources of a firm such as slack funds generated by strong past performance (Lin, Turkier & Chang, 2015). But a competitively aggressive firm also identifies available resources and prioritizes them to attack when less aggressive firms might look at the same resource base and see little. The more aggressive organizations are better at creating effects with the resources available rather than waiting for optimal resources to become available (Stambaugh *et al.,* 2013).

Mwangi and Ngugi (2014) examined the effect of Entrepreneurial Orientation on growth of Micro and Small Enterprises in the Kenyan town of Kerugoya. The study specifically attempted to ascertain the impact of innovativeness on growth of Micro and Small Enterprises; to assess the magnitude to which risk taking affects growth of Micro and Small Enterprises; to evaluate the impact of proactiveness on growth of Micro and Small Enterprises. The study also sought to discover the effect of entrepreneurial managerial competence on growth of Micro and Small Enterprises in the Kenyan town of Kerugoya. Using a descriptive research design, the target population for the study was 1420 MSEs in Kerugoya town which are registered with Ministry of Trade of the Kirinyaga County from whom secondary and primary data was collected. The data was analysed using descriptive statistics, and inferential analysis (Mwangi & Ngugi, 2014).

The findings of the study by Mwangi and Ngugi (2014) indicated that the dimensions of EO such as innovativeness, risk taking, pro-activeness, and entrepreneurial managerial competence have a significant positive influence on growth of Micro and Small Enterprises. Innovativeness was found to be the most significant with correlation coefficient of 0.915 elements of Entrepreneurial Orientation influencing growth of MSEs in Kerugoya. The study recommended that MSE owners should be candid and eager to engage in Entrepreneurial Orientation at advanced levels so as to strengthen their growth, competitiveness, profitability and survival. In addition, they should innovate to make use of change as an opportunity for different businesses. They should also attempt to pinpoint probable developing issues and find solutions for them, to acquire competitive advantage, in addition to acquiring entrepreneurial managerial competencies (Mwangi & Ngugi, 2014).

2.3.5 Regulatory Framework

Microinsurance would not be successful if there is no support from the government. It is the government, which regulates microinsurance firms (Giesbert & Steiner, 2015). Thus, the regulatory framework should be conducive and supportive to the needs of the

industry for it to flourish and be successful (Rodolfo, 2014). Based on these conditions, it can be observed that the success of microinsurance does not only depend on the microinsurance institution and the insured; rather, its success also involves the macroeconomic environment through which the active participation and support of the government through regulation is indispensable (Akotey & Adjasi, 2016). The regulatory environment encourages tapping of a wide range of distribution channels for micro-insurance (Makove, 2011).

Insurance laws, regulations and rules have developed over time with traditional insurance in mind. These traditional products continue to be inaccessible and unaffordable to the poor (Naghi, 2014). To enhance microinsurance, legal action should be taken on the errant insurance firms, fraudulent agents and deceptive clients (Morelli, Onnis, Ammann & Sutter, 2010). For example, the dramatic effect of insurance regulation introduced in India over the past few years, has pushed microinsurance out into the rural areas and towards the poor with great success.

2.3.6 Uptake of Microinsurance by MSEs

Microinsurance uptake can be measured by analysing the purchased microinsurance, portfolio mix and the renewal rate. The awareness and satisfaction performance indicators focus on how readily the target market enrols in the microinsurance programme and retain the coverage (Wipf & Garand, 2010). With the goal of advancing the field, we review recent studies on microinsurance demand which will be substituted for uptake in this study. Our search and identification strategy will follow Biener and Eling (2012) with the purpose of ensuring that the studies included meet academic standards. Other authors have used several measures of microinsurance uptake, for instance, Saqware (2012) look at microinsurance uptake in Tanzania from the demand perspectives.

2.4 Empirical Literature Review

Entrepreneurial orientation is upheld as a key aspect towards enhancing firm performance and competitiveness. As a result of seeking to unveil greater achievements as well as control the uncertainties, an entrepreneurial oriented individual upholds the need for insurance cover and any other move to have any future dynamics in the businesses in a more controlled avenue. Based on the merit that surrounds entrepreneurial orientation and uptake of micro-insurance, scholars and researchers from across the globe have turned the attention on these aspects and clearly outlined them in different dimensions. However, these studies have been based on single variables adopted in this study while they have as well left a wide gap which this study sought to fill. The studies are herein reviewed systematically based on the study variables.

2.4.1 Risk taking and Uptake of Microinsurance

Firms that adopt EO are often characterized by high risk taking behavior such as taking on large debts or making large resources commitment to projects with a view to make huge returns based on available opportunities (Boubaker, Nguyen & Rouatbi, 2016). In seizing opportunities in the marketplace, risk-taking concerns firms' tendency to take bold actions such as venturing into unknown markets, committing a substantial amount of resources to ventures with uncertain outcomes, as well as the tendency to borrow heavily hoping to reap high returns (Etebang, 2010).

Organizations may therefore follow the risk-taking path by making decisions and taking action in the context of uncertainty as well as making substantial resource commitments without knowing what the consequences of their decisions and behaviors will be (Rosanas, 2013). The standard view is that risk-taking is one of the three key elements of EO, and one that enhances company profitability (Miller & Le Bruton-Miller, 2011). It is associated with the willingness of managers to act in a bold and decisive manner in the face of uncertainty. Insurance coverage is an association's first line of defense in risk management (Ross, 2014). Being underinsured can mean disaster, while duplicate

coverage wastes money better spent elsewhere. Insurance represents an important method of meeting the financial consequences of risk. It has been traditionally defined as the business of transforming event (insurable) risks by means of two-party contract. Insurance provides a mechanism for the transfer of the cost of risk rather than the transfer of risk (Jensen & Schomacker, 2015). Micro and Small Enterprises (MSEs) are regarded as open to risk taking, this is the reason why risk management in SMEs should stay focused by top leaders (Jalali, Jaafar, Talebi & Ab Halim, 2014). Britzelmaier, Häberle and Landwehr (2015) did a study on effective risk management strategies for micro, small-medium enterprises in Germany and found that MSEs are vulnerable to risks, such as business risks, funding and budgeting among others.

Despite the necessity, many MSEs rarely carry out detailed risk assessment and management strategies. In an effort to reduce the vulnerabilities of MSEs, microinsurance has been recommended by most studies to be the best form of a risk-coping mechanism (Baidoo & Buss, 2012; Buabeng & Gruijters, 2012). In reviewing personal risk, studies by Singapore Government (2012) prove that the most significant risk among small businesses involves human factor. High degree of employee turnover and shortage of know-how experts both result in wastage of manpower and additional cost of training. In long term, human factor will lower the productivity and affect the brand image of small businesses as an employer. Duong (2012) in his study on effective risk management strategies for small-medium enterprises and micro companies in Finland found that financial risk is a broad term covering many negative risks related to financing, for instance, liquidity risk, funding risk, interest rate risk, investment risk, pricing risk, credit risk, and so on. The consequences and the exposure's extent an organization may suffer from financial risks depend on the scale of the company's financial transactions: how much of the borrowings in compare to its business scope. Financial risk is considered a specialization of risk taking which is an aspect of EO (Duong, 2012).

In addition to careful revision of business cash flow and operational forecast, management of small-medium enterprises and micro companies use hedging - including stocks and microinsurance as a method for reducing risks in operations and other investments (Jansone & Voronova, 2012). Insurance is a form of risk management primarily used to hedge against the risk of contingent, uncertain loss (Ma, Pope & Xie, 2013). Bhatt and Pathak (2014) assessed risk transfer through microinsurance in India and found that it can be a transparent means of providing compensation against damage; it decreases the need for humanitarian aid.

In addition, microinsurance offers the disaster affected a more dignified means to cope with disasters than relying on the generosity of donors after disaster strikes. Giesbert (2013) sought evidence from Ghana on microinsurance and risk management by analyzing life insurance, formal savings, informal savings, formal loans and informal loans. The study employed the empirical analysis of micro-level household survey data which was complemented by analysis of qualitative data obtained from focus group discussions. The results revealed that household uptake of micro life insurance do not entirely follow the predictions made by standard insurance theories. Informal trust-building mechanisms and subjective risk perceptions turn out to play an important role in the context of information asymmetries and limited experience with formal insurance. The study also found that the perceived value of microinsurance consists not only of the expected or experienced benefits and costs, but also of quality, emotional and social dimensions. The results also revealed that there are gender-specific patterns of market participation between and within households that are intertwined with the household type and regionally varying sociocultural conditions (Giesbert, 2013).

In Kenya, Njuguna and Arunga (2013) found that the most ubiquitous risks facing micro-insurance providers as; diseconomies of scale resulting from low penetration, limited distribution channels, correlation risks and rigid regulatory framework. The strategies being used to counter the risks include: use of technology to lower administration costs, control of moral hazards and adverse selection, thorough scrutiny

of claims, development of risk measurement models and continuous monitoring of the clients. The authors recommended that microinsurance service providers should invest in research and actuarial services to improve pricing of the products. The study also recommended that the industry regulator, Insurance Regulatory Authority, should ensure that micro-insurance policies are drafted in simple language understandable by the clients (Njuguna & Arunga, 2013).

2.4.2 Proactiveness and Uptake of Microinsurance

There is a tendency for citizens to delay taking action to protect themselves and their assets from the harmful consequences of disasters, particularly when there is an expectation that governments will if disaster strikes (Williams, 2011). Affordability is another key element bedeviling a culture of prevention or proactiveness, with market-based solutions out of reach for the most vulnerable, including MSEs. Lack of resources to manage disaster risk can even shrink risk perceptions (Asgary *et al.,* 2012). Entrepreneurial organizations need individuals who are alert to opportunities (Sapsed, Grantham & DeFillippi, 2013). Individuals are more susceptible to identify opportunities through their opportunity recognition capabilities (ORC), defined and outlined as: the individual's prior knowledge of industries, markets, or customers (Chandra, Styles & Wilkinson, 2013). Opportunity recognition capabilities are conditioned by intelligence, creativity, optimism, and perception of risk (Phillips & Tracey, 2012).

In assessing the relentless pursuit of opportunities, all entrepreneurial activities originate in the creative acts of individuals (Stuetzer, 2014). This places significant importance on the individuals within an entrepreneurial firm. Whilst opportunity recognition capabilities of individuals in an entrepreneurial organization are important, opportunity recognition in itself does not produce tangible result. An entrepreneurial firm needs individuals who act upon these recognized opportunities (Geißler & Zanger, 2015). Governments need to take a proactive approach to decreasing their fiscal burden in the

event of a disaster and promote a culture of risk reduction and self-protection among MSEs. Insurance is an area where governments have acknowledged a responsibility for issues of access and affordability (Malešič *et al.,* 2015).

According to Kuckertz, Kollmann and Krell, (2011), this propensity is termed: opportunity exploitation willingness (OEW). In this study, the opportunity exploitation willingness is expressed by the entrepreneur in the uptake of microinsurance. By linking insurance programmes to risk reduction activities among insured citizens and communities and by pooling risk in reinsurance markets, governments in Turkey, Albania, the United States and more recently Honduras, are trying to reduce moral hazard and extend the coverage of traditionally limited insurance policies (Cutler, 2015). Community-pooled insurance for instance, is a tool that can only work in communities organized around the objective of reducing and transferring risk (Anderson & Holcombe, 2013). For instance, flood insurance schemes in the United States are designed for members of communities implementing proactive measures. MSEs that are part of these communities can benefit from such schemes. In the presence of these models, MSEs are expected to benefit where involved (Anderson & Holcombe, 2013). Obstacles to MSE uptake include constraints around informal land or building practices of premises and the cost of insurance premiums (Wellalage & Locke, 2015).

In a study on financial dependence and growth in the US, Rajan and Zingales (2010) recommended two measures towards improved access to financial services. Firstly, to recognize the importance of inclusive financial services, as such recognition significantly influences and encourages a more proactive set of measures. These measures suggest that it is important to define the problem for successful provision of financial services in the informal sector. They further argued that defining the problem and recognizing MSEs as potential clients for market-based financial services plays a significant role.

Risk-sharing occurs through all financial services, but most explicitly to those identified as insurance products. Meissner (2012) found that in Africa, insurance companies have typically focused on the corporate and upper end of the market; a model representing the structure of the traditional insurance market and ignoring the broader population. With competition expected to increase in this untapped market there is need to put a strategy in place to ensure that insurance firms are proactively and effectively approaching new clients and properly managing the policyholders (Meissner, 2012).However, this study focuses on the service provider while the current study examines the entrepreneur's perspective.

Brundin, Nordqvist and Melin (2010) studied entrepreneurial orientation across generations in family firms so as to find out the role of owner-centric culture for proactiveness and autonomy in Sweden and found that proactiveness is related to initiative and first-mover advantages, and to taking initiative by anticipating and pursuing new opportunities. The authors found that proactiveness is crucial to an entrepreneurial orientation because it suggests a forward-looking perspective that is accompanied by entrepreneurial activity. They assert that proactiveness is associated with leadership, and not following, as a proactive enterprise has the will and foresight to seize new opportunities, even if it is not always the first to do so. The study however, observed that being a first entrant into a market is not necessarily a guarantee of a durable competitive pioneer advantage but is associated with mixed results and that increased earnings might not necessarily be predictably associated with higher levels of proactiveness.

This would depend on whether this specific context is appropriate to proactiveness as a dimension of entrepreneurial orientation (Brundin *et al.,* 2010). Akotey (2015) examined the impact of microinsurance on household welfare in Ghana and revealed that microinsurance could lead to different outcomes. It could have counterintuitive effects due to adverse selection and moral hazards. Adverse selection describes a state of affairs where those who have a high probability of being negatively affected by a risky event

are the ones who purchase insurance. The study observed that adverse selection can have a destabilizing effect on an insurance system, because the mechanism of risk-pooling will not function effectively if only those adversely affected by a risky event buy the insurance product while moral hazard is the situation where the indemnity enjoyed under insurance creates an incentive for a policyholder to act in an irresponsible manner. Akotey (2015) revealed that due to their protection under the insurance contract, they behave carelessly and this generates greater likelihood of the insured event occurring. Microenterprises may be less aggressive in undertaking new investments with the uptake of microinsurance. For example, agro-based microenterprises that have taken animal insurance policies might be less proactive in undertaking new investments such as the immunization of their animals (Akotey, 2015).

2.4.3 Innovativeness and Uptake of Microinsurance

In the United Kingdom, Cassia, De Massis and Pizzurno (2012) examined Strategic Innovation and New Product Development in Family Firms using a qualitative approach and found that family firms have a low level of propensity to innovation, while non-family firm has a high level of propensity to innovation. This proves that non-family firms are more successful than family firms in the development of new products. In Canada, Rosenbusch *et al.* (2011) used meta-analysis to examine the relationship of innovativeness and performance in small businesses. The results showed that the relationship of innovativeness and small business performance is highly dependent on the particular situation. Under conditions of resource scarcity, small companies benefit from the innovation. They found an association of small business innovation and performance is moderated by factors such as age of the firm, the type of innovation, and the influence of cultural context. However, these studies were more inclined on the success and performance of small businesses while the current study dwells on the uptake of microinsurance.

2.4.4 Competitive aggressiveness and Uptake of Microinsurance

Being competitively aggressive is about firms' vigilant and forceful defense of their current market position while seeking to undercut their rivals' position. To do so, they carefully and continuously monitor and analyze their rivals, are motivated to improve their performance by attacking those firms, and are ingenious in their deployment of firm resources to launch attacks. The desired end result of the competitive attacks is sustained performance that is superior to that of their rivals. A strategy of competitive aggressiveness carries high risks. Porter (2008) avers that price discounting is one of the easiest-to-employ and most commonly used competitive actions. Yet, it is often harmful to firm and industry profitability, at least in the short term. Furthermore, discounting teaches the customer to make price the sole criterion when choosing among rivals' products. Hence, using these types of actions without also attempting to create a non-price-based switching cost to the customer is likely to accomplish little for the firm in the long term.

The greatest threat to profitability, though, is directly taking on a rival's position, targeting the same customers with similar products and is the essence of a competitively aggressive strategy (Porter, 2008; Henderson & Weiler, 2010). Precisely because the taking of competitive action does have potential negative implications for a firm's profitability, a firm importantly must have a strategy when using competitive actions to earn superior returns. Developing that strategy requires understanding the mechanisms linking the strategy with superior performance, the enabling actions, and the desired strategic outcomes with their associated costs. Stambaugh, Yu and Dubinsky (2011) investigated a typology of strategies for competitive aggressiveness in the USA and argued that a firm's competitive actions should flow from a strategy. The authors distinguished between the logics of innovativeness and competitive aggressiveness and build the foundation for a competitive strategy by outlining the economic mechanisms of competitive action that lead to superior performance. Stambaugh *et al.* (2011) derived a

typology of strategies that use competitive actions to achieve sustained competitive advantage.

Mobaraki *et al.* (2012) examined the effect of entrepreneurial orientation considering the five dimensions of innovation, risk taking, pro-activeness, competitive aggressiveness, and autonomy on the performance of Iranian private insurance companies. The results indicated a relatively strong effect of entrepreneurial orientation on performance. Although, the dimensions of entrepreneurial orientation were highly correlated with each other, they did not have the same effect on performance as risk taking, innovation and competitive aggressiveness whereas proactiveness and autonomy had less impact on performance.

2.4.5 Regulatory framework and Uptake of Micro-insurance

Regulatory, supervisory, and policy issues are critical to the responsible development, delivery, and administration of insurance services for low income people and MSEs (Williams, 2010). Recognizing the importance of inclusive insurance markets, in 2011 the International Association of Insurance Supervisors (IAIS), the global standard setting body for insurance services co-drafted a "Guidance paper on regulation and supervision supporting inclusive insurance markets" in collaboration with the Regulation, Supervision and Policy working group of the Microinsurance Network (International Monetary Fund, 2013). In addition, the Access to Insurance Initiative is a global program designed to strengthen the capacity and understanding of insurance supervisors, to facilitate their role in expanding access to insurance markets, and to support the implementation of sound regulatory and supervisory frameworks consistent with international standards (Ebenstein & Leung, 2010). As microinsurance products become mainstream, CGAP is helping develop a consumer protection framework for microinsurance that includes workable regulation to improve transparency, fair treatment, and recourse in microinsurance markets (Midgley, 2012).

The regulatory environment should encourage tapping of a wide range of distribution channels for micro-insurance (Makove, 2011). The regulation of insurance is primarily concerned with consumer protection. The insurance sector is regulated to varying degrees in different countries according to the circumstances within each insurance market. Regulations consist of either one insurance law or various insurance laws, and a number of additional rules and regulations including the internal regulations of the registrar and supervisor (Lo Prete, 2015). The regulatory framework for microinsurance in Kenya includes all legislation impacting on the delivery of insurance and forms part of the regulatory scheme and helps determine the larger regulatory environment. According to the IRA (2014), challenges in the regulation of microinsurance still persist owing to the fact that factors affecting the business are qualitative rather than quantitative.

Regulatory hurdles affecting the development of microinsurance products include: capitalization levels, management and reporting requirements; licensing requirements for agents and brokers, and restrictions on the amount of commission and management expenses; definitions of what type of person or organisation is allowed to underwrite or sell insurance products; inability to bundle products and comprehensively address all the policyholder's needs; the need to get approval for the product design before launching the product and file premium rates on an annual basis; and there is no model for sharing the costs and profits with distributors due to regulatory restrictions; hence mass aggregators see little potential in terms of revenues from microinsurance (IRA, 2014).

Anane, Cobbinah and Manu (2013) conducted a study on sustainability of micro and small scale enterprises in rural Ghana by assessing the role of microfinance institutions. Both theoretical and empirical data were sourced from 93 MSEs in rural Ghana. The study found that regarding absorbing shocks and exposure, the MFIs expressed concern about the lack of insurance policies for the MSEs but were quick to indicate that educational programmes were being rolled out to educate MSEs on the importance of insurance to better cushion MSEs in event of natural disasters. Though the MSEs were

unwilling to provide data on the earnings and productivity, 45% of the MSEs indicated that the availability of microfinance products and services have facilitated their operations particularly in the area of increasing yields and earnings. This situation has sustained the activities of MSEs. It was noted that MSEs which have operated over the past 5 years have increased earnings and productivity more than newly established MSEs. This situation according to the MSEs helps to plough back some profits into the business to increase output leading to an increase in the number of employees (Anane, Cobbinah & Manu, 2013).

Findings by Llanto, Almario and Llanto-Gamboa (2006) indicated that due to the strain to meet the demand by the informal sector for microinsurance products, Micro Finance Institutions have instead created informal microinsurance policies outside the domain of the regulation and management of the Insurance Commission. There are very high risks of fraud, unprofessional conduct, unreliable financial procedures, and failures without government regulation. These institutions are inclined to create risks for clients from the informal sector and the same institution that provides the insurance even though seemingly they fill an apparent gap in the market. Microinsurance can be a substitute solution for the poor when the insurance industry and the state do not offer efficient risk administration choices. There is however a need for a better comprehension of the consequences of offering microinsurance using various models and companies. Insurance needs completely different expertise and organizational capacity from credit and savings, which is largely absent in developing nations (Llanto, Almario & Llanto-Gamboa, 2006).

2.4.6 Uptake of Microinsurance by MSEs

Saqware (2012) examined demand perspectives of micro insurance in Tanzania by addressing three distinct but interrelated areas in the micro insurance sector in Tanzania a) demand perspectives of micro insurance in the informal sector b) examining strengths and weakness of current risk coping strategies in the informal sector c) examining

household‘s characteristics that influence demand for micro insurance. The study analyzed data from a primary survey and focus group discussion derived from informal sector households in three districts of Ilala, Kinondoni and Temeke in Dar es Salaam.

The analysis involved three steps; household’s major risk exposures, risk coping strategies and a probit regression analysis was conducted to establish the relationship between households‘ characteristics and demand for micro insurance in the informal sector. The study results indicated that employment, marital status, use of financial services, education, risk exposure and insurance knowledge are significant determinants of micro-insurance demand. Insurance knowledge and trust of insurers were found to have a positive and significant impact on the demand for or uptake of micro insurance.

Findings also suggested that demand for micro insurance in the informal sector depends on the competitive advantage between formal insurance services and available informal techniques. Informal techniques have important informational advantages due to their close physical proximity and frequent, repeated interactions. This implies that some inferences can be drawn from the design and development of micro insurance. The analysis highlights different approaches to be taken by insurers in designing micro insurance products.

From the study findings, there is also evidence to suggest that pre-existing informal sharing networks affect demand (uptake) for micro insurance. The study concluded that low demand for micro insurance can be explained by available informal arrangements which are characterized by closely knit social networks and groups that provide security in exchange for loyalty to the group. Also, uncertainty avoidance culture is low within the households in Tanzania, hence households seem to be more tolerate to different situations. The study recommended that strategies for micro insurance expansion in the informal sector, which is therefore useful for the expansion of financial services (Saqware, 2012).

2.5 Critique of Literature

Meissner's (2012) empirical study on promoting microinsurance as a means of insurance sector development in Ghana found that insurance companies have typically focused on the corporate and upper end of the market; a model representing the structure of the colonial insurance market and ignoring the broader population. However, the study gave a Ghanaian perspective of insurance firms while the current study seeks a Kenyan perspective from an entrepreneurial view (Stuetzer, 2014). Haron (2010) did a study on entrepreneurial drives and business performance of Malaysian entrepreneurs using Correlation and Chi-Square analysis and found that entrepreneurs with high level of entrepreneurial drives were found to have significant relationship with high business performance firms. However, the study focused on the performance of the business while the current study seeks to unravel the phenomenon of low uptake of microinsurance by MSEs in a Kenyan context (Boubaker, Nguyen & Rouatbi, 2016).

2.6 Summary of the Literature

The above chapter has reviewed various theories and empirical literature. The chapter discusses the literature on the relationship between risk taking and uptake of microinsurance. This objective has been anchored on Frank Knight's Risk Bearing Theory which introduced the dimension of risk-taking as a central characteristic of entrepreneurship. According to this theory, the entrepreneur as an economic actor has the function to bear this "true" uncertainty and that entrepreneurs bear the aggregate risks, rather than idiosyncratic ones. The second theory that the risk taking variable is anchored on is the need for achievement theory which explains that human beings have a need to succeed, accomplish, excel or achieve. While reviewing the relationship between proactiveness and uptake of microinsurance, the chapter has reviewed psychological studies of entrepreneurship that sought to identify and to analyze the psychological factors which produce entrepreneurial personalities. These psychological

theories pay attention to personal traits, motives and incentives of individuals and conclude that entrepreneurial endeavor will never happen without proactiveness.

A second theory on which proactiveness is built upon is the Theory of Cognitive Dissonance which relates to self- justification, resulting from a person's desire to appear rational in their act or decision, whereby people will appear bias to their attitudes on the given experimental task positively, in an attempt to justify their previous behavior. The concept of proactiveness has been applied to the fields of management such as entrepreneurship and company administration, much extensively in the context of organizational and work proactiveness. This study adopted Schumpeter's Innovation Theory which describes a process of "creative destruction" where wealth creation occurs through disruption of existing market structures due to introduction of new goods and services. The theory concludes that cultural environments can produce attitude differences as well as entrepreneurial behavior. The study adopted Mclleland's Psychological Theory which views entrepreneurs as people with unique values, attitudes, and needs that drive them and differentiate them from non-entrepreneurs.

The theory suggests that people who possess psychological characteristics have a greater tendency (or potential) to perform entrepreneurial acts than people who do not possess such characteristics. These psychological characteristics include a total commitment to their cause, a need for total control, and a liking for uncertainty and challenge. Schumpeter's Theory (Passion) also supports the competitive aggressiveness by stating that the innovator is motivated more by the will to power than by the wish to profit just like an innovator is motivated more by passion than by the urge to make profits. The Personality Traits Theory also anchors competitive aggressiveness by stating that there are enduring inborn qualities or potentials of the individual that naturally make him an entrepreneur. This model gives some insight into these traits or inborn qualities by identifying the characteristics associated with the entrepreneur. These characteristics or behaviors associated with entrepreneurs tend to be more opportunity driven, demonstrate high level of creativity and innovation, and show high level of management skills and

business know-how. Finally, the relationship between regulatory framework and uptake of microinsurance has been reviewed where the study has employed the stakeholder theory that modeled the concept of stakeholders as those impacting on the firm and who the firm affects.

Nearly all micro insurance programmes involve multiple stakeholders, many of which fall into the following categories: donors and promoters; insurance regulators and supervisors, reinsurer micro insurance intermediaries, delivery channel, service provider and consumer. The underpinning theory in the study is the expected utility theory which is felt by its proponents to be a normative theory of decision making under uncertainty and is also used to understand decision-making about insurance. Under the assumption that there is perfect information, if there was insurance that would equal the expected utility and individuals were risk averse, they would be willing to buy this insurance because it would maximize their utility. The study has also presented the study's conceptualized framework where the variables have been operationalized into their constituent indicators and a conceptual review has also been presented detailing the relationship between the independent variables: risk taking, proactiveness, innovativeness and competitive aggressiveness and the dependent variable - microinsurance uptake with regulatory framework as the moderating variable.

The empirical review has also been presented where previous published studies on the prevailing phenomenon have been presented. The study on risk management practices in micro-insurance service providers in Kenya found that the most ubiquitous risks facing micro-insurance providers as; diseconomies of scale resulting from low penetration, limited distribution channels, correlation risks and rigid regulatory framework. However, the study was focused on micro-insurance providers while the current study focuses on microinsurance uptake by MSEs. The study on entrepreneurial orientation across generations in family firms by reviewing proactiveness and autonomy has been presented. However, the study was carried out in Sweden and focused on entrepreneurial orientation across generations in family firms while the current study seeks a Kenyan

perspective on uptake of microinsurance by MSEs. The critique of reviewed literature and the research gap have also been presented. The review reveals that various factors influence uptake of microinsurance and there is a dearth of literature from developing countries that investigates these factors. The chapter also presents a critique of the literature discussed.

2.7 Research Gaps

Research on EO abounds, and the relationship between EO and firm performance has been most intensively studied (some recent empirical studies include Harms et al., 2010; Grande *et al.*, 2011; Lechner & Gudmunddson, 2012; Eggers *et al.,* 2013; Kraus, 2013; Messersmith & Wales, 2013) Therefore, to be able to make a contribution to the literature one needs to identify certain gaps in the literature. The analysis of existing literature on entrepreneurship has shown that many researchers pay attention to the concept of entrepreneurial orientation (Harms *et al.,* 2010; Lee & Chu, 2011; Pratono *et al.* 2013; Saeed *et al.* 2014).

This concept is important for the effective performance of businesses and under certain conditions entrepreneurial orientation influences firm growth and performance indicators. Although many empirical studies of entrepreneurial orientation were conducted during the last several decades, there are some research gaps that are needed to be filled in (Miller 2011; Wales *et al.,* 2011). First, the research models were originally tested in the developed economies and did not get much attention in developing countries and emerging markets with exception of China (Lan & Wu, 2010; Shirokova, 2012). Thus, further research on entrepreneurial orientation should investigate the entrepreneurial orientation in developing contexts such as Sub-Saharan Africa, Russia, India, Latin America and other countries and regions. However, antecedent variables of entrepreneurial orientation are less studied. There is still little understanding of entrepreneurial orientation as influencing microinsurance uptake by MSEs.

What is more, there are very few studies that consider antecedents of entrepreneurial orientation to influence the uptake of microinsurance by MSEs with very little documentation on insurance regulation framework affecting uptake of microinsurance as a moderating variable. Thus, despite the fact that entrepreneurial orientation is broadly studied nowadays, there are still many unexplored areas within this concept and this thesis on entrepreneurial orientation and uptake of microinsurance by MSEs fills in some of the research gaps stated above and makes contribution to the existing knowledge.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology used in this study. Section 3.2 presents research design, section 3.3 presents target population, section 3.4 presents sample and sampling technique, section 3.5 presents data collection methods, section 3.6 presents pilot study, section 3.7 presents data processing and analysis and finally section 3.8 presents hypotheses testing.

3.2 Research Design

Saunders, Lewis and Thornhill (2012) defined research design as the plan and structure conceived to obtain answers to research questions. It is the grand plan in framing the methods and procedures for collection and analysis of data. A research design plays an integral role in determining the ability of a study to meet its objectives through providing the direction, tools and means of obtaining the data to be used in a study and how to use it for concrete results. There are three types of research design namely; exploratory, descriptive and explanatory research designs (Blumberg, Cooper & Schindler, 2011).

This study used both descriptive and explanatory research designs. On one hand, descriptive research design was used to describe various measures of entrepreneurial orientation and measures of microinsurance uptake. Descriptive statistics was also used to provide an understanding of the respondents. On the other, explanatory research design was used to estimate the relationship between various dimensions of entrepreneurial orientation and microinsurance uptake. Saunders, Lewis and Thornhill (2012) argues that descriptive research design is appropriate for giving a narrative of the data collected while explanatory research design is appropriate for estimating the

magnitude and direction of the effect of one variable on another. Some of the studies that used descriptive research design include; Odemba (2013) who focused on insurance uptake, Makau (2013) who studied factors affecting the growth of insurance business and Njue et al. (2012) who focused on uptake of insurance in the face of climate change.

3.2.1 Research Philosophy

According to Blaxter, Hughes and Tight (2001), research philosophy is the prototype that has the capability of reinforcing a research. The author's further highlight two paradigms that are mostly used and the paradigms are: positivist paradigm and phenomenological paradigm. Positivist paradigm is associated with quantitative data whereas phenomenological paradigm encompasses on the qualitative data (Canava, Delahaye & Sekaran, 2001). The study employed a positivist research philosophy since it deals with quantitative data which is precise and therefore can be easily compared thus generating reliable evidence from the responses collected through use of questionnaires (Bryman, 2011). Mueni (2014) and Kalou (2016) also used this research design and recommended it as an appropriate philosophy to adopt in a study with multiple variables and that relents on more than one sources of data that can be mainly constituted quantitatively.

3.3 Population of the Study

Saunders *et al.* (2012) defined population as all elements under study. Singleton et al. (2010) defined target population as the entire aggregation of respondents that meet the designated set of criteria. The efficacy and uptake of any microinsurance product depends upon the extent to which it is synced to the needs of its target group. Important aspects of such a policy depend upon the findings of the demand survey as well as consultations with relevant stakeholders such as insurance companies, local implementing agencies and the local community (Olaosebikan & Adams, 2014). In this case, the target population is the entire aggregation of micro and small enterprises in Nairobi County. This study examined the role of entrepreneurial orientation on

microinsurance uptake by small and micro enterprises in Nairobi County. Consequently, the target population of this study comprised of all licensed micro and small enterprises in Nairobi County. According to Nairobi City Council (2014) there are 297,340 licensed micro and small enterprises in Nairobi County. Out of this, 243,964 were micro enterprises and 53,376 were small enterprises. Thus 297, 340 formed the target population of this study.

3.4 Sample and Sampling Techniques

Cooper and Schindler (2011) assert that a sample is a subset of a population. A sample enables a study to gain information about a population (Cooper & Schindler, 2011). To calculate the sample size, this study usedYamane (1967) formula. Yamane (1967) formula was utilized since it does not require approximation of the proportion of elements in the population that have the required characteristics and it is easy to use. Yamane (1967) formula is specified as shown in equation 3.1.

$$n = N/\{1 + N(e^2)\} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.1)$$

Where n is the sample size, N is the target population and e is the precision error. Applying this formula where the target population is 297,340 micro and small enterprises and a precision error of 0.05 then the sample size is determined as shown in equation 3.2. Thus, the total number of MSEs to be interviewed was 400.

$$n = 297{,}340/(1 + 297{,}340(0.05^2)) \cong 400 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.2)$$

Regarding sampling techniques, there are two broad categories namely: probability and non-probability sampling techniques. Probability sampling implies that the elements have equal chances of been selected while for non-probability sampling the chances of an element been selected is unknown (Ross, 2013). This study used stratified sampling to group the micro and small enterprises into two strata; micro enterprises and small enterprises as shown in Table 3.1. Thereafter, simple random sampling was subsequently performed within the strata. Stratified sampling is advantageous since it generates results that are more representative of the whole population, it is very flexible and applicable to many geographical enquiries and correlations and comparisons can be made between sub-sets (Saunders et al., 2012).

Table 3.1: Number of Licensed MSEs in Nairobi County

Category	Number of MSEs	% of MSEs Population	Number of MSES to be sampled
Micro Enterprises	243,964	82	328
Small Enterprises	53,376	18	72
Grand Total	297,340	100	400

3.5 Data Collection Methods

Due to the size of the target population and the corresponding sample size used for micro and small enterprises, the most appropriate form of non-experimental study would be the survey method. The main instrument for data collection was a survey questionnaire whereby the respondents participated directly by filling the questionnaires. Kothari (2005) noted that questionnaires are commonly used in data collection since they are; relatively cheap compared to other methods of data collection such as observation, can cover a wide geographical area, they allow anonymity of the respondent and avoid interviewer bias. This study used a structured questionnaire that

had eight sections namely; profile of respondents, business profile, influence of risk taking, proactiveness, innovativeness, entrepreneurial drive, uptake of microinsurance and regulatory framework.

The scales used in the questionnaire were based on Covin and Covin (1990), Covin and Slevin (1986) and Khandwalla (1977) recommended scales. These scales are able to capture information regarding entrepreneurial orientation. This questionnaire was pilot tested to ensure that it was reliable and valid. However, before administration of the questionnaire, authority to collect data was obtained from Jomo Kenyatta University of Agriculture and Technology and National Commission for Science, Technology and Innovation (NACOSTI). In addition, the main researcher recruited five experienced research assistants who were trained on data collection, coding and data entry. Thereafter, the research assistants administered and collected the questionnaires whose responses were entered in Statistical Package for Social Sciences (SPSS).

3.6 Pilot Testing

Blumberg, Cooper and Schindler (2011) indicated that a pilot test is conducted to detect weaknesses in design and instrumentation to provide proxy data for selection of a probability sample. A pilot study is conducted when a questionnaire is given to just a few people with an intention of pre-testing the questions. Pilot test is an activity that assists the research in determining the reliability and validity of the research instrument (Saunders *et al.*, 2012). This study pilot tested the questionnaire using 40 MSEs (10 per cent of the sample size). The 40 MSEs were selected based on stratified sampling in order to ensure good representation of the sample. The 40 MSEs respondents for the pilot were excluded during the main survey (Saunders et al., 2012). The tests conducted during pilot study are discussed as follows.

3.6.1 Validity Test

Validity is the degree by which the sample of test items represents the content the test is designed to measure (Sato & Ikeda, 2015). Saunders *et al.* (2012) argues that there are various types of validity namely; criterion validity, construct validity, face validity and content validity. Construct validity shows the degree to which a test measures what it purports to measure. There are two types of construct validity namely; convergent and discriminant validity. Convergent validity tests whether the concept measured in different ways gives similar results.

This study tested convergent validity using Average Variance Extracted (AVE). According to Barclay *et al.* (1995) the threshold value of AVE should be greater than 0.5 for the constructs to be justifiable. Discriminant validity tests whether one concept is different from other closely related concepts in a research instrument. This study followed Fornell and Larcker (1981) methods of assessing discriminant validity namely; cross loading and Fornell and Larcker's (1981) criterion. Assessing discriminant validity based on cross loading requires that loadings of indicators be higher on their respective constructs as compared to other constructs while Fornell and Larcker's (1981) criterion is based on comparing the square root of AVE to construct correlations.

3.6.2 Reliability Test

Reliability of the research instrument was tested in order to ascertain whether the results are repeatable (Blumberg, Cooper & Schindler, 2011). In order to check reliability of the questionnaire, Cronbach's alpha was used. Cronbach alpha measures the average of measurable items and its correlation. The values of Cronbach alpha ranges between 0 and 1 with 1 indicating very reliable and zero indicating unreliable questionnaire. Sullivan (2011) argued that for a high reliability estimate, Cronbach Alpha should be as close to 1 as possible. Consequently, the threshold for a reliable questionnaire is Cronbach's alpha of 0.7.This study computedCronbach's alpha values for each measurement constructs that is, entrepreneurial orientation, uptake of microinsurance

and regulatory framework. If the Cronbach alpha values are greater or equal to 0.7 then the questionnaire will be deemed reliable and can be used to collect data for the main survey. However, if the Cronbach alpha values are less than 0.7 then the questionnaire will be deemed unreliable thereby necessitating it to be modified and pilot tested again (Singleton *et al.*, 2010).

3.7 Data Processing and Analysis

This section discusses the techniques that were used to analyse data and test the hypotheses. Before processing the responses, data preparation was done on the completed questionnaires by editing, coding, entering and cleaning the data. Data collected was then analysed using descriptive statistics and inferential statistics. Descriptive statistics enables the researcher to work out a number of statistical procedures, such as frequency distributions, frequency tables, percentages, minimum, maximum and sum.

The study also calculated means, as well as graphical presentations of frequencies and values in order to describe and/or compare variables numerically (Procheș, 2015). On the other hand, inferential statistics involves testing hypotheses using regression models among others (Greene, 2012). This study sought to investigate the effect of entrepreneurial orientation on uptake of microinsurance. Given the continuous nature of the dependent variable (uptake of microinsurance) Ordinary Least Square (OLS) method was used.

$$\pi_i = Pr(Y_i = 1|X_i = x_i)$$

$$= \frac{\exp(\beta_0 + \beta_1 x_i)}{1 + exp(\beta_0 + \beta_1 x_i)} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (3.3)$$

$$Logit(\pi_i)$$

$$= \log\left(\frac{\pi_i}{1-\pi_i}\right) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (3.4)$$

$$P(Y)$$

$$= \frac{e^{\beta_0+\beta_1 x_1+\beta_2 x_2+\cdots\beta_n x_n}}{1 + e^{\beta_0+\beta_1 x_1+\beta_2 x_2+\cdots\beta_n x_n}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (3.5)$$

$$\pi_i \beta_n x_n x_1$$

$$P(M_i) =$$

$$\frac{e^{\beta_0+\beta_1 RT_{1i}+\beta_2 PA_{2i}+\beta_3 IN_{3i}+\beta_4 CA_{4i}}}{1+e^{\beta_0+\beta_1 RT_{1i}+\beta_2 PA_{2i}+\beta_3 IN_{3i}+\beta_4 CA_{4i}}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots$$

$$P(PM_i) =$$

$$\frac{e^{\beta_0+\beta_1 RT_{1i}+\beta_2 PA_{2i}+\beta_3 IN_{3i}+\beta_4 CA_{4i}}}{1+e^{\beta_0+\beta_1 RT_{1i}+\beta_2 PA_{2i}+\beta_3 IN_{3i}+\beta_4 CA_{4i}}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots$$

$$P(RR_i) =$$

$$\frac{e^{\beta_0+\beta_1 RT_{1i}+\beta_2 PA_{2i}+\beta_3 IN_{3i}+\beta_4 CA_{4i}}}{1+e^{\beta_0+\beta_1 RT_{1i}+\beta_2 PA_{2i}+\beta_3 IN_{3i}+\beta_4 CA_{4i}}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots$$

$$\beta's$$

$$P(M_i) =$$

$$\frac{e^{[\beta_0+\beta_1 RT_1+\beta_2 PA_2+\beta_3 IN_3+\beta_4 CA_4+\beta_5 (RT*RF)_{5i}+\beta_6 (PA*RF)_{6i}+\beta_7 (IN*RF)_{7i}+\beta_8 (CA*RF)_{8i}+\beta_9 RF_{9i}]}}{1+e^{[\beta_0+\beta_1 RT_1+\beta_2 PA_2+\beta_3 IN_3+\beta_4 CA_4+\beta_5 (RT*RF)_{5i}+\beta_6 (PA*RF)_{6i}+\beta_7 (IN*RF)_{7i}+\beta_8 (CA*RF)_{8i}+\beta_9 RF_{9i}]}} \dots\dots\dots$$

$$P(PM_i) = \frac{e^{[\beta_0+\beta_1 RT_1+\beta_2 PA_2+\beta_3 IN_3+\beta_4 CA_4+\beta_5 (RT*RF)_{5i}+\beta_6 (PA*RF)_{6i}+\beta_7 (IN*RF)_{7i}+\beta_8 (CA*RF)_{8i}+\beta_9 RF_{9i}]}}{1+e^{[\beta_0+\beta_1 RT_1+\beta_2 PA_2+\beta_3 IN_3+\beta_4 CA_4+\beta_5 (RT*RF)_{5i}+\beta_6 (PA*RF)_{6i}+\beta_7 (IN*RF)_{7i}+\beta_8 (CA*RF)_{8i}+\beta_9 RF_{9i}]}} \dots\dots\dots\dots$$

$$P(RR_i) = \frac{e^{[\beta_0+\beta_1 RT_1+\beta_2 PA_2+\beta_3 IN_3+\beta_4 CA_4+\beta_5 (RT*RF)_{5i}+\beta_6 (PA*RF)_{6i}+\beta_7 (IN*RF)_{7i}+\beta_8 (CA*RF)_{8i}+\beta_9 RF_{9i}]}}{1+e^{[\beta_0+\beta_1 RT_1+\beta_2 PA_2+\beta_3 IN_3+\beta_4 CA_4+\beta_5 (RT*RF)_{5i}+\beta_6 (PA*RF)_{6i}+\beta_7 (IN*RF)_{7i}+\beta_8 (CA*RF)_{8i}+\beta_9 RF_{9i}]}} \dots\dots\dots\dots$$

$$(RT * RF)(PA * RF)(IN * RF)(CA * RF)$$

3.7.2 Multiple Linear Regression Model

The study estimated multiple linear regression based on OLS that aims at estimating unknown parameters in a linear regression model by minimising residual sum of squares. The value of the estimated parameters/regression coefficients shows the magnitude of the effect of the independent variable on the dependent variable while the sign of the regression coefficient shows the direction of the effect (Greene, 2012). Greene (2012) argues that if there is more than one independent variable then multiple linear regression model should be specified. The independent variables for this study were; risk taking, proactiveness, innovativeness and competitive aggressiveness implying that multiple linear regression model needed to be used. However, all independent variables (risk taking, proactiveness, innovativeness and competitive aggressiveness) are constructs that require being factor analysed. The main purpose of conducting a factor analysis was to summarize the information contained in a number of original variables into a smaller number of factors.

Proches (2015) argues that the newly created variables should represent the fundamental constructs which underlie the original variables. Factor analysis was used to convert subjective attributes into scores that can be used for further analysis. This study used principal component analysis and varimax rotation method to identify variables that

were heavily loaded on the constructed. The identified components were used to create an index based on their summated scores. The indices for each independent variable were further used to run; correlation analysis, one way ANOVA and multiple linear regression models. The multiple linear regression models were specified as follows.

$$MU_i = \beta_0 + \beta_1 RT_{1i} + \beta_2 PA_{2i} + \beta_3 IN_{3i} + \beta_4 CA_{4i} + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.12??)$$

Where; MU denotes uptake of microinsurance, RT denotes risk taking, PA denotes proactiveness, IN denotes innovativeness and CA denotes competitive aggressiveness. β's denotes parameters to be estimated and ε denotes the error terms. This study specified regulatory framework as a moderator variable implying that different data analysis technique need to be used to capture the moderating effect. Thus, in order to take into account the moderating variable, regulatory framework, the study used regression based method. The moderated regression requires inclusion of the moderator and the interactions between the moderator and each of the independent variable as shown:

$$MU_i = \beta_0 + \beta_1 RT_{1i} + \beta_2 PA_{2i} + \beta_3 IN_{3i} + \beta_4 CA_{4i} + \beta_5 RF_{5i} + \beta_6 (RT * RF)_{6i} + \beta_7 (PA * RF)_{7i} + \beta_8 (IN * RF)_{8i} + \beta_9 (CA * RF)_{9i} + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3.15??)$$

Where; RF denotes regulatory framework, $(RT * RF)$, $(PA * RF)$, $(IN * RF)$ and $(CA * RF)$ denotes interactions between risk taking, proactiveness, innovativeness, competitive aggressiveness and regulatory framework. Other variables are defined as before. The above model was estimated to establish the effect of entrepreneurial orientation on uptake of microinsurance. Both descriptive, correlation analysis and inferential statistics were conducted using Statistical Package for Social Science (SPSS) version 22. Before running the above models, the study conducted various diagnostic tests. Diagnostic tests such as multicollinearity, normality are conducted to ascertain whether the underlying assumptions of classical linear regression model are violated. The study tested for reliability and validity of the research instrument, multicollinearity and normality of the residuals.

Multicollinearity can be tested by use of variance inflation factor (VIF) or the correlation coefficient. Correlation coefficient greater than or equal to 0.8 indicate presence of severe multicollinearity. The consequence of severe multicollinearity is that regression coefficients are indeterminate and their standard errors are infinite. Severe multicollinearity is accounted for by dropping the variable that causes severe multicollinearity, transforming the variables or use of ridge regression (Greene, 2012). Normality was tested using histograms with normal curve to establish whether the data was normally distributed.

3.8 Hypotheses Testing

Greene (2012) defines hypothesis as conjecture concerning one or more populations. This study specified five null hypotheses namely; risk taking has no significant influence on microinsurance uptake by micro and small enterprises in Kenya, proactiveness has no significant influence on microinsurance uptake by micro and small enterprises in Kenya. Other hypotheses were; innovativeness, competitive aggressiveness has no significant

influence on microinsurance uptake by micro and small enterprises in Kenya and regulatory framework does not moderate the relationship between microinsurance uptake and entrepreneurial orientation. Joint significance of the independent variables was tested using F tests and the significance of each regression coefficient was tested using the P values ($P \leq 0.05$). The effect of regulatory framework was tested based on the significance of the coefficient of the interaction terms.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The aim of this chapter was to present results and discussion of analyzed data in line with the main research objectives. The study aimed to establish the influence of risk taking, proactiveness, innovativeness and competitive aggressiveness on micro insurance uptake by micro and small enterprises in Kenya. It also established the moderating effect of the regulatory framework on relationship between entrepreneurial orientation and micro insurance uptake by micro and small enterprises in Kenya. The chapter presents analysis of data with various statistical tools for different constructs and variables in the study. The data from questionnaires was organized, coded, analyzed and converted into quantitative summary reports for analysis using the statistical package for Social Sciences (SPSS) version 20. The questionnaire was pilot tested and was found to be reliable and valid. The analyzed data was arranged under themes that reflect the research objectives. The study findings have been compared with the findings of previous studies and the implications have also been established.

4.2 Response Rate

The study collected data from 372 respondents representing a response rate of 93 percent. The study distributed 400 questionnaires and managed to get 372 responses back. This is as shown in Table 4.1. The implication is that the response rate of 93% is adequate for the study and is highly representative since it has a nonresponse bias of only 7%. High nonresponse bias can be a major setback to the reliability and validity of the study findings (Fincham, 2008).

The high response rate recorded is attributed to the data collection procedures, where the study utilized an interviewer administered questionnaire. On completing the questionnaire, the researcher picked them shortly after and made follow up calls to clarify queries as well as prompt the respondents to fill the questionnaires. Those respondents that had not filled the questionnaires were given enough time to respond to the questionnaires. Tarling (2008) argued that a drop and pick method of data collection enhances the response rate.

Table 4.1: Response Rate

Response	Frequency	Percent
Returned	372	93
Unreturned	28	7
Total	400	100

4.3 Demographic Characteristics

This section describes characteristics of the study population based on the data collected and analyzed. Every target population usually has its own characteristics. Finchman (2008) argued that no population has homogeneous characteristics and hence it's important to assess their demographic characteristics. The section presents the descriptions of the respondents in terms of their gender, age, level of education, job title, job department, work experience, years of business operation, nature of ownership, industry of the business and number of current employees.

4.3.1 Gender of Respondent

The analysis of demographic characteristics showed that majority (58.6%) of the respondents were male while the rest (41.4%) were female. This implies that both genders were well represented, although the males were slightly more than half of all the

respondents. The results are shown in figure 4.1. These findings imply that majority of the micro and small enterprises in Kenya are operated by male. These findings imply that micro enterprises are male dominated and this agrees with Mungai (2013) that most micro and small enterprises in Kenya are operated by the male. The same findings are consistent with the government of Kenya sessional paper number 9 which reported that there was a need to enhance gender balance in the private sector in Kenya by availing funds for the women to venture more in business so as to be as economically empowered as their male counter parts. On the other hand, these findings revealed that there was no gender bias in the response since the opinions of both the male and female owners of micro and small enterprises were obtained in the study.

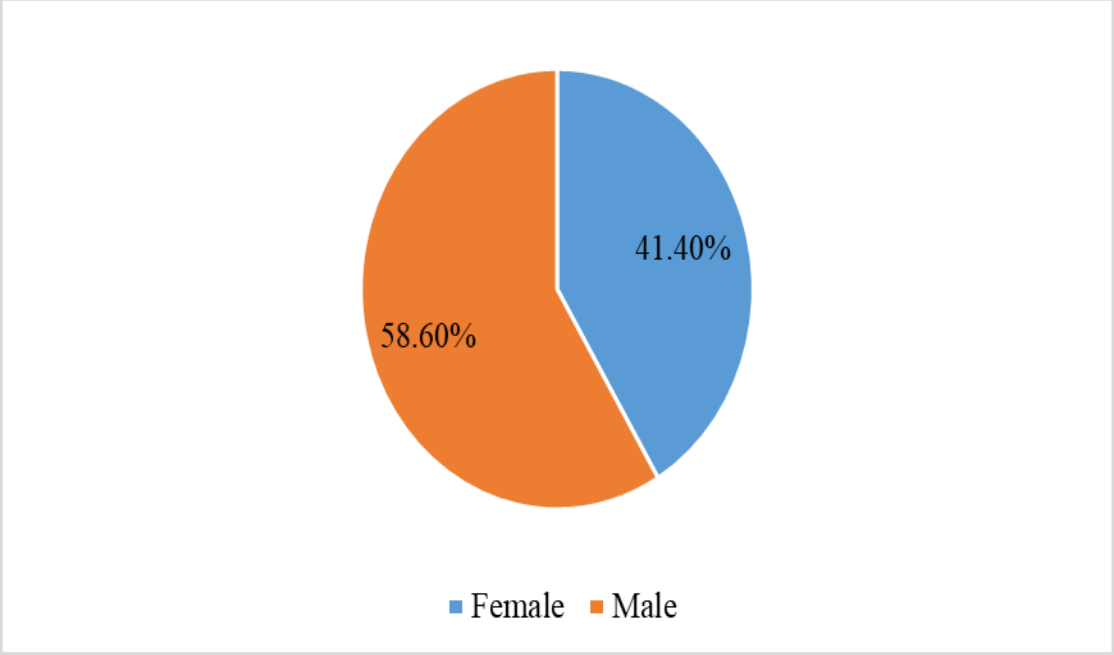

Figure 4.1: Gender of the Respondent

4.3.2 Age of the Respondent

Regarding the age of the respondent, the study found that 46.1% of the respondents were aged between 31 and 40 years. This is the age group where the respondents mostly gained work experiences and had undergone trainings to further their careers. This was followed by respondents within the age group of 20 to 30 years at 22.4%, then 41 to 50 years at 13.0%, 51to 60 years at 11.5%, below age of 20years at 6.6% and lastly above the age of 60 years at 0.5%. This implies that the most represented age group among the respondents is the age of 31 to 40 years while the least is age group above 60 years.

The findings imply that majority of micro and small business operators are aged between of 31 and 40 years. This shows that most graduate below 31 years of age prefer other sources of income like employment other than running a business. It indicates poor entrepreneurship culture among the young people aged below 30 years. These study findings compliment previous studies by Price (2006) which maintained that there are two natural age peaks correlated to entrepreneurship, namely the late twenties and mid-forties. Furthermore, the study findings are almost similar to a study done in America by Hannachi and Coléno (2015) who determined that the optimum age for entrepreneurs in USA was 25-40 years. These findings offer an insight into the need to support the youth to venture into entrepreneurship since the Kenya National Bureau of Statistics (2016) statistics are worrying and revealed that 60% of the Kenyan population is under the age of 30 out of which the Kenyan unemployment rate is approximately 40% (Kenya National Bureau of Statistics, 2016).

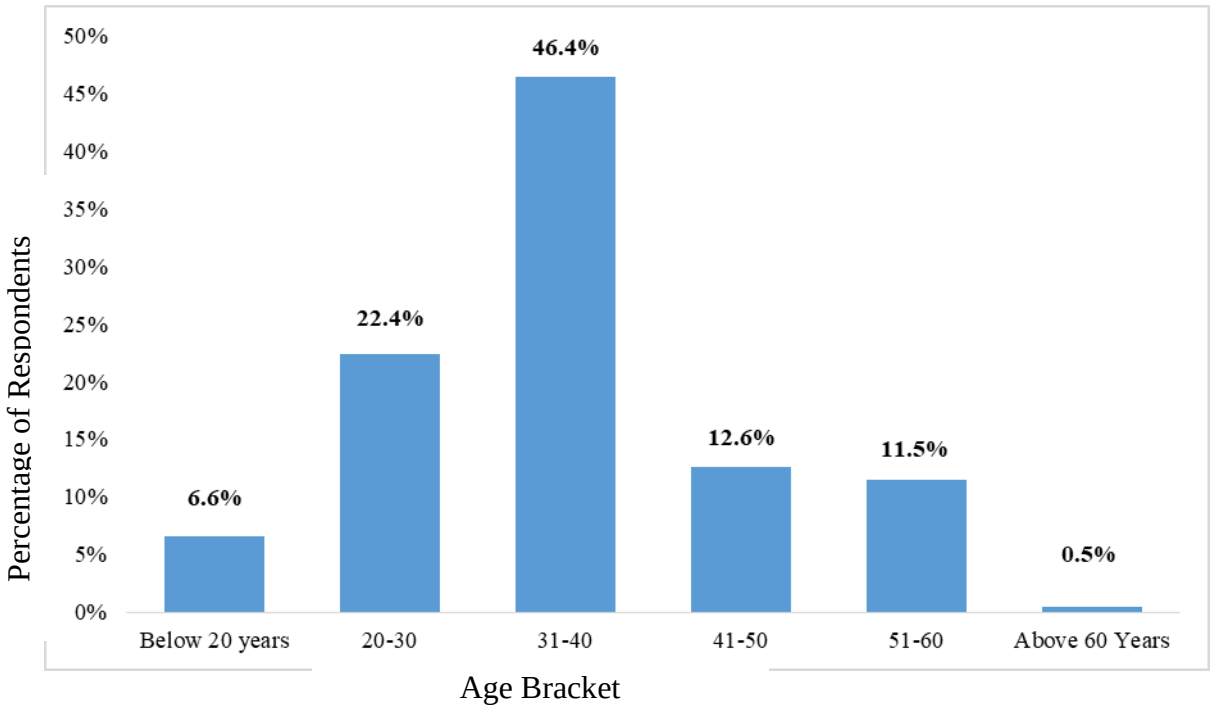

Figure 4.2: Age of the Respondent

4.3.3 Level of Education of the Respondent

The results on education level of the respondent showed that majority (50.3%) of the respondents had studied up to the diploma level, followed by bachelor's degree at 20.1%, secondary school at 14.1%, masters at 9.2%, primary school at 6% and PhD at 0.3%. The findings indicate that most micro and small enterprises in Nairobi County are operated by Diploma holders, Degree holders and secondary school leavers respectively. However, bachelor degree holders and higher tertiary level are fewer than Diploma holders. Notwithstanding, it reveals that the micro and small enterprise owners are knowledgeable. One of the insights from these findings is that there is poor entrepreneurial mindset among the graduates and people of higher level education in Kenya. The findings agree with the Government of Kenya Sessional paper Number 9 which indicated that entrepreneurs venture into business without the vital skills to start, grow and survive their businesses.

In addition, lack of basic skills and education in business management and entrepreneurship was a major drawback in the growth and development of the SMEs in Kenya. However, the MSME (2016) report revealed that not all businesses require higher educational levels. The education attainment of business owners relates to the nature of the business. Those that are more technical like education, ICT, administration and support service activities, financial and insurance activities and human health and social work activities, needs business owners who have post-secondary education while those less technical enterprises need at least secondary level of education. However, the findings are consistent with those of Kinoti and Miemie (2011) who revealed that up to 68.3% of SME owners in Kenya held college education and above, with approximately 64.5% of them with formal education and entrepreneurial subjects. It also confirmed the MSME (2016) report that only three per cent of employees in licensed MSMEs businesses in Kenya had a degree as the highest educational qualification.

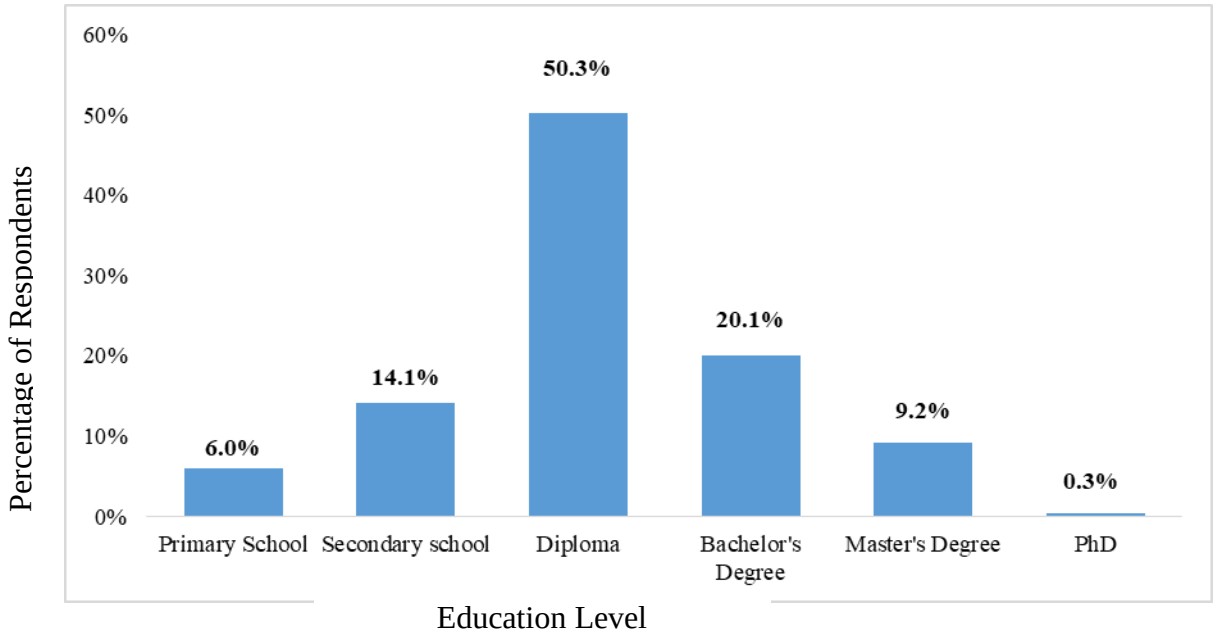

Figure 4.3: Education Level of the Respondent

4.3.4 Job Title of the Respondents

The study results indicate that majority (51.9%) of the respondents were business owners, followed by directors at 16.6%, then partners at 14.9%, then supervisors at 9%, general managers/ section heads at 5.2% and lastly CEO's at 2.4%. This implies that the most represented job title is that of owners and the least being CEOs. The findings imply low delegation of activities by most micro and small business operators in Kenya. Most of the business owners preferred to run their own businesses as opposed to employing managers, supervisors or other oversees to manage them on their behalf. This confirms that these types of business do not have formal structures hence they are run by owners/managers. This generally reflects poor human resource management practices among the micro and small enterprises in Kenya. This is in agreement with the argument by Hamid et al (2015) that most small enterprises prefer less delegation so as to be in control more and control their employees.

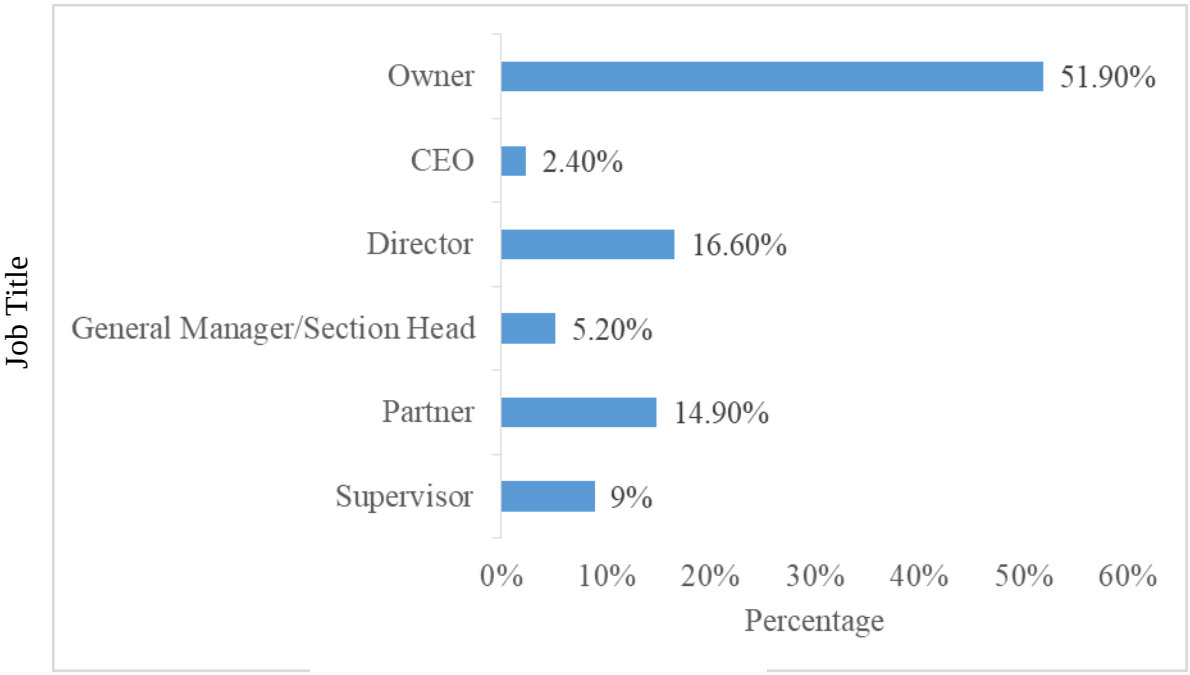

Figure 4.4: Job Title of the Respondent

4.3.5 Job Department of the Respondents

The study sought to understand the department in which the respondents work within their organizations. The results indicate that 46.8% of the respondents work in the marketing department followed by 16.1% who work in the management department then 15% who work in operations. The study further found that 10% of the respondents work in human resource department, 7.5% work in finance department and lastly 4.7% of the respondents work in information technology department. This implies that marketing, operations and management takes up 77.9% of the roles of the entrepreneurs in MSEs. This compliments the fact that the owner/managers render direct services to the customers. This is a direct implication of the competitive environment that these micro and small enterprises operate in and hence the need to be more aggressive in marketing. This is in line with Dávila et al. (2016) that marketing is highly effective as it is a make-or-break necessity for most small businesses. It also agrees with Alvesson and Willmott (2012) who revealed that a good marketing strategy allows an organization to concentrate its limited resources on the greatest opportunities to increase sale and achieve suitable competitive advantages, to develop and exploit firm's management.

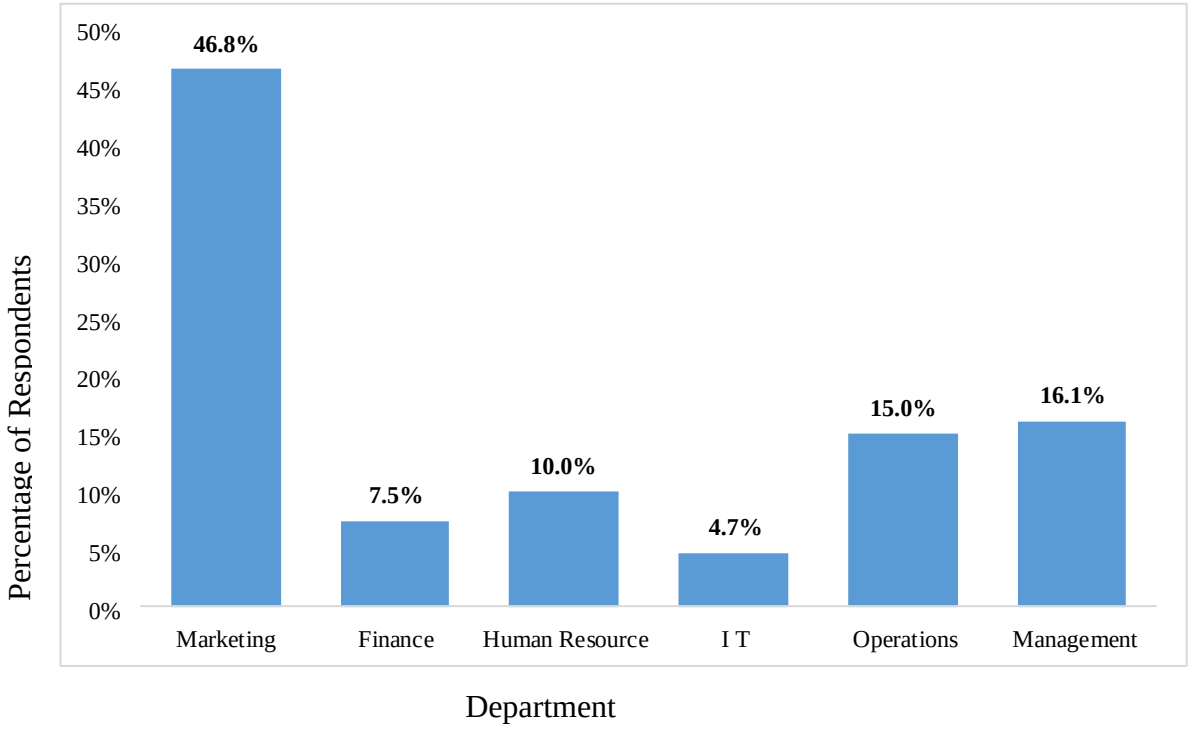

Figure 4.5: Job Department of the Respondent

4.3.6 Work Experience of the Respondents

Regarding the number of years worked at their businesses, the study found that 41.3% of the respondents had worked for 4 to 6 years, 21% had worked for over 10 years, 17.5%, 13.7% and 6.6% of the respondents had worked for 1 to 3 years, 7 to 9 years and less than 1 year respectively. These findings reveals that most of the study respondents had a work experience up to 6 years which showed that they had more industry knowledge to respond to the questionnaire. This can be linked to scholars such as Kasomi (2016) who linked high work experience to organizational knowledge.

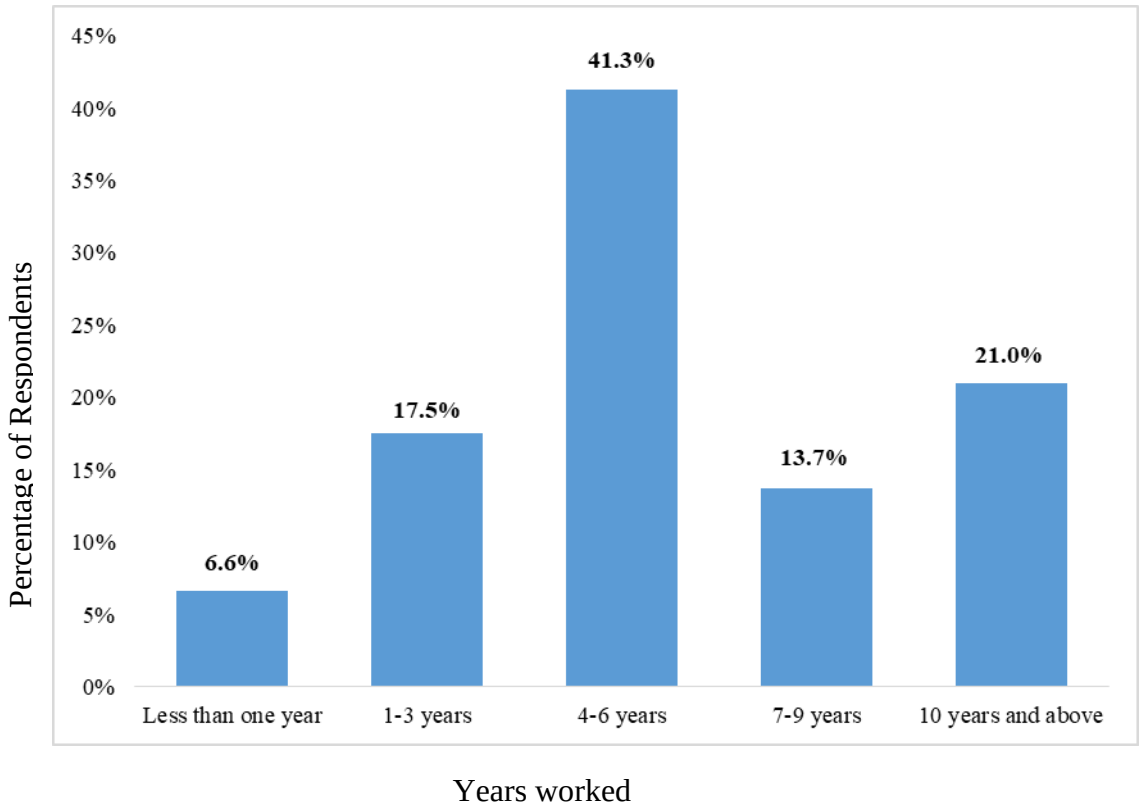

Figure 4.6: Work Experience of the Respondent

4.3.7 Years of Business Operation

The study sought to find out the number of years that the respondents' organizations have been operating. The results indicated that 43.9% of the businesses have been operating for 4 to 6 years, 26.3%, 12.7%, 12.7% and 4.3% had been operating for over 10 years, 7 to 9 years, 1 to 3 years and less than one year respectively. It is evident that 60.8% of the businesses had only been in existence for a period of between 1 and 6 years. The findings therefore imply that the average number of years that micro and small enterprises stay in business is up to 6 years maximum. The findings confirm the KNBS (2016) report of high failure rate of MSEs. It further confirms the argument by KNBS (2015); Ngugi (2013) who revealed that more than half of small enterprises don't survive the fifth and sixth anniversaries.

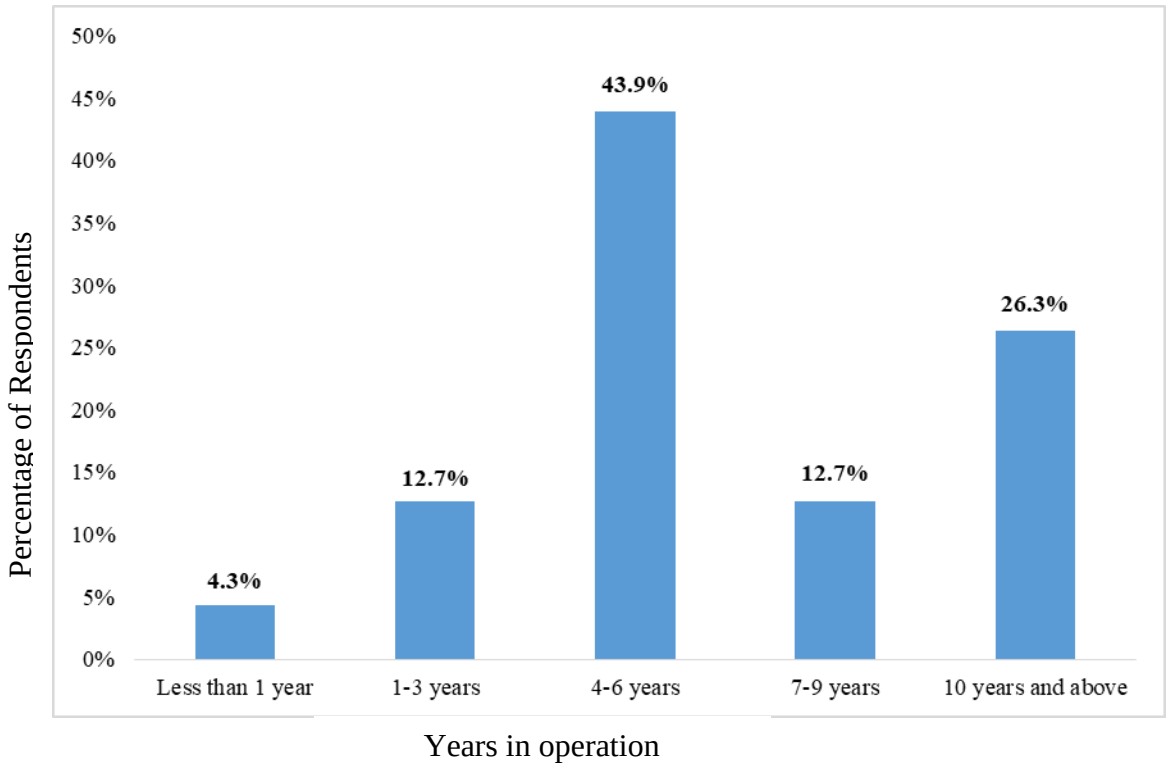

Figure 4.7: Years of Business Operation

4.3.8 Nature of Ownership of the businesses

Regarding the nature of ownership of the business, the study found that 49.2% of the businesses were sole proprietorship, 28% were partnerships, 19.6% were private limited companies and 3.3% were community based organizations / chamas. These findings imply that the Kenya MSEs are majorly owned by sole proprietors. The findings confirm the earlier findings that the majority respondents were owners. This reveals that business control systems and thus decision making in small businesses is centralized. These findings support the report on MSME (2016) that revealed that sole proprietors owned 78.9%, 37.6% and 26.2% of micro, small and medium sized establishments.

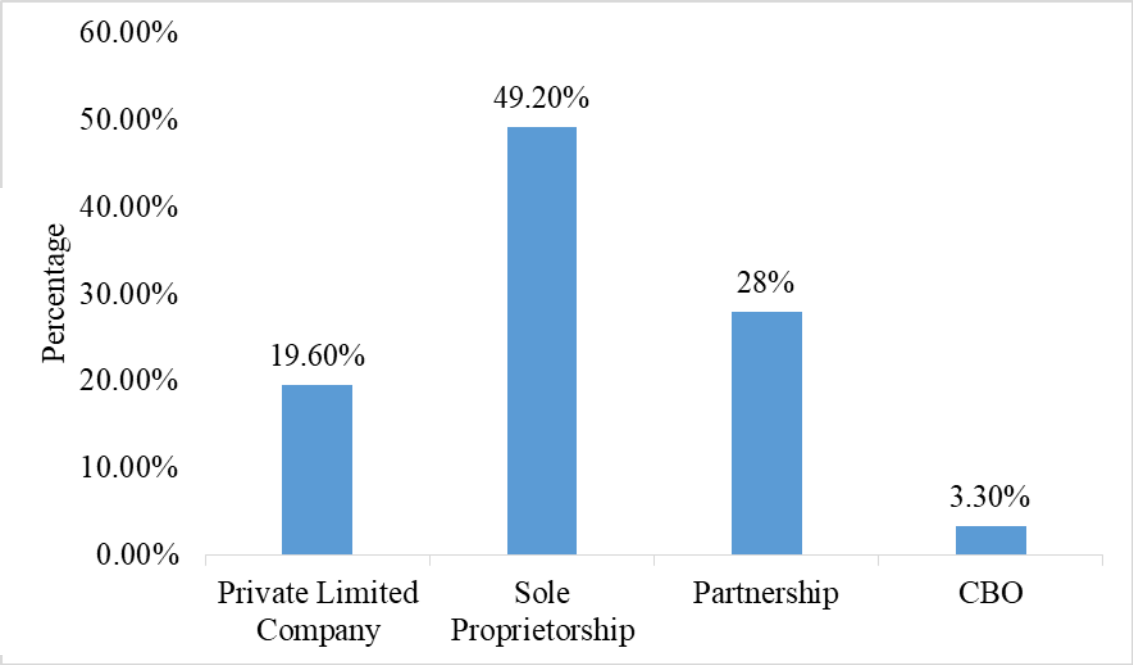

Figure 4.8: Nature of Ownership

4.3.9 Industry of the Businesses

The study found out that 20% of the respondents were from the hospitality industry, trade (20%), service providing industries (16.1%), manufacturing industries (12.8%), transport and logistics (8.3%) and telecommunication industry (6.9%). Respondents from real estate, education, finance, agriculture, construction industry and energy were 4.4%, 2.8%, 2.8%, 2.5%, 2.5%, and 0.8% respectively. The findings implied that micro and small enterprises have dominated the services economic activities, hospitality, trade and manufacturing activities. The four sectors controlled 68.9% of the businesses. The MSME (2016) report by the Kenya National Bureau of Statistics revealed that majority of MSMEs are in the service sector, with most operating in wholesale and retail trade, accommodation and food service activities and other service activities which made up of more than half (57.1 per cent) of the licensed and (62.9 per cent) of the unlicensed

businesses. This reveals low barrier of entry and exits into such markets. The report also revealed that the manufacturing sector contributed the second highest concentration of MSMEs followed by accommodation and food service activities sector.

Many businesses in the accommodation and food service were small restaurants commonly referred to as food kiosks serving hotels, beverage serving activities for instance bars, and restaurants. Furthermore, linking these findings to the MSME (2016) report on the expenditure components, it was established that unlicensed businesses are poor in remitting social security payments for their employees as evidenced by a significantly low amount (KSh 80 million) of money spent on NSSF and other health insurance products but the level of uptake of insurance for businesses for licensed micro establishments was quite low as compared to small enterprises (Claessens, 2013).

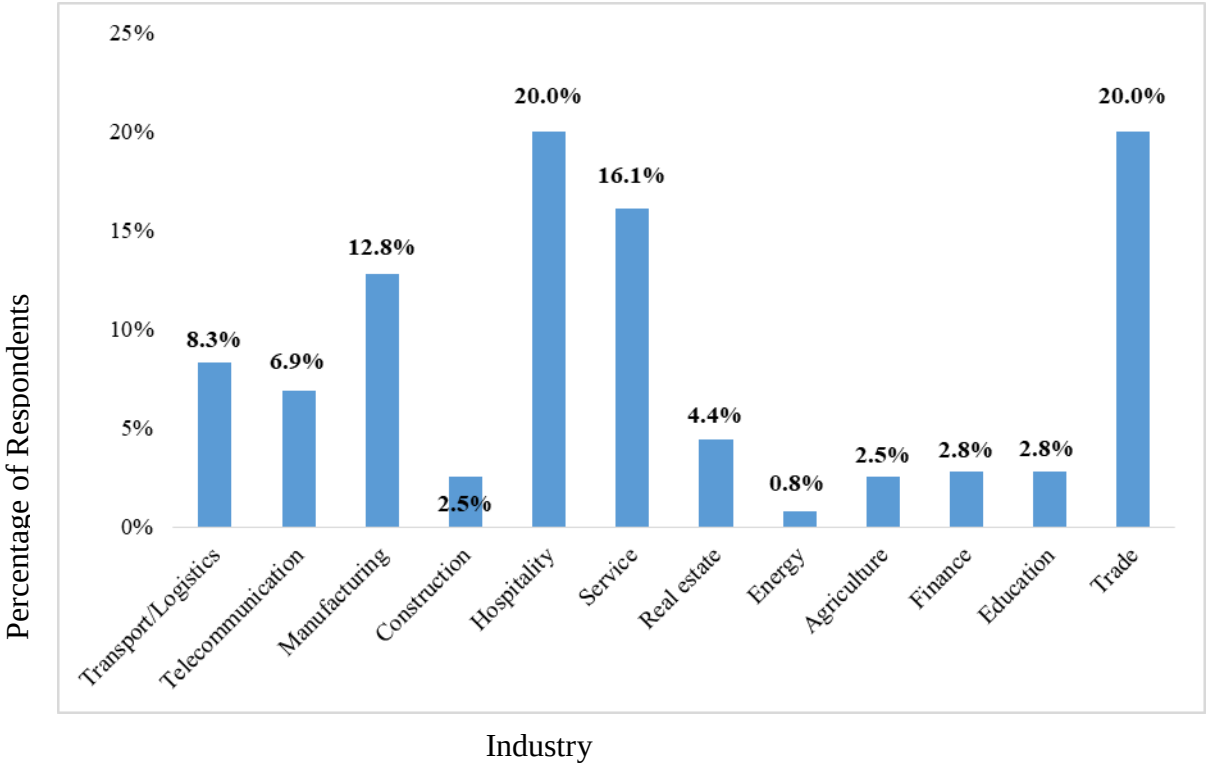

Figure 4.9: Industry of the Businesses

4.3.10 Number of Current Employees

The study found that majority (65.9%) of the respondents indicated that their businesses currently had less than 10 employees (microenterprises) while 34.1% indicated that their businesses currently had between 10 and 50 employees (small enterprises). This finding implied that majority of the respondents were from the micro enterprises as opposed to small enterprises. However, there were responses from both the micro and small enterprises which reduces bias. On the other hand, the findings indicate slow growth rate among the micro and small enterprises considering that most of the MSEs had been in existence for a period of six years. These findings are consistent with the World Bank (2014) report which revealed low sustainability among MSEs as well as mortality rate.

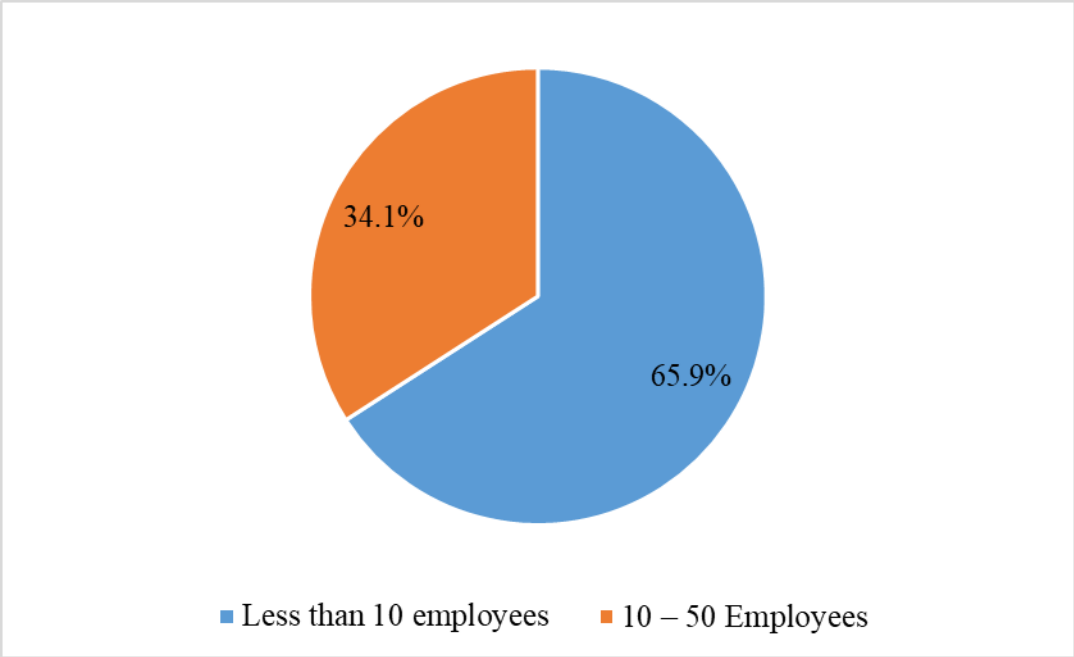

Figure 4.10: Number of Current Employees

4.3.11 Number of Employees the Firm Started With

The study sought to compare the number of employees when a firm started versus those it has currently. This was in order to establish the growth in the number of employees of the firms from the time of inception. The findings indicated that majority of the respondents work in companies that started with less than 10 employees at 73.7%, followed by employees who work in companies that started with between 10-50 employees at 21.9% and lastly those that work in businesses that started with over 50 employees at 4.4%. Comparing the findings with that of the current employees reveals insignificant increase in the number of employees which implies that there is a slow growth in the micro and small enterprises in Kenya. The findings suggest that lack of better and organized human resource structures among the micro and small enterprises leads to high turnover among the employees. It also implies that the MSEs may prefer not to employ many people since their scope of operation is limited and also due to the poor delegation attitude among the owners. The findings confirm an argument by Sifunjo (2012) that the growth and sustainability of micro and small enterprises in Kenya is slow and in most cases, as time progresses, micros and small enterprises fail.

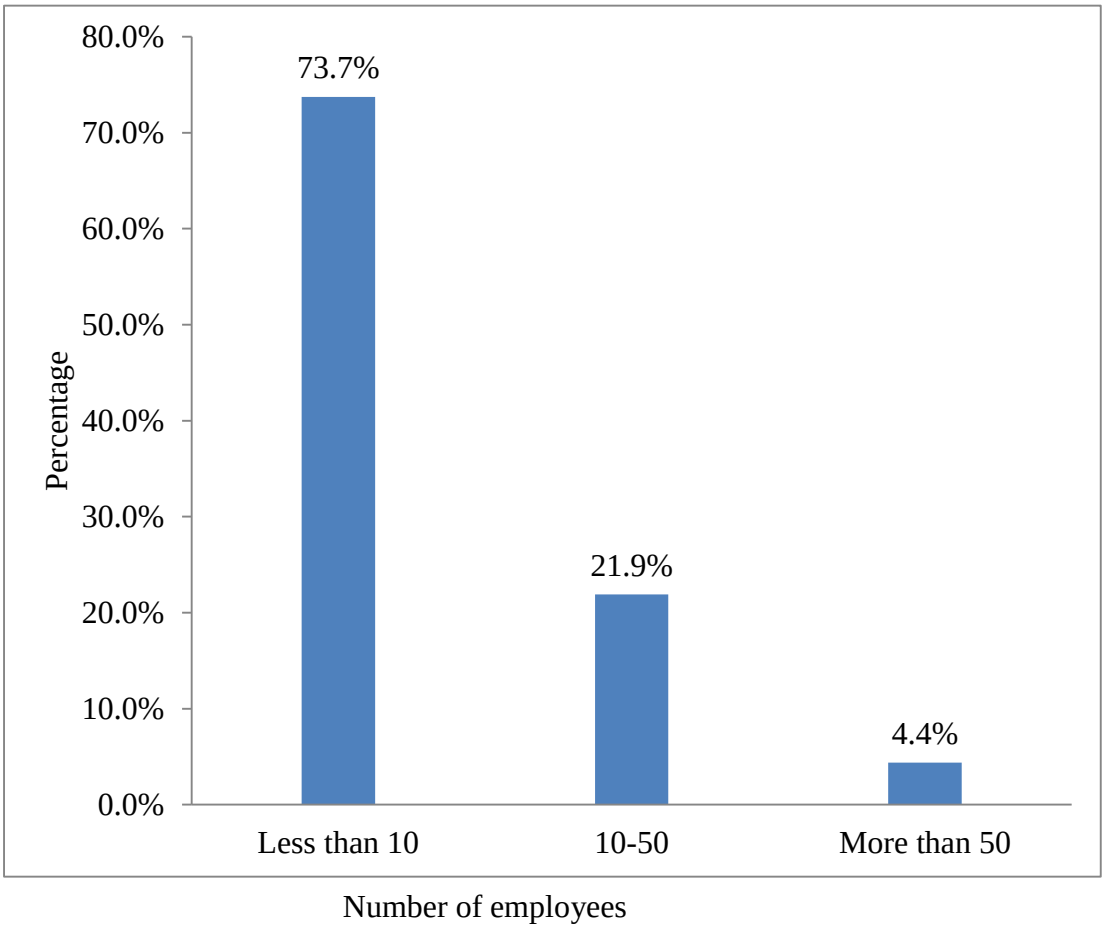

Figure 4.11: Number of employees the firms started with

4.3.12 Annual turnover/ revenue of the respondents' firms

The study sought to establish the performance of the micro and small enterprises by establishing the turnover of the firms. The findings presented in figure 4.12 result indicated that most of the respondents (45.6%) are from microenterprises, followed by respondents in small enterprises at 43.3% and lastly respondents in medium enterprises at 11%. This implies that most of the respondents are from micro and small enterprises covering the most percentage of the respondents, and comparatively smaller representation is from medium enterprises. This finding is also in line with Bulley et al. (2014) argument that small businesses have less than $10 million sales per annum.

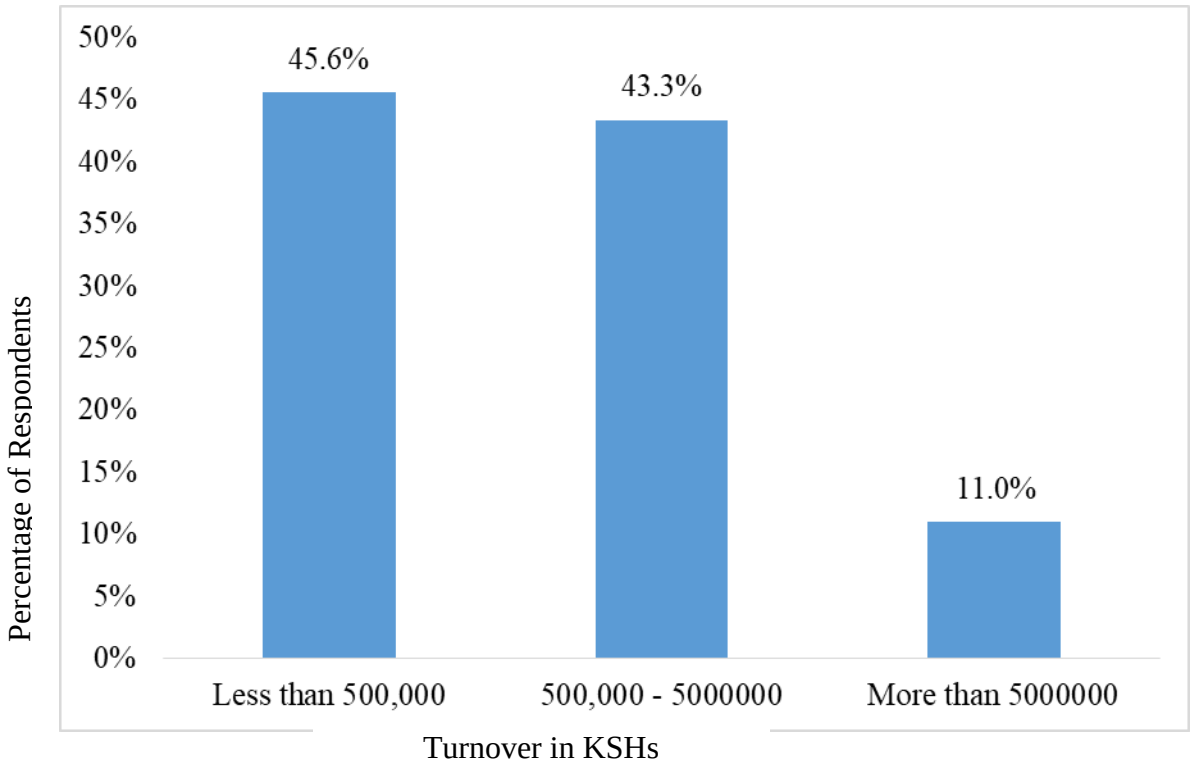

Figure 4.12: Annual turnover/ revenue of the firms

4.3.13 Improvement in Performance

The following Table 4.2 indicates percentages of the extent to which respondents' companies improved performance in the areas of market share, revenue/ sales and profitability. Regarding market share, most of the respondents (32.1%) held that their companies improved market share by a great extent, followed by those who stated that their companies improved market share in moderate extent at 30.2%, then those who believe that their companies improved market share by a small extent (21.2%), then those saying that their companies had improved market share to a great extent at 8.9% and lastly those that believed that their companies had not improved market share at all. This is to imply that majority of the respondents believe that their companies' market share had improved.

According to Table 4.2 it is indicated that most of the respondents (35.2%) believed that their companies had improved their market sales to a moderate extent, followed by those who believe that sales had improved by a great extent at 30.8%, then those who believe that their companies' sales had improved by a small extent at 18%, then those who believe that their companies' had improved sales to a very great extent at 15.4% and lastly those that believed that their sales had not improved at all at 0.6%. this result implies that majority of the respondents believe that their company sales improved. From Table 4.2 it is observed that most of the respondents (32.2%) believed that their companies had improved profitability in a moderate extent, followed by those stating that their companies had improved profitability by a great extent at 29.9%, then those who believed that their companies had improved profitability by a very great extent at 20.1%, then those who stated that their companies had improved profitability by a small extent at 16% and lastly those who believe that their companies had not improved profitability at 1.8%. This result implies that majority of the respondents believed that their companies had improved profitability. In general, most of the entrepreneurs believed that their companies had improved in the areas of market share, sales/ revenue and profitability (Hannachi & Coléno, 2015).

Table 4.2: Improvement in Performance

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
Market share	7.5%	21.2%	30.2%	32.1%	8.9%
Revenue/ Sales	0.6%	18%	35.2%	30.8%	15.4%
Profitability	1.8%	16%	32.2%	29.9%	20.1%

4.3.14 Awareness of Micro Insurance

The study sought to establish whether the respondents were aware of micro insurance, which is insurance designed for small households, micro and small businesses. From the results, a majority of 83.6 percent were aware of microinsurance whereas the remaining 16.4 percent were not aware of microinsurance. However, it is ironical because the uptake level is low at 8.1% in Kenya (Matul, McCord, Phily & Harms, 2010) against the awareness rate of 83.6%. This is an implication that there are factors that determine uptake of micro insurance products other than awareness of its existence. This finding justifies the focus of the study on entrepreneurial orientation which may be part of the factors. Micro insurance products providers therefore need to conduct market surveys to establish tailor made products which MSEs are comfortable accessing. The results are presented in figure 4.13.

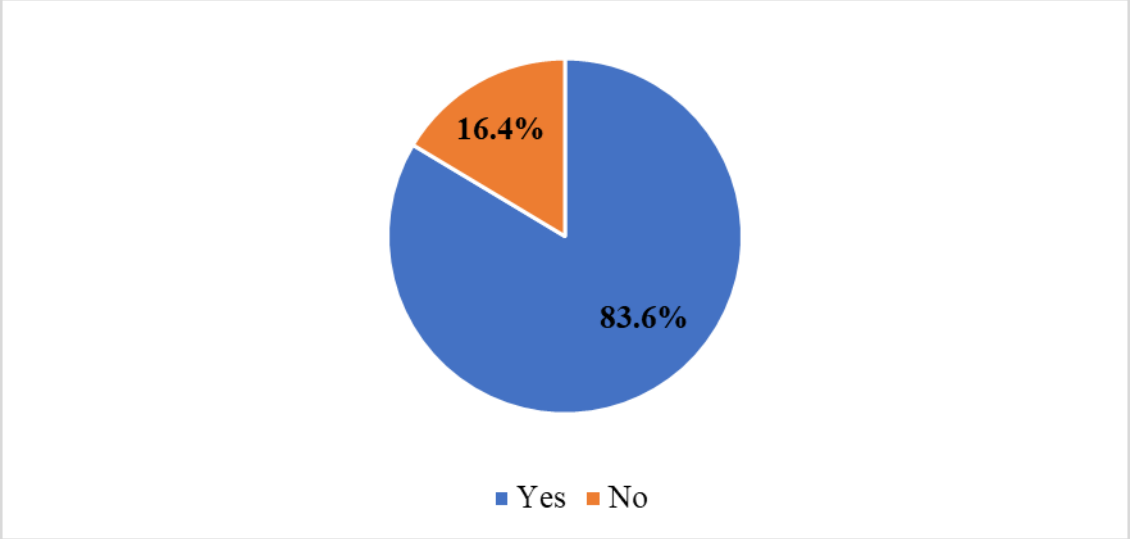

Figure 4.13: Awareness of micro insurance

4.3.15 How Respondents First Learnt of Microinsurance

The study also sought to establish how the MSEs learnt of micro insurance products. The study established that 35 percent of the respondents first learnt of microinsurance through sales agents/brokers, 27.6 percent learnt of it from advertisements, 22.6 percent learnt through a friend/business associate while 14.8 percent learnt of microinsurance via the internet. (Figure 4.14). Others learnt of it through group insurance for Advocates organized by the Law society of Kenya, and through the universities where they study. These findings imply that micro insurance providers should invest more in agents/brokers and advertisements to create awareness as this contributed to 62% of the awareness creation. However, it is indicated that despite this approach, the uptake rate remains low as is not expected (Akotey, 2015). It brings into question whether these are the best marketing methods to be adopted in marketing the micro insurance products or whether the uptake of these products relies squarely on other factors which are customer related and not industry related.

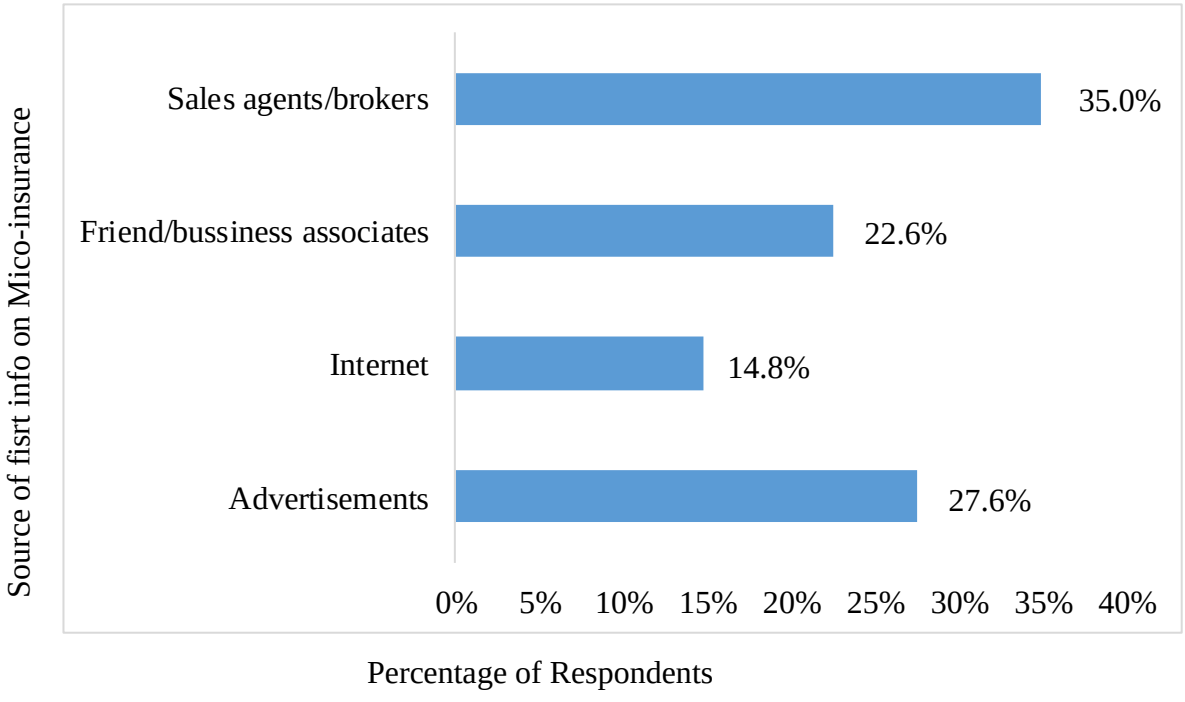

Figure 4.14: How respondents first learnt of Microinsurance

4.3.16 Purchased Microinsurance in the last 5 years

The study sought to find out if the respondents have purchased any microinsurance policy for their business or employees in the last five years. The results indicated that majority (67.5%) have purchased microinsurance policy for their business or employees in the last five years while 32.5 percent had not purchased any (Figure 4.15). This implies that even though a large percentage of the MSEs had at least purchased the micro insurance products in the last five years, the uptake at the time of the study was 8.1%. This reveals that there is no continuous consumption of the micro insurance products in the long run. There is lack of sustainability in the consumption of micro insurance products which are preferred in the short run. This may be due to the fact that most MSEs don't last long enough in the long run and may not see the need for micro insurance products especially considering the turbulence and high competition in the environment which threatens their survival (Hwang, 2016). These findings therefore bring insights on the micro insurance provider to reevaluate their micro insurance products to short-term tailor made products.

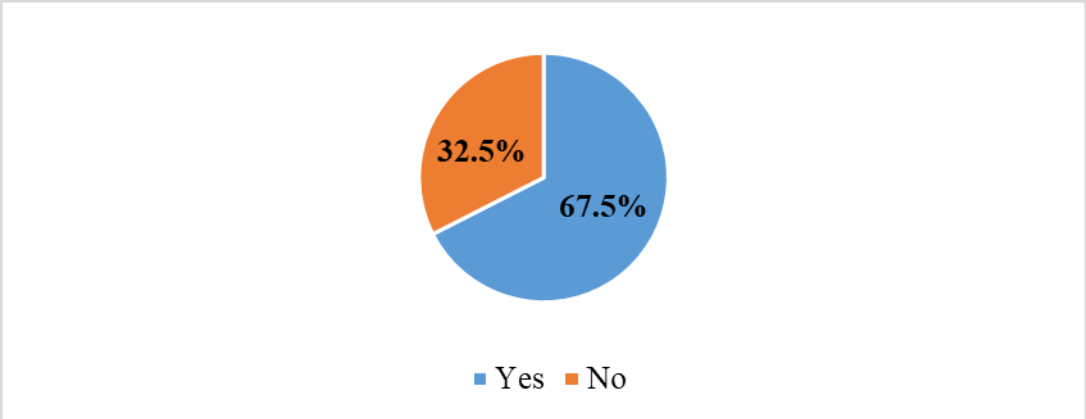

Figure 4.15: Purchased Microinsurance policy in the last 5 years

4.3.17 Delivery Channel Purchased from

Amongst the delivery channels that the respondents purchased microinsurance from, broker/agent was the majority with 28.2 percent. Other delivery channels include direct/commercial insurer (11.8%), Micro finance institutions (7%), Community based organization (5.6%), cooperatives (5.6%) and Telecommunication companies (2.2%). Figure 4.16 summarizes this information. The findings imply that one of the best methods of selling and delivering the micro insurance products is through brokers and agents as well as a direct commercial insurer. The method is however the one being used by most microinsurance providers at the moment. But with the mixed results being shown in by its low up take, there is perhaps a need to relook into the ways of improving the methods of delivery of the micro insurance products. These findings are consistent with an argument by Ishengoma and Kappel (2014) who argued that one of the best methods for developing and delivering microinsurance products is thorough sales agents. This is because they can demonstrate the importance of the products to the consumer and convince them of its importance.

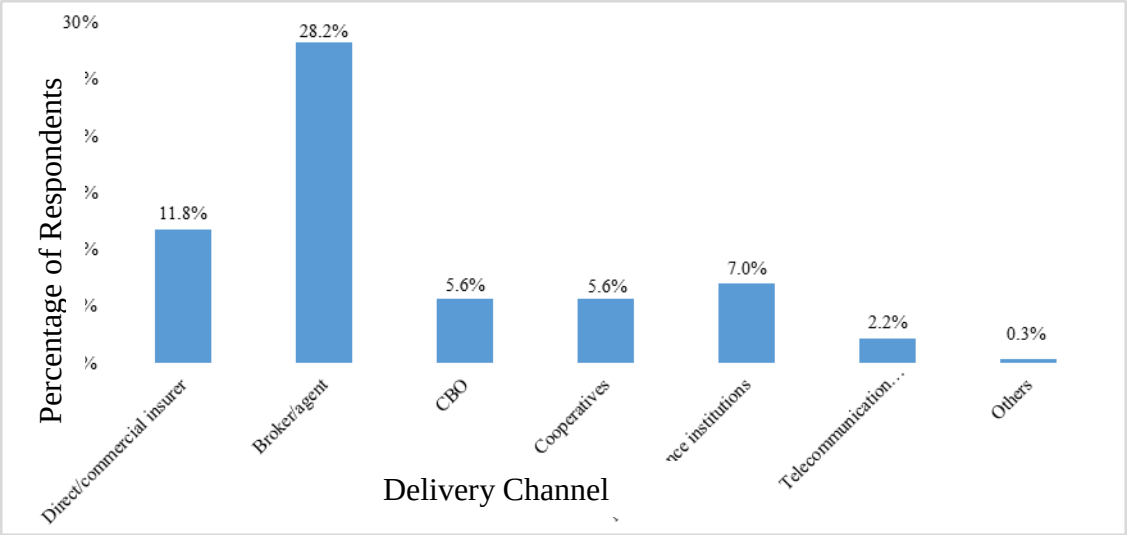

Figure 4.16: Delivery channel purchased from

4.3.18 Renewal of Policies Purchased

The study also sought to establish whether the current users of the micro insurance products were willing to renew them after expiry. The results showed that majority (78.9%) of the respondents indicated that they would renew the policy(s) that they had purchased; whereas 21.1 percent indicated that they would not (Figure 4.17). The implication of this result is that there was still dissatisfaction among the current consumers of microinsurance products in the MSEs sector. The fact that some were unwilling to renew the policy reveals that they were not satisfied with the current form of the product. This perhaps reveals that the microinsurance products providers need to conduct frequent consumer satisfaction surveys so as to understand the major complaints of the consumers regarding the micro insurance products in order to keep up with the consumer's tastes, demands and preferences (Lechner & Gudmundsson, 2012). This method will help maintain the existing consumers and at the same time enhance referrals.

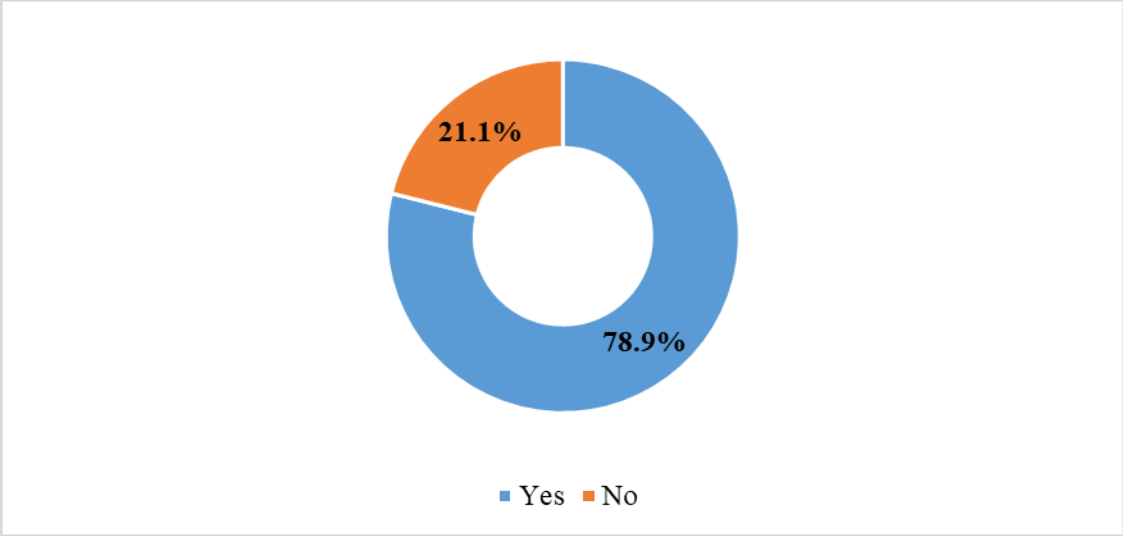

Figure 4.17: Renewal of policies purchased

4.3.19 Reasons not to renew the Policy(s)

The study further sought to find out why the current micro insurance consumers were unwilling to renew their current policies after expiry. The findings revealed that poor services (69.2%), affordability issues (19.2%), availability of other alternative products (7.7%), and product not meeting expectations (3.8%) were some of the reasons mentioned by the respondents as to why they would not renew the policy(s). Figure 4.18 summarizes the findings. The findings imply that the major determinant of poor uptake of insurance products is the poor services provided by the insurance providers as well as the cost of the premiums.

The micro insurance product providers perhaps need to re-evaluate their customer management practices especially regarding the MSEs since this was a major determinant of the low uptake rate. Apart from the consumer related factors, provision of quality services is key. Furthermore, an evaluation of the existing costing techniques is needed. Since most MSEs operate at the base of the pyramid, there is a need for microinsurance providers to come up with flexible premium repayment arrangements which may not seem like a burden to the MSEs to the extent that they look at the opportunity cost of investing in micro insurance. These results are consistent with the argument by Arun, Bendig and Arun (2012) that for the micro insurance products to sell, anywhere in the world, there was a need for the insurance providers to invest in quality services before anything else.

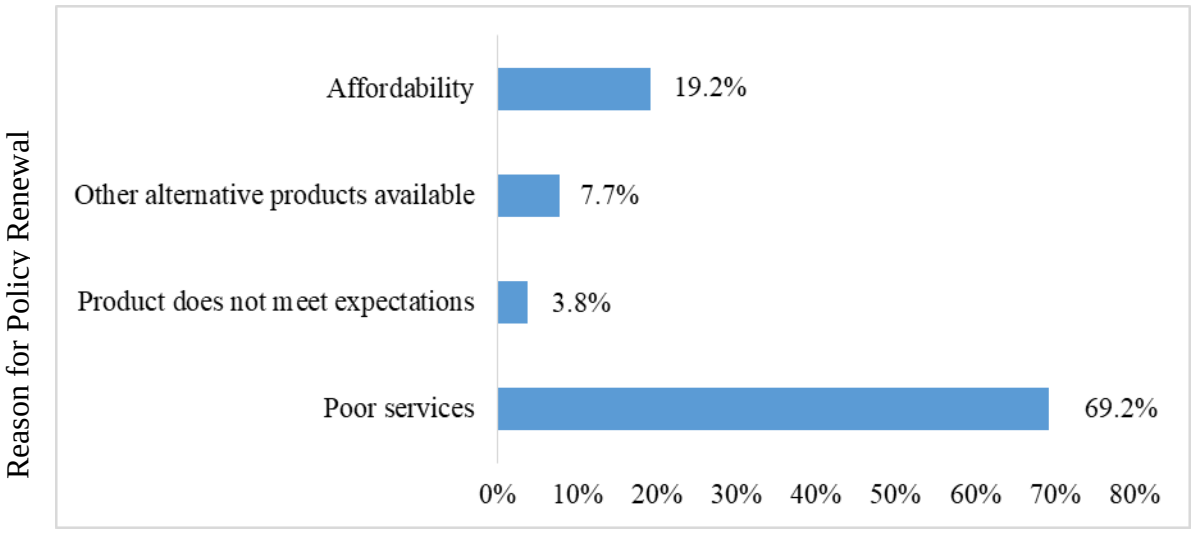

Figure 4.18: Reasons not to renew the Policy(s)

4.3.20 What Hinders Respondents from Buying Microinsurance policy(s)

The study sought to establish some of the hindrances to purchase microinsurance policy(s). It was established that some of the factors were trust issues (17.7%), lack of adequate information (18%), liquidity constraints (17.7%), unreliable delivery channels (14%), access to alternative risk coping mechanisms (10.8%) and others (0.3%). Figure 4.19 summarizes this result. The findings implies that on average, trust, liquidity issues and lack of adequate information were the major hindrances to uptake of microinsurance products in Kenya. With regard to trust issues, the findings imply that the providers of the service need to come up with strategies to enhance consumer trust and confidence in the service. In regard to liquidity, there is a need for the providers of the service to come up with affordable and flexible premium repayment arrangements to enhance its affordability (McCord & Reinhard, 2013).

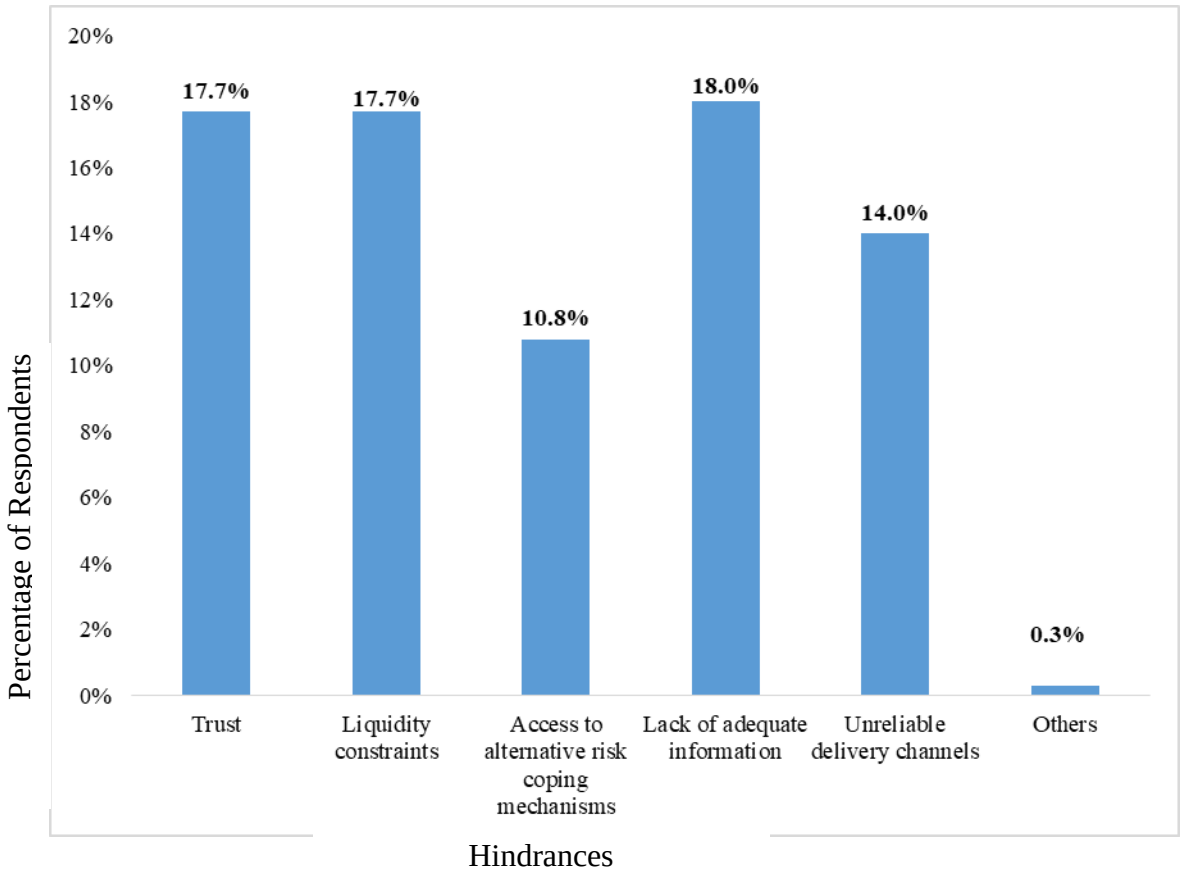

Figure 4.19: What hinders respondents from buying microinsurance policy(s)

4.3.21 Current Alternative Risk Mitigation Measures

The study also investigated how the respondents mitigated risks facing business and employees. Results indicated that majority (38.4%) use cash savings, followed by those who borrow from money lenders and friends (12.1%), asset disposal (13.7%), fundraising (7%), Rotating savings/credit associations (2.4%), and those who seek government support/assistance (1.3%) (Figure 4.20). This implies that due to inability to purchase micro insurance products, most MSEs have resorted to the use of cash savings borrowing, disposal of assets (64.2%) as alternative risk-coping mechanism. This as noted by Odemba (2013) sabotages their future operations hence the businesses end-up being stagnant and record very minimal survival rates.

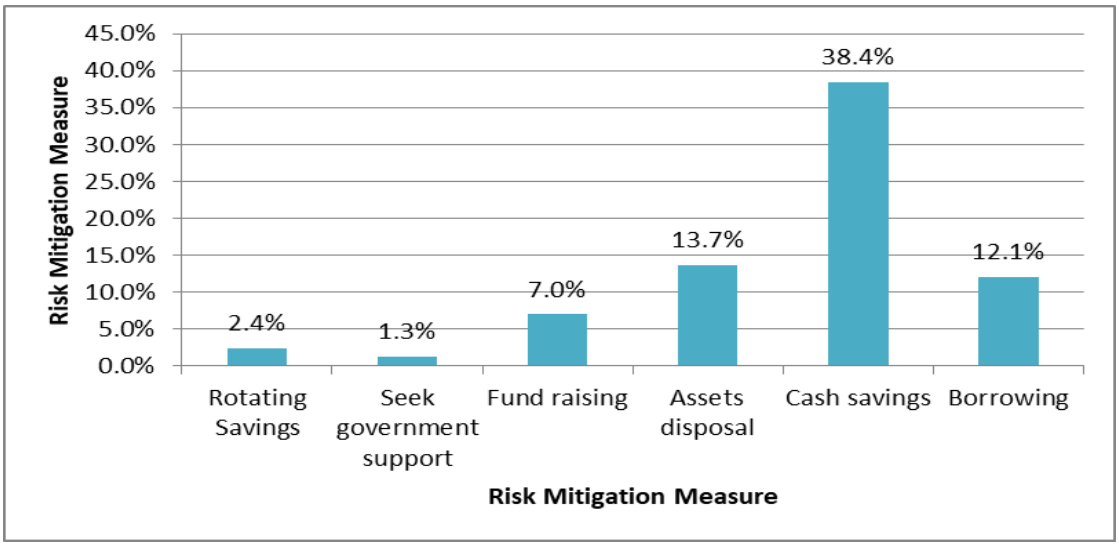

Figure 4.20: Current Alternative Risk Mitigation Measures

4.4 Descriptive Analysis of the Study Variables

The purpose of Descriptive analysis of the study findings is to describe the basic features of the data in a study (Young, 2013). Descriptive analysis provides simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data (Cooper, 2015). The aim of the study was to assess the influence of entrepreneurial orientation on the micro-insurance uptake by micro and small enterprises in Kenya. This sub-section presents the analysis of the study findings based on the variables of the study which were risk taking, proactiveness, innovativeness, competitiveness aggressiveness, regulatory framework and uptake of micro-insurance. The presentation is made systematically as per these variables for clarity and conformity.

4.4.1 Risk Taking

The first objective of the study was to establish the influence of risk taking on the uptake of micro-insurance by micro and small enterprises in Kenya. Likert's scale was used to measure the respondents' level of agreement or disagreement with specific statements

based on the measures of the risk taking. The study enquired from the respondents to indicate the Risk-Taking Behaviour of themselves and their firms whereby 36.4% of the respondents indicated that they strongly agreed that their firm practices "wait and see" position to minimize risks. Only 3.7% strongly disagreed. Similarly, 45.4% of the respondents agreed that they practice brave and open-minded approach to achieve their goals. Only 0.6% strongly disagreed with this statement. The respondents who agreed that they invest in high risk projects, unexplored technologies and take new products to new markets were 41.4% whereas those who strongly disagreed were 4.3%. The results are as shown in table 4.3. The propensity to risk taking is the degree to which an entity or an individual is willing to take chances with respect to the risk of loss (Vasquez, 2011). Risk taking propensity is generally characterizes an entrepreneur as risk averse or risk seeking.

Table 4.3: Frequency of Risk Taking on uptake of Microinsurance

		Strongly Disagree	**Disagree**	**Slightly Disagree**	**Neither Agree nor Disagree**	**Slightly Agree**	**Agree**	**Strongly Agree**
My firm practices "wait and see" position to minimize risks	Frequency	13	20	20	46	74	129	52
	Percent	3.7	5.6	5.6	13	20.9	36.4	14.7
We practice brave and open-minded approach to achieve our goals	Frequency	2	6	14	39	59	159	71
	Percent	0.6	1.7	4	11.1	16.9	45.4	20.3
We invest in high risk projects, unexplored technologies and take new products to new markets	Frequency	15	11	9	40	64	144	65
	Percent	4.3	3.2	2.6	11.5	18.4	41.4	18.7

4.4.2 Proactiveness

The second objective of the study was to determine the influence of proactiveness on the uptake of micro-insurance by micro and small enterprises in Kenya. The study asked respondents how they agreed with the statements regarding their firm's Proactiveness. Those who agreed that their firm is a leader in development of new procedures, technologies and products or services were 39.1% while 3.9% strongly disagreed. Forty two percent (42%) of the respondents agreed that they generally initiate actions which competitors then respond to whereas only 0.9% disagreed with this statement. The respondents who agreed that their firm has the will and foresight to seize new opportunities even if not related to present line of operations were 42.3% while 2% strongly disagreed with the statement. The result is displayed in table 4.4. Whilst opportunity recognition capabilities of individuals in an entrepreneurial organization are important, opportunity recognition in itself does not produce tangible result. An entrepreneurial firm needs individuals who act upon these recognized opportunities (Geißler & Zanger, 2015).

Table 4.4: Frequency for Proactiveness and uptake of Microinsurance

		Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Our firm is a leader in development of new procedures, technologies and products or services	Percent	3.9	3.6	5	14	16.8	39.1	3.9
We initiate actions which competitors then respond to	Percent	1.4	0.9	2.9	16.4	18.7	42	17.8
This firm has the will and foresight to seize new opportunities even if not related to present line of operations	Percent	2	0.9	2.6	12.6	14.9	42.3	24.9

4.4.3 Innovativeness

The third objective of the study was to assess the influence of innovativeness on the uptake of micro-insurance by micro and small enterprises in Kenya. The respondents' level of agreement was sought on different statements based on the specific measures of the innovativeness. The findings as shown in table 4.5 revealed that those who agreed that their firm frequently introduces new products and services were 43.6% whereas 2.8% disagreed with this statement. The study further established that 47.4% of the respondents agreed that their firm encourages and rewards new idea from staff regardless of their position in the firm. Only 2% disagreed. Forty nine percent (49%) of the respondents agreed that they emphasize on utilizing new technology while only 1.7% strongly disagreed. Stambaugh, Yu and Dubinsky (2011) investigated a typology of strategies for competitive aggressiveness and argued that a firm's competitive actions should flow from a strategy. The authors distinguished between the logics of innovativeness and competitive aggressiveness and build the foundation for a competitive strategy by outlining the economic mechanisms of competitive action that lead to superior performance.

Table 4.5: Frequency for Innovativeness and uptake of Micro-insurance

		Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
This firm frequently introduces new products and services	Percent	2.8	2.8	4.3	11.7	16.5	43.6	18.2
My firm encourages and rewards new idea from staff regardless of their position in the firm	Percent	2	1.1	2.9	9.4	16.3	47.4	20.9
We emphasize on utilizing new technology	Percent	1.7	2.6	1.7	6	10.3	49	28.7

4.4.4 Competitive Aggressiveness

The fourth objective of the study was to establish the influence of competitive aggressiveness on the uptake of micro-insurance by micro and small enterprises in Kenya. The study enquired from the respondents to indicate how much they agreed with statement regarding Competitive aggressiveness in their firms. The respondents who agreed that their firm adopted a very competitive stance to undo the competitors in business were 43.2% whereas those who disagreed were 8.4%. The respondents who agreed that they use a fast/aggressive approach to introduce new products in the market were 44.9% whereas only 2.3% strongly disagreed with this statement. The respondents who agreed that their firm has an ambitious market share goals and takes bold steps to achieve them were 45.7% whereas those who disagreed were only 1.4%. Table 4.6 shows the results. A strategy of competitive aggressiveness carries high risks. Porter (2008) avers that price discounting is one of the easiest-to-employ and most commonly used competitive actions.

Table 4.6: Frequencies for Competitive Aggressiveness

		Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
My firm adopts a very competitive stance to undo the competitors in business	Frequency	30	9	16	25	68	155	56
	Percent	8.4	2.5	4.5	7	18.9	43.2	15.6
We use a fast/aggressive approach to introduce new products in the market	Frequency	8	19	15	25	63	158	64
	Percent	2.3	5.4	4.3	7.1	17.9	44.9	18.2
This firm has an ambitious market share goals and takes bold steps to achieve them	Frequency	5	13	11	21	43	160	97
	Percent	1.4	3.7	3.1	6	12.3	45.7	27.7

4.4.5 Regulatory Framework

The fifth and last objective of the study was to establish the moderating effect of regulatory framework on the relationship between entrepreneurial orientation and the uptake of micro-insurance among micro and medium enterprises in Kenya. The respondents were asked to indicate how much they agreed with statement regarding regulatory framework. Those who agreed that lack of separate regulation has hindered the growth and expansion of micro-insurance were 31.3% whereas just 2.9% strongly disagreed. The respondents who agreed that there is adequate regulation, policy and supervision to protect micro-insurance policyholders were 31.5% while 2.6% strongly disagreed. Respondents who agreed that high capital requirements for micro-insurance providers' limits distribution and access to insurance products were 36.8%, 20.8% strongly agreed whereas those who strongly disagreed were 3.9%. The results are shown in table 4.7. Access to Insurance Initiative is a global program designed to strengthen the capacity and understanding of insurance supervisors, to facilitate their role in expanding access to insurance markets, and to support the implementation of sound regulatory and supervisory frameworks consistent with international standards (Ebenstein & Leung, 2010). The regulatory environment should encourage tapping of a wide range of distribution channels for micro-insurance (Makove, 2011).

Table 4.7: Frequency for Regulatory Framework and uptake of Micro-insurance

		Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
Lack of separate regulation has hindered the growth and expansion of microinsurance (insurance)	Frequency	10	26	29	48	58	109	68
	Percent	2.9	7.5	8.3	13.8	16.7	31.3	19.5
There is adequate regulation, policy and supervision to protect microinsurance (insurance) policyholders	Frequency	9	17	32	55	64	109	60
	Percent	2.6	4.9	9.2	15.9	18.5	31.5	17.3
High capital requirements for microinsurance (insurance) providers limits distribution and access to insurance products	Frequency	13	17	35	26	52	124	70
	Percent	3.9	5	10.4	7.7	15.4	36.8	20.8

4.5 Diagnostic Tests

The researcher conducted various diagnostic tests to ensure that the assumptions of Classical Linear Regression Model (CLRM) were not violated and appropriate model chosen for analysis in the event that CLRM assumption was not compromised. Estimating the regression models when the CLRM assumptions are violated would result in inefficient, inconsistent parameters estimates. The diagnostic tests that were carried

out for the study include reliability tests, multicollinearity test and test for normality of residuals. The results for the different tests are discussed as follows.

4.5.1 Reliability Analysis

The reliability of the study was tested using Cronbach's Alpha to measure internal consistency. The results indicated that the Cronbach's Alpha for the measures was 0.779 which was very close to 1 therefore the instrument was considered reliable. This justifies Sullivan's (2011) contention that for a high reliability estimate, Cronbach Alpha should be as close to 1 as possible. Moreover, Young (2013) postulated that reliable instruments give more concrete results and help in extensively answering the research questions. The results are shown in table 4.8.

Table 4.8: Reliability Statistics

Cronbach's Alpha	Number of Items
.779	12

4.5.2 Multi-collinearity test

The study sought to find out the collinearity among the independent variables using tolerance and variation inflation factor (VIF) statistics of the predictor constructs. The study adopted a threshold value of variance inflation factor of 4.0 to represent high multicollinearity status. The results indicated that all the variables were not correlated since their Pearson correlation coefficient were all less than 0.8. This finding supports the argument by Greene (2012) that correlation coefficient greater than or equal to 0.8 indicate presence of severe multicollinearity. The results are shown in table 4.9.

Table 4.9: Multicollinearity Test

		Risk Taking	Proactiveness	Innovativeness	Competitive aggressiveness	Regulation Framework
Risk Taking	Pearson Correlation	1	.703**	.440**	.258**	.207**
	Sig. (2-tailed)		.000	.000	.000	.002
	N	242	239	237	236	225
Proactiveness	Pearson Correlation	.703**	1	.599**	.328**	.184**
	Sig. (2-tailed)	.000		.000	.000	.005
	N	239	245	241	240	228
Innovativeness	Pearson Correlation	.440**	.599**	1	.392**	.201**
	Sig. (2-tailed)	.000	.000		.000	.002
	N	237	241	244	239	227
Competitive aggressiveness	Pearson Correlation	.258**	.328**	.392**	1	.247**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	236	240	239	245	229
Regulation Framework	Pearson Correlation	.207**	.184**	.201**	.247**	1
	Sig. (2-tailed)	.002	.005	.002	.000	
	N	225	228	227	229	232

4.5.3 Test for Normality of Residuals

The normality test sought to find out the normal distribution for the responses in the study which was tested for normal distribution using a histogram. According to Indiana (2011) many data analysis methods such as t-test, ANOVA and regression analysis relies on the assumption that data was normally distributed. The results indicated that the data was normally distributed as shown in figure 4.21. According to Shelvin and Miles (2010), a normally distributed data gives a clearer dimension and more reliable results on the statistical relationship between variables.

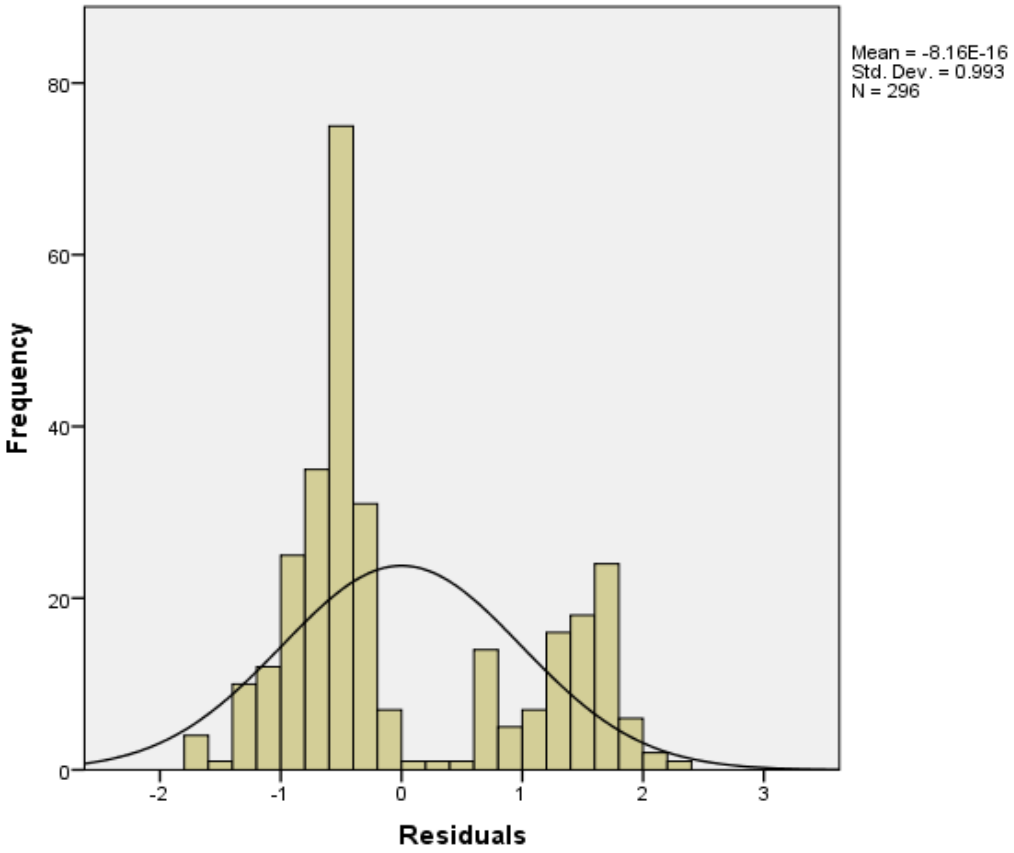

Figure 4.21: Test for normality

4.6 Inferential Analysis of the Study Model and Hypothesis Testing

The main aim of the study was to establish the influence of entrepreneurial orientation on the uptake of micro-insurance by micro and small enterprises in Kenya. The independent variables in the study were risk taking, proactiveness, innovativeness and competitive aggressiveness while the dependent variable was the uptake of micro-insurance by micro and small enterprises in Kenya. The study also had a moderating variable which is the regulatory framework. The study therefore sought to establish the statistical relationship between these variables through inferential statistics. The main measures utilized herein included the R squared (R^2), the P-value as well as the Beta coefficients. According to Young (2010), inferential analysis goes beyond just

presenting the responses in a study by unveiling the statistical relationship between the variables and how a variable (independent variable) affects or influences the other (dependent variable). Through this, concrete conclusions and recommendations in study are drawn.

4.6.1 Risk taking and Uptake of Micro-insurance

Confirmatory Factor Analysis for Risk Taking

Factor analysis was conducted to reduce items of risk taking. Risk Taking construct was measured using 3 items thereby the construct was factor analyzed in order to come up with an appropriate measure. The study found that KMO had a value of 0.648 and Bartlett's test, x^2= 155.44, p = .000. The KMO value is high (more than 0.5) and this indicates that a factor analysis will be useful with the study data. The value of Bartlett's tested less than 0.05 and this indicated that a factor analysis was useful in the study. The results are presented in Table 4.10.

Table 4.10: KMO and Bartlett's Test for Risk Taking

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.648
Bartlett's Test of Sphericity	Approx. Chi-Square	155.44
	df	3
	Sig.	.000

Communalities, Total Variance and Scree Plot for Risk Taking

Communalities for Risk Taking are as shown in the table 4.11. On the first aspect which was that the firm practiced “wait and see” position to minimize risks, the extraction score was 0.562, the second one that they practiced brave and open-minded approach to

achieve the goals the extraction was 0.672 and on the last aspect that the firms invested in high risk projects, unexplored technologies and take new products to new markets, the extraction score was 0.576. The findings suggest that much of the variances in each of the original variables are explained by the extracted factors. Total variance explained for risk taking showed that one component explained 60.344% of the total variability in the three items. The results are presented in table 4.12. The results for scree plot indicated that component one had Eigen value that was greater than one. The findings above are in agreement with total variance explained results for risk taking. The results on scree plot are presented in the following figure 4.11.

Table 4.11: Communalities for Risk Taking

	Initial	**Extraction**
My firm practices "wait and see" position to minimize risks	1.000	0.562
We practice brave and open-minded approach to achieve our goals	1.000	0.672
We invest in high risk projects, unexplored technologies and take new products to new markets	1.000	0.576

Table 4.12: Total Variance Explained for risk taking

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% Variance	ofCumulative %	Total	% Variance	ofCumulative %
1	1.810	60.344	60.344	1.810	60.344	60.344
2	.669	22.294	82.638			
3	.521	17.362	100.000			

Figure 4.22: Scree Plot for Risk Taking

The study used the component with the greatest factor loading which is "We practice brave and open-minded approach to achieve our goals" to compute summated factor scores for risk taking (Table 4.13). This means that the variable was mainly defined by the factor "We practice brave and open-minded approach to achieve our goals". This is to imply that the factor could yield better results when regressed with the dependent variable aspects hence chosen in the model.

Table 4.13: Component Matrix for risk taking

	Component 1
My firm practices "wait and see" position to minimize risks	0.75
We practice brave and open-minded approach to achieve our goals	**0.82**
We invest in high risk projects, unexplored technologies and take new products to new markets	0.759

Correlation Analysis for Risk Taking

Risk taking was positively and significantly correlated to uptake of microinsurance policy (r = .233, p = .013). This finding implies that risk taking had a positive and significant influence on Microinsurance Uptake. The findings of this study that risk taking has a significant effect on Microinsurance Uptake supports the findings by Giesbert (2013) who had investigated the microinsurance and risk management by analysing life insurance, formal savings, informal savings, formal loans and informal loans with evidence from Ghana. The study findings indicated that the uptake of micro life insurance by households do not entirely follow the predictions made by standard insurance theories, but informal mechanisms of building trust and subjective risk perceptions end up playing an important role in the framework of information disproportionateness and limited experience with formal insurance. These findings are summarized in table 4.14.

Table 4.14: Correlation Analysis for Risk Taking

		Micro Insurance uptake	**Risk taking**
Micro Insurance uptake	Pearson Correlation	1	.233*
	Sig. (2-tailed)		.013
	N	122	113
Risk taking	Pearson Correlation	.233*	1
	Sig. (2-tailed)	.013	
	N	113	242

*. Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis for Risk Taking

> ***H_0:*** *Risk taking has no significant influence on micro-insurance uptake by micro and small enterprises in Kenya*

The simple regression analysis for the first variable was carried out. The results on the model summary, ANOVA and regression coefficients are as herein shown. The results indicated that the R^2 statistic for risk taking and uptake of micro-insurance was 0.054. This implies that a variation of risk taking explains the uptake of micro-insurance by up to 5.4%. The ANOVA results on the other hand showed that the mean square of sum of regression was 35.344 and the mean square of sum of residual was 614.798. The F-statistic of the model was 6.381 with a p-value of 0.013, which is less than p-critical value of 0.05. Therefore, the regression model statistically significantly predicts the outcome variable. The regression coefficients further revealed that risk taking had a 0.164 and a p-value of 0.13. The findings therefore justify the move to reject the null hypothesis that risk taking has no significant effect on micro-insurance uptake by MSEs in Kenya.

These findings corroborates the results by Boubaker, Nguyen and Rouatbi (2016) who argued that entrepreneurs venture into unknown markets, commit substantial amount of resources to ventures with uncertain outcomes and borrow heavily with the hoping to reaping high returns. Organizations may therefore follow the risk-taking path by making decisions and taking action in the context of uncertainty as well as making substantial resource commitments without knowing what the consequences of their decisions and behaviors will be (Rosanas, 2013). Moreover, Hamid et al. (2014) argued that a risk-oriented entrepreneur is more likely to take measures that are aimed at mitigating the risks so as not to suffer total losses in case the risks taken materializes.

Table 4.15: Regression Model Analysis of Risk Taking

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.233[a]	.054	.046	2.353

a. Predictors: (Constant), risk taking

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.344	1	35.344	6.381	.013[b]
	Residual	614.798	111	5.539		
	Total	650.142	112			

a. Dependent Variable: Micro-Insurance uptake

b. Predictors: (Constant), risk taking

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.086	1.035		-1.049	.297
	Risk taking	.164	.065	.233	2.526	.013

a. Dependent Variable: Micro-insurance uptake

4.6.2 Proactiveness and Uptake of Micro-insurance

Factor Analysis for Proactiveness

The study carried out Factor analysis to reduce items of Proactiveness. Proactiveness construct was measured using 3 items thereby the construct was factor analyzed in order to come up with an appropriate measure. The study found that KMO had a value of 0.638 and Bartlett's test, x^2 = 344.463, p = .000. The KMO value is high (more than 0.5) and this indicates that a factor analysis will be useful with the study data. The value of

Bartlett's test is less than 0.05 and this indicates that a factor analysis will be useful in the study. The results are presented in Table 4.16.

Table 4.16: KMO and Bartlett's Test for Proactiveness

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.638
Bartlett's Test of Sphericity	Approx. Chi-Square	344.463
	df	3
	Sig.	.000

Communalities for Proactiveness shown in table 4.17 suggest that much of the variances in each of the original variables are explained by the extracted factors. This is evidenced by the fact that the first aspect which is that the firm is a leader in development of new procedures, technologies and products or services had an extraction score of 0.595 while the second one that the employees generally initiate actions which competitors then respond to had an extraction score of 0.818. The factor that the firm has the will and foresight to seize new opportunities even if not related to present line of operations had an extraction score of 0.699. The second factor however had the highest score.

Table 4.17: Communalities for Proactiveness

	Initial	Extraction
Our firm is a leader in development of new procedures, technologies and products or services	1.000	0.595
We generally initiate actions which competitors then respond to	1.000	0.818
This firm has the will and foresight to seize new opportunities even if not related to present line of operations	1.000	0.699

Total Variance, Scree Plot and Component Matrix for Proactiveness

Total variance explained for Proactiveness showed that one component explained 70.423% of the total variability in the three items. The results are presented in table 4.18. The results for scree plot indicated that component one had Eigen value that was greater than one. The findings corroborate total variance explained results for Proactiveness. The results on scree plot are presented in Figure 4.23. The findings indicate that all three components of Proactiveness have factor loadings that are greater than 0.5. The study therefore used the component with the highest factor loading of 0.904 to compute summated factor scores for proactiveness. The result is as shown in table 4.19.

Table 4.18: Total Variance Explained for Proactiveness

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% Variance	ofCumulative %	Total	% Variance	ofCumulative %
1	2.113	70.423	70.423	2.113	70.423	70.423
2	.600	19.993	90.416			
3	.288	9.584	100.000			

Figure 4.23: Scree Plot for Proactiveness

Table 4.19: Component Matrix for Proactiveness

	Component 1
Our firm is a leader in development of new procedures, technologies and products or services	0.771
We generally initiate actions which competitors then respond to	**0.904**
This firm has the will and foresight to seize new opportunities even if not related to present line of operations	0.836

Correlation Analysis for Proactiveness

Proactiveness was positively and significantly correlated with uptake of micro-insurance (r = .240, p = .011). This is to imply that proactiveness affects the uptake of micro-insurance. These results are as shown in table 4.20. The findings of this study however compare with the findings by Akotey (2015) which revealed that due to their protection under the insurance contract, microenterprises behave carelessly and this generates

greater likelihood of the insured event occurring. They in turn may be less aggressive in undertaking new investments with the uptake of microinsurance. Agro-based microenterprises that have taken animal insurance policies, for example, might be less proactive in undertaking new investments such as the immunization of their animals. The results by Akotey (2015) suggest that proactiveness and uptake of microinsurance are significantly correlated.

Table 4.20: Correlation for Proactiveness

		Micro-Insurance uptake	Proactiveness
Micro-Insurance uptake	Pearson Correlation	1	.240*
	Sig. (2-tailed)		.011
	N	122	113
Proactiveness	Pearson Correlation	.240*	1
	Sig. (2-tailed)	.011	
	N	113	245

*. Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis for Proactiveness

> ***H_0:*** *Proactiveness has no significant influence on micro-insurance uptake by micro and small enterprises in Kenya.*

A regression analysis was carried out for the relationship between proactiveness and uptake of micro insurance by MSEs. The findings as shown in table 4.21 revealed that the R^2 statistic for variable was 0.057. The implication of this result is that 5.7% of the variations in micro-insurance uptake by MSEs is explained by proactiveness. The ANOVA results indicated that the mean square of sum of regression was 37.237and the mean square of sum of residual was 610.993. The *F*-statistic of the model was 6.765 with a p-value of 0.011, which is lesser than *p*-critical value of 0.05. Therefore, the regression model statistically significantly predicts the outcome variable. The micro-insurance uptake by MSEs is explained by proactiveness. The study further found that

proactiveness has a coefficient of 0.177 with a p-value of 0.011. Given that the p value for proactiveness is lesser than 0.05, this suggested that proactiveness significantly influences microinsurance uptake. The findings corroborates Dai, Maksimov, Gilbert and Fernhaber (2014) who argued that firms identify possible emerging problems and find solutions for them through introduction of new products and services in anticipation of future demand and shaping the environment (Khan & Kakabadse, 2014).

Table 4.21: Regression Model results for Proactiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.240[a]	.057	.049	2.346

a. Predictors: (Constant), proactiveness

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.237	1	37.237	6.765	.011[b]
	Residual	610.993	111	5.504		
	Total	648.230	112			

a. Dependent Variable: Micro-Insurance uptake
b. Predictors: (Constant), Proactiveness

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.373	1.121		-1.224	.223
	Proactiveness	.177	.068	.240	2.601	.011

a. Dependent Variable: Micro-Insurance uptake

4.6.3 Innovativeness and Uptake of Micro-insurance

Factor Analysis for Innovativeness

Factor analysis was conducted to reduce items of Innovativeness. Innovativeness construct was measured using 3 items thereby the construct was factor analyzed in order to come up with an appropriate measure. The study found that KMO had a value of 0.686 and Bartlett's test, x^2 = 281.135, p = .000. The KMO value is high (more than 0.5) and this indicates that a factor analysis will be useful with the study data. The value of Bartlett's test is less than 0.05 and this indicates that a factor analysis will be useful in the study. The results are presented in Table 4.22.

Table 4.22: KMO and Bartlett's Test for Innovativeness

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.686
Bartlett's Test of Sphericity	Approx. Chi-Square	281.135
	df	3
	Sig.	.000

Communalities for Innovativeness shown in the table 4.23 suggest that much of the variances in each of the original variables are explained by the extracted factors. The factors with the required extractions included the factor that the firm frequently introduces new products and services, the factor that the firm encourages and rewards new ideas from staff regardless of their position in the firm and the last one that the firm emphasized on utilizing new technology.

Table 4.23: Communalities for Innovativeness

	Initial	Extraction
This firm frequently introduces new products and services	1.000	0.621
My firm encourages and rewards new idea from staff regardless of their position in the firm	1.000	0.738
We emphasize on utilizing new technology	1.000	0.710

Total Variance, Scree Plot and Component Matrix

Total variance explained for Innovativeness showed that one component explained 69% of the total variability in the three items. The results are presented in table 4.24. The results for scree plot indicated that component one had Eigen value that was greater than one. The results are in agreement with total variance explained results for Innovativeness. The results on scree plot are presented in figure 4.24. The study used the component with the greatest factor loading which is "My firm encourages and rewards new ideas from staff" to compute summated factor scores for innovativeness (Table 4.25).

Table 4.24: Total Variance Explained for Innovativeness

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% Variance	ofCumulative %	Total	% Variance	ofCumulative %
1	2.069	68.958	68.958	2.069	68.958	68.958
2	.545	18.171	87.129			
3	.386	12.871	100.000			

Figure 4.24: Scree Plot for Innovativeness

Table 4.25: Component Matric for Innovativeness

	Component 1
This firm frequently introduces new products/ services	0.788
My firm encourages and rewards new idea from staff regardless of their position in the firm	**0.859**
We emphasize on utilizing new technology	0.842

Correlation Analysis for Innovativeness

The correlation results are as shown in table 4.26. The findings revealed that innovativeness was significantly correlated with uptake of micro-insurance by MSEs (*r* = .172, *p* value = .017). The findings imply that innovativeness has a significant influence on uptake of microinsurance by MSEs. These findings are in concur with those

by Rosenbusch *et al.* (2011) who used meta-analysis to scrutinize the correlation between innovativeness and performance in small businesses. The findings illustrated that the association between innovativeness and small business performance is highly dependent on the particular situation. In conditions of resource scarcity, small enterprises benefit from the innovation. An association of small business innovation and performance was found to be moderated by factors such as age of the firm, the type of innovation, and the influence of cultural context.

Table 4. 26: Correlation Analysis for Innovativeness

		MicroInsurance uptake	Innovativeness
MicroInusrance uptake	Pearson Correlation	1	.172
	Sig. (2-tailed)		.067
	N	122	114
innovativeness	Pearson Correlation	.172	1
	Sig. (2-tailed)	.017	
	N	114	244

Regression analysis for Innovativeness

> ***H_0:*** *Innovativeness has no significant influence on microinsurance uptake by micro and small enterprises in Kenya.*

The simple regression model analysis results are as shown on table 4.27. The model summary results indicate that the R^2 statistic for innovativeness is 0.172. This means that 17.2% of the variations in the micro insurance uptake are explained by innovativeness. ANOVA results specified that the mean square of sum of regression was 19.357 and the mean square of sum of residual was 5.671. The F-statistic of the model was 3.413 with a p-value of 0.027, which is lesser than *p*-critical of 0.05. Therefore, the regression model in this case statistically significantly predicts the outcome variable. The study found that innovativeness had a coefficient of .223 with a p-value of 0.017. Given that the p-value for proactiveness was lesser than 0.05, this suggested that innovativeness significantly

influences microinsurance uptake. These findings are in line with Cassia, De Massis and Pizzurno (2012) who found that family firms have a low level of propensity to innovation, while non-family firm has a high level of propensity to innovation, which proves that non-family firms are more successful than family firms in the development of new products.

Table 4.27: Regression Results on Innovativeness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.172[a]	.030	.021	2.381

a. Predictors: (Constant), innovativeness

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.357	1	19.357	3.413	.027[b]
	Residual	635.134	112	5.671		
	Total	654.491	113			

a. Dependent Variable: MicroInsurance uptake

b. Predictors: (Constant), innovativeness

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.552	1.137		-.485	.628
	Innovativeness	.223	.067	.172	1.848	.017

a. Dependent Variable: MicroInsurance uptake

4.6.4 Competitive aggressiveness and Uptake of Micro-insurance

Factor Analysis for Competitive Aggressiveness

Factor analysis was conducted to reduce items of Aggressiveness. Aggressiveness construct was measured using 3 items thereby the construct was factor analyzed in order to come up with an appropriate measure. The study found that KMO had a value of 0.6 and Bartlett's test, x^2 = 247.752, p = .000. The KMO value was more than 0.5 and this indicates that a factor analysis will be useful with the study data. The value of Bartlett's test was less than 0.05 and this indicates that a factor analysis will be useful in the study. The results are presented in Table 4.28.

Table 4.28: KMO and Bartlett's Test for Aggressiveness

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.6
Bartlett's Test of Sphericity	Approx. Chi-Square	247.752
	df	3
	Sig.	.000

Communalities for Aggressiveness are as shown in the table 4.29. The findings revealed that much of the variances in each of the original variables are explained by the extracted factors. However, the variance “My firm adopts a very competitive stance to undo the competitors in business” can be excluded. This is because the factor has a low extraction factor of 0.403 which is very low as compared to those of “We use a fast/aggressive approach to introduce new products in the market” and “This firm has an ambitious market share goals and takes bold steps to achieve them”

Table 4.29: Communalities for Aggressiveness

	Initial	Extraction
My firm adopts a very competitive stance to undo the competitors in business	1.000	0.403
We use a fast/aggressive approach to introduce new products in the market	1.000	0.764
This firm has an ambitious market share goals and takes bold steps to achieve them	1.000	0.738

Total Variance, Scree Plot and Component Matrix

The total variance explained results for Aggressiveness indicated that one component explained 63.505% of the total variability in the three items. The results are presented in table 4.30. The results for scree plot indicated that component one had Eigen value that was greater than one. The findings corroborate total variance explained results for Aggressiveness. The results on scree plot are presented in figure 4.25. The study used the component with the highest factor loading which is "We use a fast/aggressive approach to introduce new products in the market" to calculate summated factor scores. The findings are shown in table 4.31.

Table 4.30: Total Variance Explained for Aggressiveness

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.905	63.505	63.505	1.905	63.505	63.505
2	0.759	25.294	88.798			
3	0.336	11.202	100			

Figure 4.25: Scree Plot for Aggressiveness

Table 4.31: Component Matrix for Aggressiveness

	Component 1
My firm adopts a very competitive stance to undo the competitors in business	0.635
We use a fast/aggressive approach to introduce new products in the market	0.874
This firm has an ambitious market share goals and takes bold steps to achieve them	0.859

Correlation analysis for Competitive aggressiveness

Competitive Aggressiveness was found to be positively and significantly correlated with uptake of microinsurance by MSEs (r = 257, p value = .006). This result implies that competitive analysis had a significant effect on the uptake of microinsurance by MSEs.

These findings are shown in table 4.32. The findings compare with those by Mobaraki *et al.* (2012) who examined the effect of entrepreneurial orientation considering the five dimensions of innovation, risk taking, pro-activeness, competitive aggressiveness, and autonomy on the performance of Iranian private insurance companies. The results of their study indicated a relatively strong effect of entrepreneurial orientation on performance. Although, the dimensions of entrepreneurial orientation were highly correlated with each other, they did not have the same effect on performance as risk taking, innovation and competitive aggressiveness.

Table 4.32: Correlation analysis for Competitive aggressiveness

		Micro-Insurance uptake	Competitiveness
Micro-Insurance uptake	Pearson Correlation	1	.257**
	Sig. (2-tailed)		.006
	N	122	114
competitiveness	Pearson Correlation	.257**	1
	Sig. (2-tailed)	.006	
	N	114	245

**. Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis of the Model on Competitive Aggressiveness

> ***H_0:*** *Competitive aggressiveness has no significant influence on microinsurance uptake by micro and small enterprises in Kenya.*

The regression model analysis was carried out to identify the relationship between competitive aggressiveness and uptake of micro insurance among SMEs in Kenya. The findings as shown in table 4.33 revealed that the R^2 statistic as shown under the model summary is 0.257. This means that 25.7% of the variations in the uptake of micro-insurance by MSEs is explained by competitive aggressiveness. The results for ANOVA indicated that the mean sum of square regression was 43.408 and the mean square of

sum of residual was 5.492. The value of F-statistic was 7.904 with a p-value of 0.006, which is lesser than p-critical of 0.05. Thus, the regression model statistically significantly predicts the outcome variable. Competitive aggressiveness had a coefficient of 0.281 with a p-value of 0.006. The findings suggested that competitive aggressiveness had a significant effect on micro-insurance uptake. This finding agrees with Stambaugh, Yu and Dubinsky (2011) who argued that a firm's competitive actions should flow from a strategy. The authors distinguished between the logics of innovativeness and competitive aggressiveness and build the foundation for a competitive strategy by outlining the economic mechanisms of competitive action that lead to superior performance.

Table 4.33: Results of the Regression Analysis for Competitive Aggressiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.257[a]	.066	.058	2.343

a. Predictors: (Constant), competitiveness

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.408	1	43.408	7.904	.006[b]
	Residual	615.057	112	5.492		
	Total	658.465	113			

a. Dependent Variable: MicroInsurance uptake

b. Predictors: (Constant), competitiveness

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.101	.550		.183	.855
	competitiveness	.281	.029	.257	2.811	.006

a. Dependent Variable: MicroInsurance uptake

4.6.5 Regulatory framework and uptake of Microinsurance

Factor Analysis for Regulatory Framework

Factor analysis was conducted to reduce items of Regulatory Framework. Regulatory Framework construct was measured using 3 items thereby the construct was factor analyzed in order to come up with an appropriate measure. The study found that KMO had a value of 0.673 and Bartlett's test, x^2 = 222.486, p = .000. The KMO value was more than 0.5 and this indicates that a factor analysis will be useful with the study data. The value of Bartlett's test was less than 0.05 and this indicates that a factor analysis will be useful in the study. The results are presented in Table 4.34.

Table 4.34: KMO and Bartlett's Test for Regulatory Framework

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.673
Bartlett's Test of Sphericity	Approx. Chi-Square	222.486
	df	3
	Sig.	.000

Communalities for Regulatory Framework as indicated in table 4.35 suggest that much of the variances in each of the original variables are explained by the extracted factors. The first factor “Lack of separate regulation has hindered the growth and expansion of microinsurance (insurance)” had a score of 0.602 while the second factor “There is adequate regulation, policy and supervision to protect microinsurance (insurance) policyholders” had an extraction score of 0.716. The last factor “High capital requirements for microinsurance (insurance) provider’s limits distribution and access to insurance products” had an extraction score of 0.654.

Table 4.35: Communalities for Regulatory Framework

	Initial	Extraction
Lack of separate regulation has hindered the growth and expansion of microinsurance (insurance)	1.000	0.602
There is adequate regulation, policy and supervision to protect microinsurance (insurance) policyholders	1.000	0.716
High capital requirements for microinsurance (insurance) providers limits distribution and access to insurance products	1.000	0.654

Total Variance, Scree Plot and Component Matrix

The total variance explained results for Regulatory Framework indicated that one component explained 65.756% of the total variability in the three items. The results are presented in table 4.36. The findings for scree plot indicated that component one had Eigen value that was greater than one. The findings corroborate total variance explained results for Regulatory Framework. The results on scree plot are presented in figure 4.26. The results from factor analysis show that all three components of regulatory framework have factor loadings that are greater than 0.5 indicating that all the items are strongly correlated with component one. The study however used the component with the greatest factor loading of 0.846 to calculate summated factor scores for regulatory framework. This result is displayed in table 4.37.

Table 4.36: Total Variance Explained for Regulatory Framework

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.973	65.756	65.756	1.973	65.756	65.756
2	0.587	19.582	85.338			
3	0.44	14.662	100			

Figure 4.26: Scree Plot for Regulatory Framework

Table 4.37: Component Matrix for Regulatory Framework

	Component 1
Lack of separate regulation has hindered the growth and expansion of microinsurance (insurance)	0.776
There is adequate regulation, policy and supervision to protect microinsurance (insurance) policyholders	0.846
High capital requirements for microinsurance (insurance) providers limits distribution and access to insurance products	0.809

Correlation Analysis for Regulatory Framework

Regulatory framework was found to be positively and insignificantly correlated with Purchased microinsurance policy (r = .112, p = .249). The findings are shown in table 4.38. This outcome indicates that the regulatory framework does not influence the uptake of microinsurance by MSEs in Kenya. The findings of this study contradict assertions by IRA (2014) which states that regulatory hurdles affect the development and adoption of microinsurance products. These hurdles include capitalization levels, management and reporting requirements; licensing requirements for agents and brokers, and restrictions on the amount of commission and management expenses; definitions of what type of person or organisation is allowed to underwrite or sell insurance products; inability to bundle products and comprehensively address all the policyholder's needs; the need to get approval for the product design before launching the product and file premium rates on an annual basis; and there is no model for sharing the costs and profits with distributors due to regulatory restrictions; hence mass aggregators see little potential in terms of revenues from microinsurance.

Although the findings of this study indicate that regulation does not moderate the relationship between uptake of microinsurance and entrepreneurial orientation, Llanto, Almario and Llanto-Gamboa (2006) contend that regulation may be necessary since there can be very high risks of fraud, unprofessional conduct, unreliable financial procedures, and failures without government regulation. Insurance sector needs totally different expertise and organizational capacity from credit and savings, which is largely absent in developing nations. Therefore, in as much as regulatory framework does not moderate the relationship between uptake of microinsurance and entrepreneurial orientation it directly influences the uptake of microinsurance products by MSEs in Kenya.

Table 4.38: Correlation Analysis for Regulatory Framework

		MicroInsurance uptake	Regulatory Framework
MicroInsurance uptake	Pearson Correlation	1	.112
	Sig. (2-tailed)		.249
	N	122	107
regulatory	Pearson Correlation	.112	1
	Sig. (2-tailed)	.249	
	N	107	232

Regression Analysis for Regulatory Framework

The results regression results of the regulatory framework showed that the value of R^2 statistic for renewal rate is 0.112. This means that 11.2% of the variations in the micor-insurance uptake is explained by regulatory framework (Table 4.39). ANOVA results showed that the mean square of sum of regression was 7.427 and the mean square of sum of residual was 5.535. The F-statistic of the model was 1.342 with a p-value of 0.249, which is greater than p-critical of 0.05. The regression model therefore does not significantly predict the outcome variable. From the results, regulatory framework had a coefficient of 0.067 with a p-value of 0.249. This finding implied regulatory framework had no significant effect on microinsurance uptake.

The findings of this study that risk taking influences microinsurance uptake as determined by renewal rate confirms findings by Mobaraki *et al.* (2012) who surveyed the effect of entrepreneurial orientation while taking into consideration the five dimensions of EO such as innovation, risk taking, pro-activeness, competitive aggressiveness, and autonomy on the performance of private insurance companies in Iran. Their study found a relatively strong influence of EO on performance. The dimensions of EO were highly correlated with each other, but they did not have the same effect on performance as risk taking, innovation and competitive aggressiveness.

The findings of this study that risk taking, proactiveness, innovativeness and competitive aggressiveness does not influence microinsurance uptake (portfolio mix) also contradict findings by Mobaraki *et al.* (2012) who established a relatively strong effect of EO on performance. From their results, the dimensions of EO were highly correlated with each other, although they did not have the same effect on performance as risk taking, innovation and competitive aggressiveness. Their study surveyed the impact of entrepreneurial orientation taking into account the five dimensions of innovation, risk taking, pro-activeness, competitive aggressiveness, and autonomy on the performance of Iranian private insurance companies.

Table 4.39: Regression Results for Regulatory Framework

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.112[a]	.013	.003	2.353

a. Predictors: (Constant), regulatory framework

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.427	1	7.427	1.342	.249[b]
	Residual	581.134	105	5.535		
	Total	588.561	106			

a. Dependent Variable: MicroInsurance uptake

b. Predictors: (Constant), regulatory

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.414	.929		.446	.657
	regulatory	.067	.058	.112	1.158	.249

a. Dependent Variable: MicroInsurance uptake

4.7 Overall Model

4.7.1 Unmoderated Multiple Linear Regression Model

A regression analysis of the overall model of the study was carried out. The results indicated that the R^2 statistic for micro-insurance uptake is 0.650. This means that 65% of the variations in the micro insurance uptake is explained by the four aspects of Entrepreneurial orientation. The ANOVA results showed that the mean square of sum of regression was 92.395 and the mean square of sum of residual was 5.466. The *F*-statistic of the model was 16.904 with a p-value of 0.000, which is lesser than *p*-critical value of 0.05. Therefore, the regression model statistically significantly predicts the outcome variable. The study found that the p values for Risk Taking (p= 0.040) Proactiveness (p= 0.010), Innovativeness (p=0.000), Competitive Aggressiveness (p= 0.036) were all lesser than the significant 0.05. This finding suggested that risk taking, proactiveness, innovativeness and competitive aggressiveness all had significant effect on uptake of micro-insurance by MSEs.

Table 4.40: Regression Results for the Unmoderated Overall Model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.806[a]	0.6501	0.637	2.305

a. Predictors: (Constant), competitiveness, risk taking, innovativeness, proactiveness

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	369.580	4.000	92.395	16.904	0.000
	Residual	568.497	104	5.466		
	Total	938.077	108			

a. Dependent Variable: MicroInsurance uptake

b. Predictors: (Constant), competitiveness, risk taking, innovativeness, proactiveness

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.607	1.337		-1.949	0.000
	Risk taking	0.082	0.043	0.112	1.904	0.040
	Proactiveness	0.066	0.025	0.089	2.621	0.010
	Innovativeness	0.038	0.007	0.052	5.418	0.000
	Competitiveness	0.065	0.030	0.205	2.125	0.036

a. Dependent Variable: MicroInsurance uptake

4.7.2 Moderated Multiple Linear Regression Model

A regression analysis was done with the moderator. The results indicated that the R^2 statistic for Renewal rate is 0.649. This means that 64.9% of the variations in the uptake of micro insurance is explained by competitiveness, risk taking, innovativeness and proactiveness when moderated by regulatory framework. The ANOVA results for Renewal rate showed that the mean square of sum of regression was 35.355 and the mean square of sum of residual was 4.977. The *F*-statistic of the model was 7.104 with a p-value of 0.000, which is lesser than *p*-critical value of 0.05. Therefore, the regression model statistically significantly predicts the outcome variables. The p-values for risk taking (p= 0.035), proactiveness (p=0.000), innovativeness (p=0.002), competitive aggressiveness (p=0.000) and regulatory framework (p= 0.000) were all lesser than the significance level of 0.05. Therefore, the study rejected the null hypothesis that risk taking, proactiveness, innovativeness and competitive aggressiveness do not affect uptake of micro-insurance by MSEs in Kenya. In addition, the p-values of the interactions between risk taking (p=0.722), innovativeness (p=0.810), proactiveness (p=0.981) and competitive aggressiveness (p=0.422) and regulatory framework were all insignificant thus the study failed to reject the null hypothesis that the interaction between risk taking, innovativeness, and competitive aggressiveness with regulatory framework do not affect renewal rate.

Table 4.41: Regression Results for the Overall Moderated Model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	0.825	0.6801	0.649	2.231

. Predictors: (Constant), competitiveness, risk taking, innovativeness, proactiveness, regulatory, proactiveness_regulatory, risktaking_regulatory, innovativeness_regulatory, competitiveness_regulatory

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	318.193	9	35.355	7.104	0.000
	Residual	467.862	94	4.977		
	Total	786.055	103			

c. Predictors: (Constant), competitiveness, risktaking, innovativeness, proactiveness, regulatory, proactiveness_regulatory, risktaking_regulatory, innovativeness_regulatory, competitiveness_regulatory

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.586	3.593		0.441	0.000
	Proactiveness	0.529	0.278	0.710	1.901	0.000
	Competitiveness	0.422	0.071	1.041	5.959	0.000
	Innovativeness	0.271	0.122	0.098	2.221	0.001
	Risk taking	0.144	0.101	0.060	1.426	0.003
	Regulatory	0.082	0.064	0.497	1.281	0.109
	Interaction Risktaking_regulatory	.008	.022	.273	.357	.722
	Interaction Proactiveness_regulatory	.039	.028	1.327	1.352	.180
	Interaction Innovativeness_regulatory	-.001	.029	-.025	-.024	.981
	Interaction Competitiveness_regulatory	-.022	.028	-1.396	-.806	.422

a. Dependent Variable: MicroInsurance uptake

4.8 Optimal Model

An optimal model was developed based on the regression coefficients of the overall moderated model of the study. According to the study findings, the constant (B_0) was insignificant in all simple and multiple linear regression models. Regulatory framework did not moderate the relationship between microinsurance uptake and entrepreneurial orientation nor did it have direct effect on microinsurance uptake. Thus the optimal is specified as:

$$\boldsymbol{Y = 0.529X_1 + 0.422X_2 + 0.271X_3 + 0.144X_4}$$

Where;

Y = Microinsurance uptake

X_1 = Proactiveness

X_2 = Competitive aggressiveness

X_3 = Innovativeness

X_4 = Risk Taking

From the optimal model, a revised conceptual framework was formulated as shown in figure 4.27. The variables are arranged based on their significance level and the Beta coefficients as indicated on the optimal model. This is to mean that proactiveness has the most significant influence on uptake of micro insurance, followed by competitive aggressiveness, innovativeness and lastly risk taking. However, the regulatory framework is left out of the revised conceptual framework based on the fact that it had insignificant moderating effect on the relationship between entrepreneurial orientation and uptake of micro-insurance by MSEs. According to Mulinge (2013), as much as most of the variables in a study might have a significant influence on the dependent variable, their significance differs hence there is need for a revised conceptual framework to outline this.

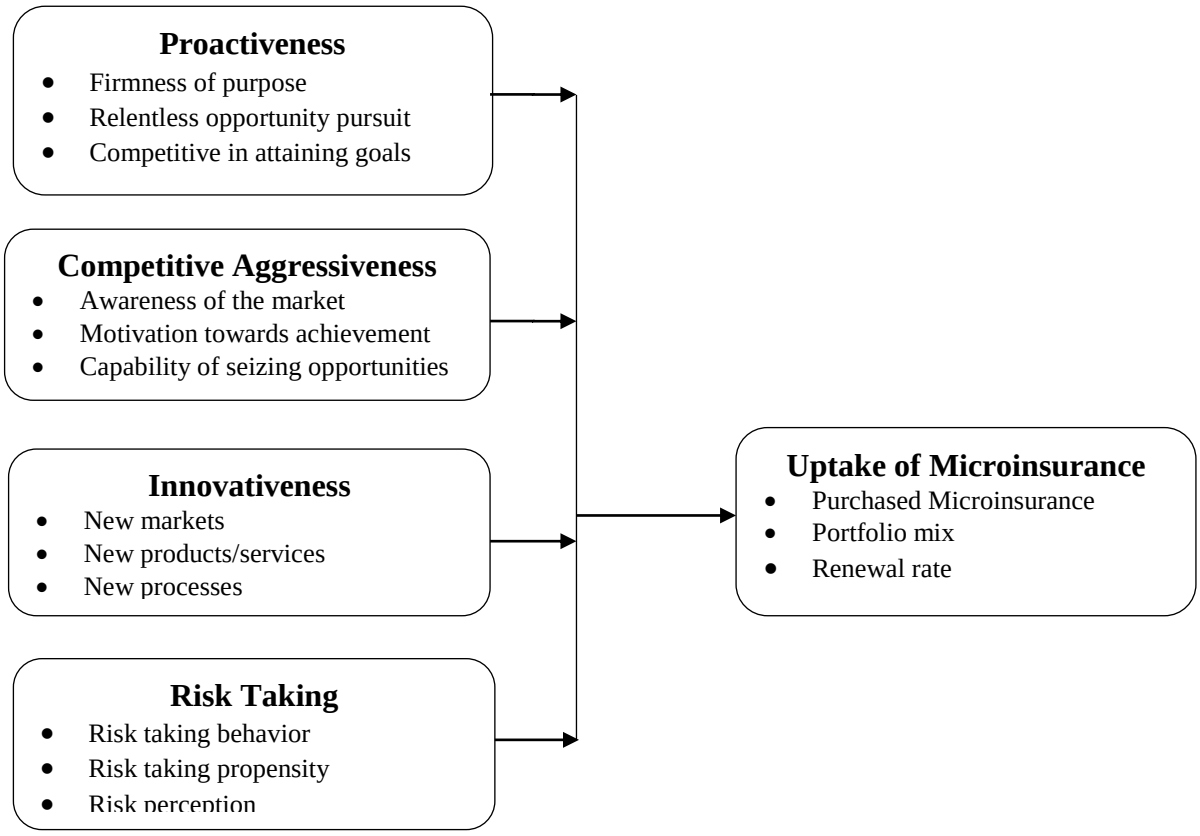

Figure 4.27: Revised Conceptual Framework

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The aim of this chapter is to present the summary of the findings, the conclusion and recommendations. The study aimed at establishing the influence of risk taking, proactiveness, innovativeness and competitive aggressiveness on micro insurance uptake by micro and small enterprises in Kenya. Using quantitative data and binary logistic models, the relationship between the variables was established. The summary of the findings is presented in this chapter. The findings have guided development of conclusions of the study as well as the recommendations. The summary under this section has been done in line with the objectives of the study and areas of further research have also been suggested.

5.2 Summary of Major Findings

5.2.1 Risk Taking

The study found that risk taking contributes about 4.6% to microinsurance uptake. The correlation results revealed that risk taking behaviour of the entrepreneur was significantly associated with the uptake of microinsurance products in terms of the portfolio mix, and renewal rate. The ANOVA results indicated that risk taking behaviour was not statistically different for micro and small enterprises owners. The regression findings further revealed that risk taking behavior had positive and significant influence on whether MSEs purchased micro insurance policy. However, risk taking behavior of MSEs significantly influenced portfolio mix and renewal rate of the micro insurance policies. These findings reveal that risk taking behavior of an MSEs influences their decision on whether to purchase micro insurance or not.

5.2.2 Proactiveness

The study found that 5.7% of the variation of uptake of micro insurance was explained by proactiveness as an aspect of entrepreneurial orientation. The correlation results revealed that the proactiveness behaviour of the entrepreneur was positively and significantly related with the purchase of micro insurance policy, portfolio mix and renewal rate of micro insurance policies. The ANOVA results showed that proactiveness behaviour between micro and small enterprises was significantly different. Regression results showed that proactiveness behavior of an entrepreneur had positive and significant influence on the decision to purchase micro insurance policy. However, proactive behavior of an entrepreneur did not significantly influence portfolio mix and renewal rate of the micro insurance policies. These findings implied that proactiveness behavior of an entrepreneur plays a critical role in influencing purchase decisions of micro insurance policy.

5.2.3 Innovativeness

The findings on model summary revealed that 3.0% of the variation of uptake of micro-insurance by MSEs was explained by innovativeness. The results from correlation analysis showed that the innovativeness behaviour of the entrepreneurs was significantly related with portfolio mix, renewal rate and micro insurance purchase decisions. Further, ANOVA results revealed that innovativeness behaviour of an entrepreneur of a micro and small enterprises was statistically different. The regression results showed that innovativeness behavior of an entrepreneur influenced their decision to purchase micro insurance policy, have portfolio mix or renew their micro insurance policies. This implies that innovativeness of the entrepreneurs influences uptake of micro insurance policies.

5.2.4 Competitive Aggressiveness

The model summary revealed that indeed competitive aggressiveness influenced uptake of micro-insurance among entrepreneurs by about 25.7%. Correlation results showed that the competitive aggressiveness behaviour of the entrepreneurs was positively and significantly associated with the decision to purchase micro insurance policy, portfolio mix and renewal rate of micro insurance policies. ANOVA results revealed that competitive aggressiveness behaviour of an entrepreneur of a micro and small enterprises was statistically different. Regression results showed that competitive aggressiveness behavior of an entrepreneur positively and significantly influenced the decision to purchase micro insurance policy. However, competitive aggressiveness behavior of an entrepreneur significantly influenced portfolio mix and renewal rate of the micro insurance policies. These findings reveal that competitive aggressiveness behavior of an entrepreneur influences their decision to purchase micro insurance policies.

5.2.5 Regulatory Framework

Correlation results revealed that the regulatory framework was negatively and insignificantly associated with the decision to purchase micro insurance policies, portfolio mix and renewal of micro insurance policies. ANOVA results showed that the regulatory framework for the micro enterprises was statistically different from that of small enterprises. Findings from regression analysis showed that regulatory framework had a negative and insignificant influence on decision to purchase micro insurance policy. However, regulatory framework did not significantly influence portfolio mix and renewal rate of the micro insurance policies. These findings reveal that regulatory framework influences the decision to purchase micro insurance policies. In addition, the study found that regulatory framework does not significantly moderate the relationship between entrepreneurial orientation and uptake of micro insurance by MSEs.

5.3 Conclusion

The study established that the relationship between risk taking and decision to purchase micro insurance by MSEs in Kenya was statistically significant to uptake of micro-insurance by MSEs through renewal rate, purchase and portfolio mix. Risk taking behavior of an entrepreneur positively and significantly influence decision to purchase micro insurance products, portfolio mix and renewal rate of the micro insurance policies. As per the results, the study therefore concluded that risk taking behaviour of entrepreneurs of MSEs significantly influences micro insurance purchase decisions. Thus entrepreneurs of MSEs who have high affinity of risk have higher probability of purchasing micro insurance in order to protect their businesses from losses resulting from high uncertainties.

The study found that pro-active behaviour of the entrepreneur positively and significantly influenced the uptake of micro-insurance by MSEs. Pro-active behavior of an entrepreneur of MSEs positively and significantly influences the decision to purchase micro insurance policy and so is the portfolio mix and renewal rate of the micro insurance policies. The results suggested that entrepreneurs of MSEs who are more proactive have higher chances of purchasing micro insurance products. The study ascertained that innovativeness of an entrepreneur of MSEs significantly influenced the decision to purchase micro insurance policy, renewal and portfolio mix. The study concluded that uptake of micro insurance depends on entrepreneurs' innovative capabilities.

Thus Kenyan MSEs may come up with new ideas or introduce business processes but this would not influence their consumption of micro insurance products. The study revealed that competitive aggressiveness behaviour of the entrepreneurs was negatively and significantly related with the decision to purchase micro insurance policy but not with portfolio mix and renewal rate of micro insurance policies. Competitive aggressiveness behavior of an entrepreneur negatively and significantly influences the

decision to purchase micro insurance policy but does not influence portfolio mix or renewal rate of micro insurance policies. This result suggests that the tendency of MSEs to compete in the market in order to gain entry into a market or improve their market position reduces the likelihood of entrepreneurs purchasing micro insurance policies.

The study established that regulatory framework was negatively and significantly associated with the decision to purchase micro insurance policies but not with portfolio mix and renewal of micro insurance policies. Regulatory framework negatively and significantly influences the decision to purchase micro insurance policy but had no influence on portfolio mix and renewal rate of the micro insurance policies. Regulatory framework does not significantly moderate the relationship between entrepreneurial orientation and uptake of micro insurance. These findings suggest that the existing regulatory framework does not support uptake of micro insurance by MSEs.

5.4 Recommendations

Risk taking behaviour increases the likelihood of entrepreneurs of MSEs purchasing micro insurance policies. The study recommends that entrepreneurs who are risk averse could cushion themselves by purchasing micro insurance policies consequently enabling them achieve their firms' objectives.

Proactiveness behaviour of the entrepreneurs means that they are opportunity-seeking, forward-looking characterized by introduction of new products and/or services ahead of the competitors and acting in anticipation of future demand. Because of the uncertainties, purchase of micro-insurance would provide the protection.

Innovative behaviour influences the uptake of micro insurance by MSEs in Kenya. The entrepreneurs' predisposition to engage in creativity and experimentation through introduction of new products and/or services as well as technological leadership in new processes results to investment of numerous resources. It is therefore recommended that this investment of resources should be insured.

Competitive aggressiveness positively influences entrepreneurs' decision to purchase micro insurance policies. The intensity of the MSE entrepreneurs to outperform their rivals is characterized by a strong offensive posture or aggressive responses to competitive threats. It is therefore recommended that they insure their enterprises against the eventualities in such a competitive landscape.

Regulatory framework directly influences entrepreneurs of MSEs decision to purchase micro insurance policies. The study recommends that the government should review existing micro insurance regulations with the aim of designing them in a way that they create conducive environment to encourage entrepreneurs to take up more micro insurance. Consequently, protect against perils such as economic shocks, death and illness proprietors, loss of property through natural disasters and calamities which lead to huge financial loses, jobs and low economic development.

5.5 Contribution of the Study to the Existing Knowledge

The study developed a conceptual framework which outlines the correlation between the entrepreneurial orientation and uptake of microinsurance by micro and small enterprises. The hypotheses that were related to the original conceptual framework were successfully tested and the results provided basis for development of optimal conceptual framework. The study contributed to theory by proving that entrepreneurial orientation can be explained effectively by two major theories which included the cognitive dissonance theory and the McClelland's psychological theory. These theories explain the need for an entrepreneur to be self-motivated and have the desire to grow and develop.

The study further contributed to the knowledge by attesting that entrepreneurial orientation can be effectively explained by the four major variables; risk taking, pro-activeness, innovativeness and competitive aggressiveness. This means that when addressing entrepreneurial orientation, it could be appropriate address it in terms of the four variables.

In addition, the study contributed to theory by proving that regulatory framework directly affects uptake of micro insurance and does not moderate the relationship between entrepreneurial orientation and uptake of micro insurance. The study also contributed to existing knowledge by showing that out of the four variables focused on in the study, their significance to influencing uptake of micro-insurance among MSEs varies; whereby pro-activeness was found to be the most significant, followed by competitive aggressiveness, innovativeness and risk taking was the least significant.

5.6 Areas of further Research

The principal aim of this study was to establish the influence of entrepreneurial orientation on uptake of micro insurance by micro and small enterprises in Kenya. Future studies could investigate the influence of entrepreneurial orientation on uptake of micro insurance by medium enterprises in Kenya.

The study focused on uptake of micro insurance from MSEs' point of view. This means that the views of the insurance providers were not covered in the study hence there could be a study to unearth the influence of uptake of micro-insurance from the insurance providers' perspective.

The study focused on four major aspects on entrepreneurial orientation which are; risk taking, pro-activeness, innovativeness and competitive aggressiveness which were found to explain up to 65% (R^2 = 0.650) of the variability of uptake of micro-insurance by MSEs. There could therefore be a similar study to unveil other factors not focused in the study that influence uptake of micro-insurance that make the 35% remainder.

As revealed in the study, MSEs are very critical as far as economic development and growth are concerned. However, this study only focused on uptake of micro-insurance by the MSEs whereas there are other challenges that face this sector. There could therefore be a study to establish the influence of entrepreneurial orientation on other dimensions of MSEs such as performance, growth and survival.

REFERENCES

Aftaab-ul-Maroof, S. (2014). Demand for Microinsurance: An assessment of Driving Factors. *Indian Journal of Applied Research, 4*(7), 122-134.

Agier, I., & Szafarz, A. (2012). Subjectivity in credit allocation to micro-entrepreneurs: evidence from Brazil. *Small Bus Econ, 41*(1), 263-275.

Akotey, J.O. (2015). *The Impact of Microinsurance on Household Welfare in Ghana*. Doctor of Philosophy Degree in Development Finance, Stellenbosch University.

Akotey, J. O., & Adjasi, C. K. (2016). Does Microcredit Increase Household Welfare in the Absence of Microinsurance? *World Development, 77*(2), 380-394.

Alderman, H., & Paxson, C. H. (1994). *Do the poor insure? A synthesis of the literature on risk and consumption in developing countries*. Washington DC: World Bank

Aliber, M. (2001). *Social Finance Programme & InFocus Programme on Boosting Employment through Small Enterprise Development, South African Microinsurance Case-Study*. Working Paper No. 33, International Labor Organization

Allen, F. & Yago, G. (2010). *Financing the Future: Market-based Innovations for Growth*. Upper Saddle River, NJ: Pearson Education, Inc.

Allianz AG, GTZ and UNDP Public Private Partnership (2006). *Microinsurance Demand and Market Prospects* – India

Amit, R., Gerson, R., and Yaalon, D.H., (1993), Stages and rate of the gravel shattering process by salts in desert Reg soils: *Geoderma*, *57*(2), 295–324.

Anane, G.K., Cobbinah, P. B., & Manu, J. K. (2013). Sustainability of Small and Medium Scale Enterprises in Rural Ghana: The Role of Microfinance Institutions. *Asian Economic and Financial Review*, 3(8), 1003-1017.

Andersen, T. J., Garvey, M., & Roggi, O. (2014). Risk, Uncertainty, and Proactive Risk-Taking. *Managing Risk and Opportunity, 3*(2), 35-67.

Anderson, B., Covin, J., Slevin, D. (2009). Understanding the Relationship betweenEntrepreneurial Orientation and Strategic Learning Capability: An Empirical Investigation. *Strategic Entrepreneurship Journal, 3*(3), 218–40.

Anderson, M. G., & Holcombe, E. (2013). Foundations: Reducing Landslide Risk in Communities. *Community-Based Landslide Risk Reduction, 2*(3), 1-52.

Andrevski, G., Richard, O. C., Ferrier, W. J., & Shaw, J. D. (2010). Managerial Racial Diversity, Competitive Aggressiveness and Firm Performance: A Moderated Mediation Model. *Academy of Management Proceedings*, *4*(1), 1-6.

Arrow, K. J. (1965). *Aspects of the theory of risk-bearing*. Yrjö Jahnssonin Säätiö.

Arrow, K.J. (1964). The Role of Securities in the Optimal Allocation of Risk Bearing. *Review of Economic Studies*; *31*(3), 91-96.

Baidoo, I. & Buss, M. (2012). *Literature review: Barriers to microinsurance uptake*. Ac cra: GIZ - Promoting Microinsurance in Ghana.

Bakhshi, P. (2016) Review of Progress and Potential of Micro Insurance in India. *International Journal of Advanced Research*, *4*(4), 1669-1675

Balica, S., Dinh, Q., & Popescu, I. (2015). Vulnerability and Exposure in Developed and Developing Countries. *Hydro-Meteorological Hazards, Risks and Disasters*, *3*(2), 125-162.

Barclay, D., Thompson, R., & Higgins, C. (1995). The Partial Least Squares (PLS) Approach to Causal Modeling: Personal Computer Adoption and Use an Illustration. *Technology Studies, 2*(2), 285-309.

Baskerville, R.F. (2003). Hofstede Never Studied Culture. *Accounting, Organizations and Society*, *28*(1), 1-14.

Bellu, R.R. (2010). *Entrepreneurs and managers: are they different? In Anonymous, Frontiers of Entrepreneurship Research*. Wellesey, MA: Babson College.

Bertram-HHmmer, V., & Krrhnert, K. (2012). Does Index Insurance Help Households Recover from Disaster? Evidence from IBLI Mongolia. *SSRN Electronic Journal*. doi:10.2139/ssrn.2686061

Bhatt, M.R. and Pathak, V. (2014). Risk transfer through microinsurance: Lessons Learnt and Evidence from Phailin Cyclone Affected Community *All India Disaster Mitigation Institute (AIDMI)*

Bhattacharya, C. (2009). Advances in Micro Insurance in India Economics, *Journal of Marketing 73*(6), 198 – 213.

Bhattacharya, S., & Londhe, B. R. (2014). Micro Entrepreneurship: Sources of Finance & Related Constraints. *Procedia Economics and Finance, 11*(3), 775-783.

Biener, C., & Eling, M. (2012). Insurability in microinsurance markets: An analysis of problems and potential solutions, *Geneva Papers on Risk and Insurance, 37*(1), 77–107.

Biener, C. (2013). Pricing in Microinsurance Markets. *World Development*, *41*(4), 132-144.

Blumberg, B., Cooper, D. R., & Schindler, P. S. (2011). *Business research methods* - McGraw-Hill Higher Education – London

Bonke, J. (2013). Pooling of income and sharing of consumption within households. *Review of Economics of the Household, 13*(1), 73-93.

Boubaker, S., Nguyen, P., & Rouatbi, W. (2016). Multiple Large Shareholders and Corporate Risk-taking: Evidence from French Family Firms. *European Financial Management*, *22*(4), 697-745.

Britzelmaier, B., Häberle, M., & Landwehr, M. (2015). Risk management in German small and medium-sized enterprises. *IJESB*, *24*(4), 548.

Brockhaus, R.H. (1980). Risk-Taking Propensity of Entrepreneurs. *Academy of Management Journal, 23*(3), 509–520

Brooks, P., Peters, S., & Zank, H. (2013). Risk behavior for gain, loss, and mixed prospects. *Theory and Decision, 77*(2), 153-182.

Brouwer, A., Faramarzi, A., & Hoogendoorn, M. (2014). Does the New Conceptual Framework Provide Adequate Concepts for Reporting Relevant Information about Performance? *Accounting in Europe, 11*(2), 235-257.

Brundin, E., Nordqvist, M., & Melin, L. (2010). Entrepreneurial Orientation across Generations in Family Firms: The Role of Owner-centric Culture for Proactiveness and Autonomy. *Transgenerational Entrepreneurship*, *4*(4), 45-54.

Buabeng, I. & Gruijters, R. (2012). *Market survey: The supply of microinsurance produc ts in Ghana*. Accra: GIZ -Promoting Microinsurance in Ghana.

Bulley, C. A., Baku, K. F., & Allan, M. M. (2014). Competitive Intelligence Information: A Key Business Success Factor. *Journal of Management and Sustainability*, *4*(2), 56-67.

Butt, A. (2010). *Experiences in Micro-Insurance*. Washington DC: CARE International.

Callaghan, C., & Venter, R. (2011). An investigation of the entrepreneurial orientation, context and entrepreneurial performance of inner-city Johannesburg street traders. *Southern African Business Review*, *15*(1), 28-48.

Campanelli, P. C., Rothgeb, J. M., & Martin, E. A. (2005). The role of respondent comprehension and interviewer knowledge in CPS labor force classification. *Survey Methodology*, *7*(4), 56-78.

Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, *34*(3), 511-532.

Cardon, M. S., Zietsma, C., Saparito, P., Matherne, B. P., & Davis, C. (2005). A tale of passion: New insights into entrepreneurship from a parenthood metaphor. *Journal of Business Venturing*, *20*(1), 23–45.

Cassia, L., De Massis, A., & Pizzurno, E. (2012). Strategic Innovation and New Product Development in Family Firms: an empirically grounded theoretical framework. *International Journal of Entrepreneurial Behaviour & Research*, *18*(2), 198-232.

Chandra, Y., Styles, C. W., & Wilkinson, I. (2013). The Recognition of First Time International Entrepreneurial Opportunities: Evidence from Firms in Knowledge-Based Industries. *SSRN Electronic Journal*, *5*(6), 87-99.

Chen, X. P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: a persuasion analysis of venture capitalists' funding decisions. *Academy of Management Journal*, *52*(1), 199-214.

Chen, Y. Q., Zhang, S. J., Liu, L. S., & Hu, J. (2015). Risk perception and propensity in bid/no-bid decision-making of construction projects. *Engineering, Construction and Architectural Management*, *22*(1), 2-20.

Chetty, R., & Looney, A. (2011). Consumption Smoothing and the Welfare Consequences of Social Insurance in Developing Economies. *International Journal of Entrepreneurial Behaviour & Research*, *18*(2), 198-232.

Chiliya, N. and Roberts-Lombard, M (2012). Impact of Level of Education and Experience on Profitability of Small Grocery Shops in South Africa. *International Journal of Business Management and Economic Research*, *3*(1), 462-470.

Chodokufa, K. & Chiliya, N. (2014). The Relationship between MSEs and Insurance providers in Nelson Mandela Metropolitan Area, South Africa. *Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy*, *5*(14), 34-56.

Churchill, C., Phillips, R. D., & Reinhard, D. (2011). Introduction to the 2011 Symposium Issue of JRI on Microinsurance. *Journal of Risk and Insurance*, *78*(1), 1-5.

Claessens, S. (2013). Benefits and Costs on Integrated Financial Services Provision in Developing Countries. *Brookings-Wharton Papers on Financial Services*, *2003*(1), 85-139.

Coon, Dennis. (2004). *Introduction to Psychology* (9th Ed) Minneapolis: West Publishing Company.

Cooper, D. R., & Schindler, P. S. (2011). *Business research methods*. New York: McGraw-Hill/Irwin.

Covin, J. G. & Slevin. P. (1986). *The development and testing of an organizational-level entrepreneurship scale.* New York:CARE

Covin, J. G., & Slevin, D. P. (1990). Strategic management of small firms in hostile and benign environments. *Strategic management journal*, *10*(1), 75-87.

Covin, J.G., & Wales W. J. (2011). The Measurement of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice*, *3*(5), 34-65.

Cunningham, B. J., & Lischeron, J. (1991). Defining Entrepreneurship. *Journal of Small Business, 25*(3), 30-48.

Currie, G, Humphreys, M., Ucbasaran, D. & McManus, S. (2008). Entrepreneurial Leadership in the English Public Sector: Paradox or Possibility? *Public Administration, 86*(4), 987–1008.

Cutler, D. M. (2015). Supplementing Public Insurance Coverage with Private Coverage. *Labor Markets and Firm Benefit Policies in Japan and the United States*, *87*(5), 183-204.

Dai, L., Maksimov, V., Gilbert, B. A., & Fernhaber, S. A. (2014). Entrepreneurial orientation and international scope: The differential roles of innovativeness, proactiveness, and risk-taking. *Journal of Business Venturing*, *29*(4), 511-524.

Dávila, G. A., North, K., & Varvakis, G. (2016). How Brazilian Textile Enterprises Learn to Grow. *Competitive Strategies for Small and Medium Enterprises*, *7*(8), 241-254.

Dean, C.C. (2013). *Corporate entrepreneurship: Strategic and structural correlates and impact on the global presence of United States firms.* Unpublished doctoral dissertation, Texas, Denton, TX: University of North Texas.

Demos, R. (2013). Aspects of Positivism. *Philosophy and Phenomenological Research*, *13*(3), 377.

Dercon, S., Gunning, J. W., & Zeitlin, A. (2011). The demand for insurance under limited credibility: Evidence from Kenya. *International Development Conference*, DIAL, Paris.

Dionne, G. (2013). Risk Management: History, Definition, and Critique. *Risk Management and Insurance Review*, *16*(2), 147-166.

Doherty, N. A., & Schlesinger, H. (1991). Rational insurance purchasing: consideration of contract non-performance. In *Managing the Insolvency Risk of Insurance Companies*. Netherlands: Springer.

Drucker, P. F. (1985). The discipline of innovation. *Harvard business review*, *80*(8), 95-100.

Duong, L. (2012). *Effective Risk Management Strategies for Small-Medium Enterprises and Micro Companies - A Case Study for Viope Solutions Ltd.* International Business Degree Thesis

Ebenstein, A., & Leung, S. (2010). Son Preference and Access to Social Insurance: Evidence from China's Rural Pension Program. *Population and Development Review*, *36*(1), 47-70.

Eeckhoudt, L., Gollier, C., & Schlesinger, H. (2005). *Economic and financial decisions under risk*. Princeton: Princeton University Press.

Eggers, F., Kraus, S., Hughes, M., Laraway, S., & Snycerski, S. (2013). Implications of customer and entrepreneurial orientations for SME growth. *Management Decision*, *51*(3), 524-546.

Eisenhauer, J. G. (1995). The entrepreneurial decision: Economic theory and empirical evidence. *Entrepreneurship: Theory and Practice*, *19*(4), 67-80.

European Commission. (2016). *Annual Report on European SMEs 2014/2015*. London: European Commission.

Ezra, D. (2016). Most People Need Longevity Insurance rather than an Immediate Annuity. *Financial Analysts Journal*, *72*(2), 23-29.

Farthing, R. (2014). What's Wrong with Being Poor? The Problems of Poverty, as Young People Describe them. *Child Studies*, *30*(2), 107-119.

Fayolle, A., Basso, O., & Bouchard, V. (2013). Understanding the Impact of Culture on a Firm's Entrepreneurial Orientation and Behaviour: A Conceptual Framework. *European Entrepreneurship in the Globalizing Economy*. London: European Entrepreneurship.

Feldstein, M. S. (1973). The welfare loss of excess health insurance. *The Journal of Political Economy*, *6*(4), 251-280.

Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology*, *58(2)*, 203-231.

Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.

Fincham, J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American journal of pharmaceutical education*, *72*(2), 43-54.

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research, 7*(3), 39-50.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

Friedrich, P., & Hiba, J. C. (2016). Learning to Cope with Turbulent Situations: A Study of Owner-Managers in Argentine SMEs. *Competitive Strategies for Small and Medium Enterprises*, *6*(7), 153-179.

Gamage, H. R. (2014). Entrepreneurial drive beyond the need for achievement: a point of difference in South Asian entrepreneurial drive, inspiration and motivation. *IJPMB*, *4*(3), 234.

Geißler, M., & Zanger, C. (2015). Opportunities und Opportunity Recognition als Aufgabe des Gründungs marketing. *Entrepreneurial Marketing*, *6*(7), 179-197.

Giachetti, C. (2015). Competing in Emerging Markets: Performance Implications of Competitive Aggressiveness. *Management International Review*, *56*(3), 325-352.

Giesbert, A. (2013). *Microinsurance and Risk Management: Evidence from Ghana*: Accra: Insurance Authority.

Giesbert, L. L., & Steiner, S. (2015). Client Perceptions of the Value of Microinsurance: Evidence from Southern Ghana. *Journal of International Development*, *27*(1), 15-35.

Gitonga, N. (2009). Health Microinsurance: East African Experience. *Insight Health Advisors' Journal, 8*(5), 4-5.

Grande, J., Madsen, E., L., & Borch, O., J. (2011). The relationship between resources, entrepreneurial orientation and performance in farm-based ventures. *Entrepreneurship & Regional Development*, *23*(3-4), 89-111.

Grant, A. M., Berg, J. M., & Cable, D. M. (2014). Job titles as identity badges: How self-reflective titles can reduce emotional exhaustion. *Academy of Management Journal*, *57*(4), 1201-1225.

Greene, H. (2012). *Econometric Analysis* (7th ed.). Upper Saddle River, N. J: Prentice Hall.

Greenhalgh, C., & Rogers, M. (2010). *Innovation, intellectual property, and economic growth*. Princeton: Princeton University Press.

Guiso, L., & Jappelli, T. (1998). Background uncertainty and the demand for insurance against insurable risks. *The Geneva Papers on Risk and Insurance Theory*, *23*(1), 7-27.

Hamid, F. S., Rangel, G. J., Taib, F. M., & Thurasamy, R. (2014). The relationship between risk propensity, risk perception and risk-taking behaviour in an emerging market. *International Journal of Banking and Finance*, *10*(1), 7.

Hannachi, M., & Coléno, F. (2015). The Virtues of the Vice of Cooperation between Rival Firms: A Simulation Model to Evaluate the Performance of Coopetition Strategy in the Grain Merchant Industry. *Journal of Management and Strategy*, *6*(1), 47-53.

Harms, R., Reschke, C., H., Kraus, S., & Fink, M. (2010) Antecedents of innovation and growth, analyzing the impact of entrepreneurial orientation and goal-oriented management. *International Journal of Technology Management*, *52*(2), 135-152.

Haron, J. (2010). *Entrepreneurial drives and business performance of Malaysian entrepreneurs.* Unpublished PhD thesis, Teknologi MARA: Universiti Teknologi MARA.

Heirati, N., O'Cass, A., Schoefer, K., & Siahtiri, V. (2016). Do professional service firms benefit from customer and supplier collaborations in competitive, turbulent environments? *Industrial Marketing Management*, *5*(6), 56-72.

Henderson, J., & Weiler, S. (2010). Entrepreneurs and Job Growth: Probing the Boundaries of Time and Space. *Economic Development Quarterly*, *24*(1), 23–32.

Henry, C., Hill, F., & Leitch, C. (2010).*Entrepreneurship: Education and Training*. England: Ash gate Publishing limited.

Hepeng. (2014). Small and Medium-Sized Enterprise Human Resources Management Outsourcing Feasibility Study in China. *International Journal of Business and Social Science*, *5*(7), 179-189.

Herath, H.M.R.M. (2016). *Barriers in implementing Micro Insurance: A study of the Self-Employment sector in Sri Lanka*. MBA Dissertation Research Gate.

ilbe, J. M. (2011). Logistic regression. In *International Encyclopedia of Statistical Science* (755-758). Springer Berlin Heidelberg.

Huckstep, R. (2015). *MicroEnsure-providing cover for the under-insured mass markets in Africa. Daily Fintech.* MicroEnsure.

Hwang, I. D. (2016). *Prospect Theory and Insurance Demand*. London: Princeton Printers.

IIPS & Macro International. (2007). *National Family Health Survey (NFHS-3), 2005–06:* Mumbai: IIPS.

ILO. (2013). *Global Employment Trends 2012: Preventing a Deeper Jobs Crisis.* Geneva: International Labor Organization,

International Monetary Fund. (2013). India: Financial Sector Assessment Programme Detailed Assessments Report on IAIS Insurance Core Principles. *IMF Staff Country Reports*, *13*(265), 1-19.

IRA. (2014). *Kenya Microinsurance Policy Paper*. Nairobi: Insurance Regulatory Authority,

Ishengoma, E.K., & Kappel, R. (2014). Business Constraints and Growth Potential of Micro and Small Manufacturing Enterprises in Uganda. *The working paper Series* No. 78.

Jalali, A., Jaafar, M., Talebi, K., & Ab Halim, S. (2014). The Moderating Role of Bridging Ties between Risk-Taking, Proactiveness and Performance: The Evidence from Iranian SMEs.*IJBM*, *9*(5), 67-98.

Jansone, I., & Voronova, I. (2012). Risks Assessment of Small and Medium-Sized Enterprises: The Case of Latvia. *Contemporary Issues in Business, Management and Education '2012. Selected papers*.

Jensen, N., & Schomacker, K. (2015). A Two-Account Life Insurance Model for Scenario-Based Valuation Including Event Risk. *Risks*, *3*(2), 183-218.

Jeraj, M. (2014). The Relationship between Optimism, Pre-Entrepreneurial Curiosity and Entrepreneurial Curiosity. *Organizacija*, *47*(3), 87-102.

Jiang, X., Mori, N., Tatano, H., Yang, L., & Shibutani, Y. (2015). Estimation of property loss and business interruption loss caused by storm surge inundation due to climate change: a case of Typhoon Vera revisit. *Nat Hazards*, *4*(7), 43-75.

Johnson, B. (1990). Toward a multidimensional model of entrepreneurship: The case of achievement and the entrepreneur. *Entrepreneurship: Theory & Practice*, *14*(2), 39-54.

Joshi, M. P. (2013). What Role EO Dimensions Play when a Country is Introducing Economic Liberalization? *Academy of Management Proceedings*, *2013*(1), 14187-14187.

Kaluszka, M., & Krzeszowiec, M. (2012). Pricing insurance contracts under Cumulative Prospect Theory. *Insurance: Mathematics and Economics*, *50*(1), 159-166.

Kamitewoko, E (2013). Determinants of Entrepreneurship Success: An Examination of Chinese-Owned Businesses in Congo Brazzaville. *Chinese Studies Scientific Research*, *2*(3), 113-120.

Karani, N. N., & Isaboke, C. (2014). *Challenges facing the uptake of M-insurance loyalty-based life insurance schemes: A case study of the yuCover micro-insurance scheme in Kenya*. Unpublished MBA Thesis, Nairobi: University of Nairobi.

Kazianga, H., & Udry, C. (2006). Consumption smoothing? Livestock, insurance and drought in rural Burkina Faso. *Journal of Development Economics*, *79*(2), 413-446.

Kazimoto, P. (2015). Assessment of Factors Affecting Small Businesses' performance in Tanzania, *Research Conference*. Arusha: University of Arusha.

Kebede, B. and Atomsa, T. (2015). *The Challenges of Micro and Small Enterprises and Business Development Service*, Unpublished MBA Thesis, Addis Ababa University.

Khan, N. A., & Kakabadse, N. (2014). Shaping the European Mindset: A Governance Design and Policy Innovation Agenda. *Rethinking the Future of Europe*, *4*(7), 42-76.

Khandwalla, P.N. (1977). *The design of organizations.* New York: Harcourt Brace Jovanovich.

Knight, F. (1921).*Risk, Uncertainty, and Profit*. Boston: Houghton-Mifflin.

Kothari, C.R. (2005). *Research Methodology: Methods and techniques*. New Delhi: New Age International Ltd Publishers

Kothari, V. B. (2010). Lack of Marketplace Competitive Excellence: Reactive Strategies and Approaches. *Executive Greed, 7*(1), 111-120.

Kraus, S. (2013). The role of entrepreneurial orientation in service firms: empirical evidence from Austria. *Service Industries Journal*, *33*(5), 427-444.

Kreiser, P.M., Marino, L.D., & Weaver, K.M. (2012). Assessing the relationship between entrepreneurial orientation, the external environment, and firm performance scale: A multi-country analysis. *In Frontiers of Entrepreneurship Research* (199–208). Wellesley, MA: Babson College.

Kreiser, P. M., & Davis, J. (2010). Entrepreneurial Orientation and Firm Performance: The Unique Impact of Innovativeness, Proactiveness, and Risk-taking. *Journal of Small Business & Entrepreneurship*, *23*(1), 39-51.

Kropp, F., &Zolin, R. (2005). Technological entrepreneurship and small business innovation research programs. *Academy of Marketing Sciences Review*, *62*(3), 381-399.

Kuckertz, A., Kollmann, T., & Krell, P. (2011). Opportunity Recognition and Opportunity Exploitation - Two Validated Measurement Scales. *SSRN Electronic Journal, 3*(6), 23-34.

Lachman, R. (1980). Toward Measurement of Entrepreneurial Tendencies. *Management International Review*, *20*(2), 108–116.

Laffont, J.J., & Matoussi, M.S. (1995). Moral Hazard, Financial Constraints and Sharecropping in El Oulja. *The Review of Economic Studies, 62*(3), 381-399

Lan, Q., & Wu, S. (2010). An empirical study of entrepreneurial orientation and degree of internationalization of small and medium-sized Chinese manufacturing enterprises. *Journal of Chinese Entrepreneurship, 2*(1), 53-75.

Lechner, C., & Gudmundsson, S., V. (2012). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, *1*(1), 1-25.

Lee, T., & W. Chu. (2011). Entrepreneurial orientation and competitive advantage: The mediation of resource value and rareness. *African Journal of Business Management, 5*(33), 12797-12809.

Lin, H., Turkier, Y., & Chang, K. (2015). Anticipating Competitive Tension: A Psychology-based Awareness-Motivation-Capability Perspective. *Academy of Management Proceedings, 2015*(1), 17230-17230.

Liu, W., & Hou, S. (2010). The awareness-motivation-capability approach to the cooperation relationships between franchisers and franchisees: The case of

laundry business franchise system. *2010 IEEE International Conference on Management of Innovation & Technology*, *3*(5), 56-67.

Lloyd's of London (2014), *Insurance in Developing Countries: Exploring the Opportunities in Microinsurance*. London: Lloyd's Micro-Insurance Centre.

Lo Prete, A. (2015). Labour Market Institutions and Household Consumption Insurance within OECD Countries. *The World Economy*, *5*(12), 561-594.

Loewe, M., & Zaccar, C. (2012). Microinsurance in Western Asia. *SSRN Electronic Journal*, *4*(6), 54-87.

Longenecker, J.G., Moore, C.W., & Petty, J.W. (2012). *Small Business Management: An Entrepreneurial Emphasis*, 13th ed. Mason, Ohio: South Western College Publishing an International Thomson Publishing Company.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, *21*(1), 135-172.

Ma, Y., Pope, N., & Xie, X. (2013). Contingent Commissions, Insurance Intermediaries, and Insurer Performance. *Risk Management and Insurance Review*, *17*(1), 61-81.

Madhoushi M., Sadati A., Delavari H., Mehdivand M., & Mihandost R. (2011). Entrepreneurial Orientation and Innovation Performance: The Mediating Role of Knowledge Management, *Asian Journal of Business Management*, *3*(4), 310-316.

Makau R. N. (2013). *Factors Affecting the Growth of Life Insurance Business in Nairobi Kenya.* Unpublished Masters Project. Nairobi: Kenya University.

Makove, S.M. (2011). *African Policy Approaches: Microinsurance in Kenya*. *Regulators' Workshop.* Zimbabwe: Victoria Falls.

Malešič, M., Prezelj, I., Juvan, J., Polič, M., & Uhan, S. (2015). Evacuation in the event of a disaster: Planned activity or improvisation? *International Journal of Disaster Risk Reduction, 12*(3), 102-111.

Mathur, S. (2010). Microinsurance-A powerful tool to empower the poor. Sri Sharada: *Institute of Management & Research, 6*(2), 45-67.

Matin, I. (2013). The very poor who participate in microfinance institutions and those who never have. *Small Enterprise Development, 16*(3), 51-57.

Matta, C. (2015). Interpretivism and Causal Explanations: A Case from Educational Research. *Philosophy of the Social Sciences, 45*(6), 543-567.

Matul, M., Dalal, A., De Bock, O., & Gelade, W. (2013). *Why People Do Not Buy Microinsurance and What Can We Do About It.* Microinsurance Paper no. 20. Geneva: ILO.

Matul, M., McCord, M. J., Phily, C., & Harms, J. (2010). *The Landscape of Microinsurance in Africa.* Working Paper No. 4. Geneva: *ILO.*

Maxwell, J. A. (2010). *Qualitative research design: An interactive approach*. 2nd Edition, Thousand Oaks, California: Sage Publications.

McClelland, D.C., & Winter, D.G. (1971). *Motivating economic achievement: Accelerating economic development through psychological training*. New York: Sage Publications,

McClelland, D.C. (1961). *The achieving society.* New York: Sage Publications,

McConnell, C. R., and Brue, S. L. (2008). *Macroeconomics*. New York: Sage Publications,

McCord, M.J., & Reinhard, D. (2013). *Landscaping Microinsurance in Africa and Latin America*. New York: Microinsurance Centre.

Meissner, J. (2012) *Promoting Microinsurance in Ghana: Microinsurance as a Means of Insurance Sector Development*, Accra, Ghana: National Insurance Commission (NIC).

Menezes, F. M., & Quiggin, J. (2012). More competitors or more competition? Market concentration and the intensity of competition. *Economics Letters*, *117*(3), 712-714.

Messersmith, J., G., & Wales, W., J. (2013) Entrepreneurial orientation and performance in young firms: the role of human resource management. *International Small Business Journal, 31*(2), 115-136.

Meyer, J. P., & Maltin, E. R. (2010). Employee commitment and well-being: A critical review, theoretical framework and research agenda. *Journal of Vocational Behavior*, *77*(2), 323-337.

Microinsurance Africa Summit (2013).Creating a Sustainable Insurance Industry for Low Income Earners. *Summit held from 14th – 16th August 2013, InterContinental Hotel, Nairobi, Kenya*

Midgley, J. (2012). Social protection and the elderly in the developing world: mutual aid, micro-insurance, and the state. *Journal of Comparative Social Welfare*, *28*(2), 153-163.

Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice*, *35*(5), 873-894.

Mitchell, R. K., Smith, J. B., Morse, E. A., Seawright, K. W., Peredo, A. M., & McKenzie, B. (2002). Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures. *Entrepreneurship: Theory and Practice*, *26*(4), 9-33.

Mitton, D.G. (1989). The complete entrepreneur. *Entrepreneurship Theory and Practice*, *13*(3), 9-19.

Mobaraki, M. H., Zali, M. R., Abdolvahab, S., & Moghimi, E. H. (2012). The Impact of Entrepreneurial Orientation on The Performance of Private Insurance Companies In Iran, Based on Lumpkin And Dess Model. *ISI Iranian Journals, 27*(3), 212-236.

Mohan B. G., & Ganesh, L. (2012). An integrated conceptual model of relationships among different types of innovations. *Innovation in Technology Management. The Key to Global Leadership. PICMET '97*.

Mohar, Y.M.S., Singh, J., & Kishore, K. (2007). Relationship Between psychological characteristics and entrepreneurial inclination: A Case Study of Students at University Tun Abdul Razak. *Journal of Asia Entrepreneurship and Sustainability*, *8*(5), 561-587.

Montgomery, D. B., Moore, M. C., & Urbany, J. E. (2013). Reasoning about competitive reactions: Evidence from executives. *Marketing Science*, *24*(1), 138-149.

Morelli, E., Onnis, G.A., Ammann, W.J., & Sutter, C. (2010). *Microinsurance: An Innovative Tool for Risk and Disaster Management.* Switzerland: Buchdruckerei Davos AG.

Mossin, J. (1968). Aspects of rational insurance purchasing. *The Journal of Political Economy*, *9*(13), 553-568.

Mugo, L. W., & Okibo, W. (2015). Factors Influencing Microinsurance Penetration among Middle and Low Income Earners in Kenya. *International Journal of Economics, Commerce and Management*, *3*(6), 787-801.

Munich Re Foundation. (2013). *The landscape of microinsurance in Africa 2012.* Munich Re Foundation.

Mwangi, M. M. A. & Ngugi, K. (2014). Influence of Entrepreneurial Orientation on Growth of Micro and Small Enterprises in Kerugoya, Kenya. *European Journal of Business Management*, *1*(11), 417-438.

Myers, M. D. (2009). *Qualitative research in business and management*. London: Sage Publications.

Nadkarni, S., Pan, L., & Xiao, S. (2014). The impact of temporal framing of competitive actions on rivals' responses. *Academy of Management Proceedings*, *2014*(1), 17341-17341.

Naghi, L. E. (2014). To Risk or Not Risk in Life Insurance - Traditional Versus Unit linked Products in Romania. *SGEM 2014 Scientific Subconference on Political Sciences, Law, Finance, Economics and Tourism*.

Nairobi City County, (2014). *Business list. Business licensing department*. Nairobi: Nairobi City Council.

Nasr, S. & Abdelkader, L. (2013). *World Bank, Middle East and North Africa Knowledge and Learning*. Quick Notes Series, 90. Washington DC: World Bank

Ndede, F.W.S. (2015). *Determinants of acquisition of financial services by micro and small enterprises in Langata sub-county of Nairobi County, Kenya. Journal of entrepreneurship, 7*(23), 23-54.

Nenzhelele, T.E. (2012) *A Study of the Awareness and Practice of Competitive Intelligence in SMEs in the City of Tshwane Metropolitan Municipality*. Master of Commerce in Business Management

Ngugi, J.K. Gakure, R.W., & Kahiri, J. (2013). Influence of Intellectual Capital on the Growth of Small and Medium Enterprises in Kenya. *International Journal of Arts and Entrepreneurship*, *90*(7), 567-403.

Njue, E., Lilian, K., & Mathenge, M. (2012). *Determinants of Crop Insurance Uptake Decisions in the Face of Climate Change: Evidence from Smallholders in Kenya.* Conference proceedings of Egerton University.

Njuguna, A.G., & Arunga, A. (2013). Risk Management Practices: A Survey of Micro-Insurance Service Providers in Kenya. *International Journal of Financial Research*, *4*(1), 89-109.

North, D.C. (1990). *Institutions, Institutional Change, and Economic Performance*. New York: Norton.

Odemba, J. (2013). *Factors affecting uptake of life insurance in Kenya*. Unpublished PhD dissertation, Nairobi: University of Nairobi.

Ogodo, O. (2010). Kenyan Farmers Get Micro-insurance. *Science and Development Network News, 5*(9), 1-11.

Olaosebikan, O., & Adams, M. (2014). Prospects for micro-insurance in promoting micro-credit in sub-Sahara Africa. *Qualitative Research in Financial Markets*, *6*(3), 232-257.

Oslo Manual. (2005). *Paris and Luxembourg:* Geneva: *OECD/Eurostat*.

Osteryoung, J. S., & Newman, D. (1993). What is a small business? *The Journal of Entrepreneurial Finance*, *2*(3), 219.

Pain, D. (2011). Product innovation in non-life insurance markets: Where little "i" meets big "I". *Sigma* No. 4. Zurich: Swiss Reinsurance Company.

Pant, A. (2012). Livestock Risk and Insurance. *Financial Engineering for Low-Income Households*, *9*(2), 137-139.

Parrino, R., Poteshman, A., & Weisbach, M. (2012). Measuring Investment Distortions when Risk-Averse Managers Decide Whether to Undertake Risky Projects. *77*(2), 153-182.

Petrocelli, J.V. (2011). Validity of Research Conclusions. *Encyclopedia of Research Design*, *6*(1), 3-9.

Pfeffer, J. (2013). Evidence-Based Management for Entrepreneurial Environments: Faster and Better Decisions with Less Risk. *SSRN Electronic Journal*, *2*(1), 56-87.

Phillips, N., & Tracey, P. (2012). Opportunity recognition, entrepreneurial capabilities and bricolage: connecting institutional theory and entrepreneurship in strategic organization. *Strategic Organization*, *5*(3), 313-320.

Porter, M.E. (2008). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: The Free Press.

Portillo, M., & Poldma, T. (2010). Janus Perspective: Looking Forward, Looking Back. *Journal of Interior Design*, *35*(3), 5-8.

Pratono, A., T. Wee, D. Syahchari, A. TyazNugraha, N.Mat, & HadiatiFitri. (2013). The Direct Effect of Entrepreneurial Orientation and Innovation Success on Firm Performance. *American Journal of Economics 3*(1), 1-6.

Pratt, J. W. (1964). Risk aversion in the small and in the large. *Econometrica: Journal of the Econometric Society*, *1*(2), 122-136.

Procheş, S. (2015). Descriptive statistics in research and teaching: are we losing the middle ground? *Quality & Quantity*, *3*(5), 87-101.

Purdie, D.M., Dunne, M.P., Boyle, F.M., Cook, M.D., & Najman, J.M. (2002). Health and demographic characteristics of respondents in an Australian national sexuality survey: comparison with population norms. *Journal of Epidemiology & Community Health*, *56*(10), 748-753.

Querbes, A., & Frenken, K. (2016). Evolving user needs and late-mover advantage. *Strategic Organization*, *2*(1), 1-17.

Rajan, R. G., & Zingales, L. (2010). Financial Dependence and Growth, *American Economic Review*, *88*(5), 559-586.

Ramsay, C.M., & Arcila, L.D. (2013). Pricing Funeral (Burial) Insurance in a Microinsurance World with Emphasis on Africa. *North American Actuarial Journal*, *17*(1), 63-81.

Re, S. (2011). World insurance in 2010, premiums back to growth-capital increases. *Sigma*, *2*(5), 103-112.

Robson, C. (2011). *Real World Research*, (2nd ed.). Oxford: Blackwell Publishing.

Rodolfo L.P.M. (2014) *Innovations in Microinsurance: Evidence from the Philippines*. Brazil: Fundação Getúlio Vargas Escola De Administração De Empresas De São Paulo.

Rodrik, D., & Yoon, C. (2013). *Strategic Trade Policy When Domestic Firms Compete Against Vertically Integrated Rivals*. Oxford, Blackwell Publishing

RoK. (2012). *Micro and Small Enterprises Act No. 55*. Nairobi: Republic of Kenya.

RoK. (2014). *Economic Survey*. Nairobi: Government Printers.

Rosanas, J. M. (2013). Decisions within Organizations. *Decision-Making in an Organizational Context*, *22*(4), 112-137.

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, *26*(4), 441-457.

Ross, K.N. (2013). *Quantitative research methods in educational planning: Sample design for educational survey research*. UNESCO International Institute for Educational Planning. Module.

Ross, S. (2014). Risk Management and Insurance Industry Perspective on Cosmic Hazards. *Handbook of Cosmic Hazards and Planetary Defense*, *71*(4), 1-18.

Roth, J., McCord, M.J., & Liber, D. (2007). *The Landscape of Microinsurance in the World's 100 Poorest Countries*, Microinsurance Centre, Appleton, WI, USA.

Rothschild, M., & Stiglitz, J. (1976). *Equilibrium in competitive insurance markets: An essay on the economics of imperfect information* (355-375). Netherlands: Springer.

Runyan, R. C., Ge, B., Dong, B., & Swinney, J. L., (2011). Entrepreneurial Orientation in Cross-Cultural Research: Assessing Measurement Invariance in the Construct. *Entrepreneurship Theory and Practice*, *67*(3), 12-23.

Saalfrank, C. (2012). *Microinsurance and the interface between insurers and insured households: An analysis of the AfatVimo Partner-Agent Model of microinsurance in Gujarat, India*. Basel: Univ. of Basel.

Saastamoinen, A. (2013). Heteroscedasticity or production risk? A synthetic view. *Journal of Economic Surveys*, *29*(3), 459-478.

Sadoulet, L. (2014). Reputation as Insurance? Extending the Range of Financial Services for the Poor. *SSRN Electronic Journal*, *3*(4), 21-39.

Saeed, S., Yousafzai. S.Y, &Engelen, A. (2014). On Cultural and Macroeconomic Contingencies of the Entrepreneurial Orientation–Performance Relationship. *Entrepreneurship Theory and Practice*, *38*(2), 255-290.

Sapsed, J., Grantham, A., & DeFillippi, R. (2013). A bridge over troubled waters: Bridging organizations and entrepreneurial opportunities in emerging sectors. *Research Policy*, *36*(9), 1314-1334.

Saqware, A.N. (2012). *Micro Insurance in Tanzania: Demand Perspectives*. Unpublished PhD Thesis. Lancashire: University of Central Lancashire.

Sato, T., & Ikeda, N. (2015). Test-taker perception of what test items measure: a potential impact of face validity on student learning. *Language Testing in Asia*, *5*(1), 67-89.

Saunders, M. N., Lewis, P., &Thornhill, A. (2012). *Research Methods for Business Students.* New Delhi: Financial Times/ Prentice Hall.

Schillo, S. (2011). Entrepreneurial Orientation and Company Performance: Can the Academic Literature Guide Managers? *Technology Innovation Management Review, 1*(2), 99-121.

Schumpeter, J. (1942). Creative destruction. *Capitalism, socialism and democracy*, *82*(5), 109-132.

Schumpeter, J. A. (2013). *Capitalism, socialism and democracy*. London: Routledge.

Schumpeter, J.A. (1934). *The Theory of Economic Development*. Cambridge, Mass: Harvard University Press.

Schwartz, R. G., Teach, R. D., & Birch, N. J. (2005). A longitudinal study of entrepreneurial firms' opportunity recognition and product development management strategies: implications by firm type. *International Journal of Entrepreneurial Behavior & Research*, *11*(4), 315-329.

Sen, A. (2013). Does Increasing the Market Share of Smaller Firms Result in Lower Prices? Empirical Evidence from the Canadian Retail Gasoline Industry. *Review of Industrial Organization*, *26*(4), 371-389.

Shane, S., Kolvereid, L., & Westhead, P. (1991). An exploratory examination of the reasons leading to new firm formation across country and gender. *Journal of business venturing*, *6*(6), 431-446.

Shane, S.A. (1994). The Effect of National Culture on the Choice between Licensing and Direct Foreign Investment. *Strategic Management Journal*, *2*(15), 627-642.

Shaver, K. G., & Scott, L. R. (1991). Person, process, choice: The psychology of new venture creation. *Entrepreneurship theory and practice*, *16*(2), 23-45.

Shendy, R., Kaplan, Z., Mousley, P., World Bank, & Public-Private Infrastructure Advisory Facility. (2011). *Toward better infrastructure: Conditions, constraints, and opportunities in financing public-private partnerships in select African countries*. Washington D.C: World Bank.

Shirokova G.V., & L.S. Sokolova. (2013). *Exploring the antecedents of entrepreneurial orientation in Russian SMEs: The role of institutional environment*. Working paper No. 1 Graduate School of Management, St. Petersburg State University.

Singapore Government, SRING Singapore, & Ministry of Trade and Industry. (2012). *Top Five Risk SMEs Should Address.* The Business Times. Singapore: Singapore Press Holdings Ltd.

Singleton, R. A., Straits, B. C., & Straits, M. M. (2010). *Approaches to social research*. New York: Oxford University Press.

Sirojudin, & Midgley, J. (2012). Microinsurance and Social Protection: The Social Welfare Insurance Program for Informal Sector Workers in Indonesia. *Journal of Policy Practice*, *11*(1-2), 121-136.

Sitkin, S. B., & Weingart, L. R. (1995). Determinants of risky decision-making behavior: A test of the mediating role of risk perceptions and propensity. *Academy of management Journal*, *38*(6), 1573-1592.

Stambaugh, J.E., Yu, A. and Dubinsky, A. J. (2011). Before the Attack: A Typology of Strategies for Competitive Aggressiveness. *Journal of Management Policy and Practice*, *12*(1), 65-78.

Stambaugh, J., Lumpkin, G. T., Brigham, K., & Cogliser, C. (2013). What makes some firms more competitively aggressive than others? Evidence from the Banking Industry. *Academy of Management Proceedings*, *2009*(1), 1-6.

Stetz, P.E., Howell, R., Stewart, A., Blair, J.D., & Fottler, M.D. (2010). Multidimensionality of entrepreneurial firm-level processes: Do the dimensions covary? In R.D. Reynolds, E. Autio, C.G. Brush, W.D. Bygrave, S. Manigart, H.J. Sapienza & D.L. Sexton (Eds.), *Frontiers of entrepreneurship research* (459–469). Wellesley, MA: Babson College.

Stock, R. M., & Zacharias, N. A. (2010).Patterns and performance outcomes of innovation orientation. *Journal of the Academy of Marketing Science*, *39*(6), 870-888.

Stuetzer, M. (2014). The creative environment as stimulator for entrepreneurial opportunities. *Handbook of Research on Entrepreneurship and Creativity*, *8*(4), 209-249.

Sullivan, G. M. (2011). A primer on the validity of assessment instruments. *Journal of graduate medical education*, *3*(2), 119-120.

Swailes, S. (2004). Commitment to change: Profiles of commitment and in-role performance. *Personnel Review*, *33*(2), 187-204.

Szpiro, G. G. (1986). Measuring risk aversion: an alternative approach. *The Review of Economics and Statistics*, *9*(4), 156-159.

United Nation Industrial Development Organization. (2014). *UNIDO Activities in Egypt Report.* Egypt: UNIDO.

Vasquez, J. A. (2011). The role of paradigms in scientific inquiry: a conceptual framework and a set of principles for paradigm evaluation. *From Classical Realism to Neotraditionalism*, *98*(4), 19-31.

Vega, P.G., &Rojas, P. G. (2011). Knowledge, Perception, and Application of Strategic Marketing in MSMEs (Micro, Small, and Medium Enterprises) in Bogota. *Journal of Marketing Development and Competitiveness, 5*(4), 119-130.

Venkateswarlu, P. & Ravindra, P.S. (2012). Economic Problems in Micro, Small and Medium Enterprises (MSMEs) in India. *Advances in Management, case study, 5*(9), 46-86.

Wales, W., Monsen, E., & McKelvie, A. (2011). The Organizational Pervasiveness of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice, 35*(5), 895– 923.

Wang, H., & Chen, W. (2010). Is firm-specific innovation associated with greater value appropriation? The roles of environmental dynamism and technological diversity. *Research Policy, 39*(1), 141-154.

Wellalage, H. N., & Locke, S. (2015). Informality and Credit Constraints: Evidence from Sub-Saharan African MSEs. *SSRN Electronic Journal, 3*(5), 85– 92.

Williams, W. (2010). A Powerful Voice for Low-Income People: The Impact of ACORN. *Analyses of Social Issues and Public Policy, 10*(1), 355-358.

Wipf, J., & D. Garand. (2010). *Performance indicators for microinsurance: A handbook for microinsurance practitioners*, (2nd ed.). Luxembourg: ADA.

Wirtz, J., & Tang, C. (2016). Uber: Competing as Market Leader in the US versus Being a Distant Second in China. *People, Technology, Strategy, 5*(5), 626-632.

World Bank. (2011). *Poverty and Inequality Analysis*. Washington DC: World Bank.

World Bank. (2012). *Middle East and North Africa Region: Micro, Small and Medium Enterprise Technical Assistance Facility*. Washington DC: World Bank.

Yamane, T. (1967). *Statistics: An Introductory Analysis, (2nd Ed)*. New. York: Harper and Row.

APPENDICES

Appendix I: Introduction Letter

Muthoga Ngera

P.O. Box 53646 -00200,

Nairobi, Kenya.

Date: ……

Dear Sir / Madam

RE: DATA COLLECTION BY MUTHOGA NGERA

I am a Doctoral candidate at the Jomo Kenyatta University of Agriculture and Technology (JKUAT) conducting a study on uptake of micro insurance in Kenya. The purpose of the study is to establish the relationship between entrepreneurial orientation and microinsurance uptake by micro and small enterprises in Kenya. You have been identified as a potential respondent to this survey. Please respond to all questions, to your best knowledge. Your responses will be COMPLETELY CONFIDENTIAL. In case of any queries or comments about this survey, kindly contact me through the address above.

Thank you for your support and cooperation.

Yours Faithfully,

Muthoga Ngera

Cell Phone: 0722 527 874; **Email:** muthogangera@gmail.com

Appendix II: Questionnaire

INFLUENCE OF ENTREPRENEURIAL ORIENTAION ON MICRO INSURANCE UPTAKE BY MICRO AND SMALL ENTERPRISES IN KENYA

Instructions

Please read each question carefully and answer all questions by circling/ticking the appropriate answer.

SECTION A: PROFILE OF RESPONDENT

1. Kindly indicate your gender

Male	
Female	

2. In which of the following age groups do you fall into?

Below 20 years		20-30	
31 – 40		41 - 50	
51-60		Above 60 years	

3. Please indicate your highest level of education.

Primary school		Secondary school	
Diploma		Bachelor's degree	
Master's degree		PHD	

4. Which of the following closely matches your job title / responsibility in this enterprise?

Owner		Chief Executive Office /CEO	
Director		General Manager/Section Head	
Partner		Supervisor	

5. In which department do you work in? If your department is not listed, please select 'Other' and specify the department.

Marketing/Sales		Finance	
Human Resources		IT	
Operation			

Other (specify)……

6. For how many years have you worked for this company/ business?

Less than one year		1-3	
4- 6		7- 9	
10 years and above			

SECTION B: PROFILE OF BUSINESS

7. For how many years has this business been in operation?

Less than one year		1-3	
4-6		7- 9	
10 years and above			

8. What is the nature of ownership of this business?

Private limited company	
Sole proprietorship	
Partnership	

Other (specify)……

9. Please choose the industry that best describes your business/enterprise.

Transport/ Logistics		Tele communication	
Manufacturing		Construction	
Hospitality		Service	
Real estate		Energy	
Agriculture		Finance	
Education		Trade	

Other (specify)…….

10. How many employees does your business have?

Less than 10		11– 20	
21- 30		31 – 40	
41-50		More than 50	

11. What is the annual turnover for your business? (In Kshs.)

Less than 500, 000		500,001 – 1,500, 000	
1,500, 001– 2,500, 000		2,500, 001– 3,500, 000	
3,500, 001– 4,500, 000		4,500, 001– 5,000, 000	
More than 5,000,000			

12. Please indicate by ticking if your company realized improved performance in the following areas.

Firm performance	**2011**		**2012**		**2013**		**2014**		**2015**	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
12.1. Market share										
12.2. Sales volume										
12.3. Profitability										

SECTION C: RISK TAKING

13. Please tick the correct answer for each of the statements below. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree

Risk Taking Behavior	**1**	**2**	**3**	**4**	**5**	**6**	**7**
My firm practices "wait and see" position to minimize risks							
We practice brave and open minded approach to achieve our goals							
We invest in high risk projects, unexplored technologies and take new products to new markets							

SECTION D: PROACTIVENESS

14. Please tick the correct answer for each of the statements below. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree

Proactiveness	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Our firm is a leader in development of new procedures, technologies and products or services							
Wegenerally initiate actions which competitors then respond to							
This firm has the will and foresight to seize new opportunities even if not related to preset line of operations							

SECTION E: INNOVATIVENESS

15. Please tick the correct answer for each of the statements below. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree

Innovativeness	**1**	**2**	**3**	**4**	**5**	**6**	**7**
This firm frequently introduces new products and services							
My firm encourages and rewards new idea from staff regardless of their position in the firm							
We emphasize on utilizing new technology							

SECTION F: COMPETITIVE AGGRESSIVENESS

16. Please tick the correct answer for each of the statements below. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree

Competitive Aggressiveness	**1**	**2**	**3**	**4**	**5**	**6**	**7**
My firm adopts a very competitive posture to undo the competitors in business							
We use a fast/aggressive approach to introduce new products in the market							
This firm has an ambitious market share goals and takes bold steps to achieve them							

SECTION G: REGULATORY FRAMEWORK

17. Please tick the correct answer for each of the statements below. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree

Regulatory Framework	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Capitalization requirements limits number of entities providing microinsurance							
The number of licensed providers hinders access to microinsurance products							
Microinsurance regulations are adequate in terms of safeguarding the interests of policy holders							

SECTION H: UPTAKE OF MICROINSURANCE

18. Are you aware of microinsurance?

Yes [ ] No [ ]

18.1 If yes to question 18, how did you learn of microinsurance?

Advertisements ☐ Internet ☐

Friend/business associates ☐

Sales agent ☐ Other (specify**)**……

19. Have you purchased any microinsurance policy in the last five years?

Yes [ ] No [ ]

If yes to question 19, proceed to question 20. If No skip to question number 23.

20. Please indicate by ticking the policy type purchased in each of the following years?

Microinsurance policy purchased	**2012**	**2013**	**2014**	**2015**	**2016**
Property					
Credit Life					
Fire					
Fraud					
Life					
Natural disasters					
Theft					
Health					
Funeral					
Other (specify**)**……					

21. Please indicate the annual amount (in Kshs) spent on premiums for each of the following microinsurance policy(s).

Microinsurance policy purchased	**2012**	**2013**	**2014**	**2015**	**2016**
Property					
Credit Life					
Fire					
Fraud					
Life					
Natural disasters					
Theft					
Health					
Funeral					
Other (specify**)**……					

22. Do you think you will renew the policy(s) that you have purchased?

Yes [ ] No [ ]

22.1 If No to question 22, please indicate why you will not renew the policy?

Reasons	
Poor services	
Product does not meet expectations	
Alternative products	
Affordability	
Other (specify**)**……	

SECTION I: RESPONDENTS WITH NO MICROINSURANCE POLICY

23. Please indicate by ticking what hinders you from buying microinsurance policy(s)?

Determinant	
Trust	
Liquidity constraints	
Access to other coping mechanisms	
Insurance awareness, knowledge and skills	
Personal characteristics	
Other (specify**)**……	

24. Please indicate by ticking the methods that your business uses to cope with risks?

Risk coping methods	**2012**	**2013**	**2014**	**2015**	**2016**
Borrowing					
Depleting savings					
Asset disposal					
Fund raising					
Government support					
Other (specify**)**……					

25. Any other comments?

Thank you very much

Appendix III: Micro-insurance penetration in Africa

Country	Number of lives covered	Penetration rate
South Africa	8,227,387	40.4%
Namibia	141,969	11.2%
Seychelles	4,000	9.9%
Kenya	1,102,317	8.1%
Tunisia	95,000	7.3%
Uganda	1,498,789	6.9%
Senegal	346,764	4.9%
Benin	170,081	2.7%
Zimbabwe	211,000	2.4%
Togo	81,757	1.9%
Cameroon	177,718	1.9%
Botswana	16,000	1.8%
Comoros	9,000	1.7%
Ethiopia	1,008,292	1.7%
Guinea	136,146	1.7%
Malawi	186,521	1.6%
Burkina Faso	140,403	1.3%
Mali	131,559	1.3%
Egypt	142,100	1.1%
Mauritania	12,681	0.9%
Tanzania	335,022	0.9%
Ghana	95,110	0.8%
Republic of the Congo	21,146	0.7%
Zambia	37,188	0.4%
Côte d'Ivoire	30,644	0.4%
Burundi	24,610	0.3%
Democratic Republic of the Congo	150,335	0.3%
Morocco	8,540	0.2%
Nigeria	106,992	0.1%
Niger	2,370	0.0%
Algeria	1,500	0.0%
Madagascar	2,000	0.0%

Source: Matul et al. (2010)