Entrepreneurial Orientation, Age of Owner and Small Business Performance in Johannesburg

Chikumbusko Mkondo Kaunda

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management.

Supervisor: Robert Venter

Johannesburg, 2012

ABSTRACT

The rate of population growth has been declining in most regions of the world though it remains high in some areas. The overall impact of this is that there is an increase in the proportion of people aged over 60 years old while the working population of those aged 25–59 has been growing at a slower pace. This scenario creates challenges for an economy that is still developing like South Africa's. Increasingly entrepreneurship is being seen as one of the ways in which the problems caused by high unemployment and its associated effects can be tackled while stimulating economic growth in an economy.

This study, completed by means of a convenience sample of 103 firms in Johannesburg, collected and analysed the data on small entrepreneurs and established an understanding of the link between entrepreneurial orientation and business performance, amongst younger and older entrepreneurs in South Africa.

The study found that more than other factors the proactivity of the entrepreneur influenced the entrepreneurial orientation (EO) relationship, while risk taking and innovation did not have a major effect on this relationship and subsequent performance of the business (BP). Other key finding of the research showed a suggestion of age having an inverse relationship with entrepreneurial orientation and business performance as well. The results of the dummy variable regression analysis exclude statistical significance testing.

This research is expected to add value to entrepreneurs, future researchers and policy makers in government by helping identify where to direct their focus in enhancing entrepreneurial development.

DECLARATION

I, Chikumbusko Mkondo Kaunda, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Chikumbusko Mkondo Kaunda

Signed at University of the Witwatersrand, Johannesburg

On the 07th day of December 2012

DEDICATION

I dedicate this work to Jonathan Benjamin Mayuyuka Kaunda.

ACKNOWLEDGEMENTS

I would like to thank God and my supervisor for their kind assistance with this work. All studies of this nature are only possible with the support and co-operation of those who take part. Thanks goes out to all those who gave their time to participate.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

The rate of population growth has been declining in most regions of the world though it remains high in some areas. The overall impact of this is that there is an increase in the proportion of people aged over 60 years old while the working population of those aged 25–59 has been growing at a slower pace (ILO 2011).

This potentially creates an economic gap because for any economy to be successful it requires a substantial proportion of the economy to be active and in many developing economies, small businesses have been shown to contribute substantially to job creation, economic growth and a more equitable distribution of income. The impact that age plays in the success of these small businesses is not very clear and there is little literature available.

The purpose of this research is to analyse critically the role an entrepreneurs age particularly younger and older entrepreneurs has on the notions of entrepreneurial orientation (EO) and business performance (BP) in a South African context. Once the role that age plays on entrepreneurial orientation and business performance are identified practical consideration for allocating resources more efficiently can be done for policy makers. The study aims to make recommendations based on research data analysed. The study could further contribute to general academic discourse on entrepreneurship in South Africa.

1.2 Context of the study

The Global Entrepreneurship Monitor Survey (2010) provides data on the extent and nature of entrepreneurial activity in South Africa. In 2010 South Africa was

ranked 27 out of 59 countries. In many developing economies, small businesses have been shown to contribute substantially to job creation, economic growth and a more equitable distribution of income. South Africa has had persistently low levels of entrepreneurial activity (TEA) relative to its peers. Furthermore, the International Labour Organization (2011) notes that worldwide, the rate of population growth is declining, though it remains high in some countries and regions. As a result the proportion of the population aged 60 years and over will rise in the more developed regions from 22 % in 2010 to 33 % in 2050, and in the less developed regions from 9 % to 20 %. Along with this aging population, 40 % of South Africans between the ages of 18-24 are not in formal education, nor employed nor disabled that they cannot work. This creates a growing future social and economic problem.

South Africa's low levels of entrepreneurial activity are the result of personal, as well as environmental factors. A better understanding of the business environment can encourage individuals to see entrepreneurship as a viable vocation.

1.3 Problem statement

1.3.1 Main problem

The impact the age of the entrepreneur has on, entrepreneurial orientation (EO) and business performance (BP) needs to be explored in South Africa.

In order to understand this relationship it is important to first understand the link between EO and BP. Once the link has been understood an investigation of the link of AGE and EO as well as the link of AGE and BP will be explored. Entrepreneurial Orientation has been established as a precursor of Business Performance in several studies (Covin and Slevin 1989, 1991; Lumpkin and Dess 1996, 2001).

1.3.2 Sub-problems

The first sub-problem seeks to understand the relationship between entrepreneurial orientation and business performance of firms in South Africa.

The second sub-problem seeks to understand how the age of an entrepreneur affects entrepreneurial orientation and therefore as an extension business performance of a firm. Entrepreneurs classified by age may be known as young entrepreneurs, older entrepreneurs, grey entrepreneurs and late stage entrepreneurs.

The third sub-problem seeks to understand how the age of an entrepreneur affects business performance of a firm.

1.4 Significance of the study

The International Labour Organization (2011) report shows that future economic growth will depend more heavily on the productivity of the entire workforce. GEM Reports (2009, 2010) for South African show that the prevalence of early stage entrepreneurial activity tends to be relatively low in the 18-24 age categories, it peaks in the 25-34 year old category and then declines with increase in age with the sharpest decrease after the age of 54.

It is important to find out how the participation of young entrepreneurs in the 18-24 category and older entrepreneurs 55-64 and above impact entrepreneurship. Levesque and Minniti (2006) carried out a study to find out the reason behind the high number of entrepreneurs in the 25-35 year old age category, observations included the limited information or studies available on the economic implications of age. There have been some studies such as that by Cressy and Storey (1995) that suggest that the survival rates of business by older entrepreneurs are higher than those by younger entrepreneurs, suggesting that these businesses perform better overall. Kautonen (2008) carried out a study that highlighted the fact that a number of firms were founded by individuals over the age of 50 years old and therefore should not be treated

as a marginal issue. Though the contribution was not as high as that for younger entrepreneurs the impact of economically active individuals was significant.

South Africa faces numerous economic, political and social challenges. A key challenge is that of massive and growing unemployment especially amongst the youth and women in particular. Entrepreneurship is considered an important mechanism for economic development through employment creation and its associated benefits. The GEM Report (2009) has shown that the low levels of early stage entrepreneurial activity (TEA) in South Africa are influenced by: A low level of overall education, especially in mathematics and science, social and entrepreneurial factors that do not encourage entrepreneurship as a career path of choice, lack of access to finance particularly in the micro-financing arena and difficult regulatory environment. According to the GEM Report (2010) South Africa's TEA rate of 8.9 % is a significant improvement on the 2009 TEA rate of 5.9 %. This improvement is still below the average for all efficiency-driven economies (11.7 %) as well as significantly below the average for all middle to low-income countries (15.6 %).

Entrepreneurs have stimulated economic performance by introducing innovations, creating change, and stimulating competition. They seek opportunity to create both private wealth and social benefit by adopting new production techniques, reallocating resources to new opportunities, diversifying output, and penetrating new markets (Venkataraman 1997).

The OECD countries have also made entrepreneurship an explicit policy priority in recent years as well, and government policies now seek to affect the rate and type of entrepreneurship. Governments increasingly consider entrepreneurship and innovation to be cornerstones of a competitive national economy and in most countries entrepreneurship policies are in fact closely connected to innovation policies (OECD 2008).

The study aims to potentially add to entrepreneurship literature concerning South Africa by building on the work of other researchers such as (Covin and

Slevin 1989, 1991; Lumpkin and Dess 1996, 2001) by demonstrating a link between the components of entrepreneurship and performance. The study fills a gap in that the majority of research on entrepreneurship is heavily biased towards the North American market (Aldrich 2000).

It will also be important to see if the results of the study are culture bound to South Africa. This research is expected to add value to entrepreneurs, future researchers and policy makers, through this research the government can identify where to direct their focus in policy making for entrepreneurial development.

1.5 Delimitations of the study

There are a number of boundaries that will determine the final outcome of the study.

(a) A self-administered questionnaire survey will be carried out as it is the most cost effective method available to the researcher. Were time and cost not major constraints in this research, additional insights from in-depth face to face interviews with a large number of entrepreneurs would also provide additional insights that empirical data alone cannot provide.

(b) Area of focus for the study is Johannesburg due for the need to readily access the population and the constraints of time and resources.

(c) Budget limitations of researcher may limit the ability to gather richer set of data and more intricate levels of data analysis as well as sampling methods used.

(d) The study must be completed in a limited period of time.

1.6 Definition of terms

Entrepreneurship is an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes and raw materials, through organizing efforts that previously had not existed (Shane 2003).

Age is length of time a person or thing has existed (Collins Dictionary 2010).

Entrepreneur Orientation according to Lumpkin and Dess (2001) captures a crucial aspect of the way the enterprise is organized that enhances relationship between the ways in which enterprise combine and transform tangible resources and effectiveness. The entrepreneurial orientation has been found to be a key determinant of firm performance no matter the approach to measurement, regardless using the managerial perceptions of firm level variable to explain process firm's behaviours indicated by the number of specific actions, or resources allocations to understand content. Covin and Slevin (1989) describe it as reflecting an enterprise's proclivity to engage in innovative, proactive, risk-taking strategic activities.

Business Performance In the study of entrepreneurship there have been a number of differing definitions used to describe entrepreneurship performance, these definitions are varied and describe different indicators. The Organisation for Economic Co-Operation and Development (OECD) which is a grouping of 30 economies that work together to address economic, social and environmental challenges of globalisation have tried to come up with a way to build internationally comparable statistics on entrepreneurship and its determinants. This has been done through their Entrepreneurship Indicators Programme (EIP). The OECD (2008) indicators on performance are:

- Birth rates of employer firms, death rates of employer firms,
- Survival rates of employer firms over a year,
- Share of 1 year old firms in population,
- Importance of high growth firms with regards to employment

- Importance of high growth firms with regards to turnover
- Importance of gazelle firms with regards to employment
- Importance of gazelle firms with regards to turnover

The GEM Report on entrepreneurship provides a good indicator of the first three indicators on entrepreneurship birth rates of employer firms, death rates of employer firms, survival rates of employer firms over a year, share of 1 year old firms in population. Issues of turnover and employment rate are also important considerations as well. These factors will be considered in this research however no explicit distinction will be made between whether a firm is a high growth firm or a gazelle.

A high growth firm is measured by employment or by turnover and are all enterprises with average annualised growth in employees or in turnover greater than 20 % a year, over a three year period (OECD 2008).

Gazelles on the other hand have been employees for a period of up to five years with average annualised growth in employees or in turnover greater than 20 % a year, over a three year period and with ten or more employees at the beginning of the observation period (OECD 2008).

Economic activities are those that contribute to the production of goods and services in the country. There are two types of economic activities: (1) market production activities (work done for others and usually associated with pay or profit); and (2) non-market production activities which may include work done for the benefit of the household like subsistence farming (Quarterly Labour Force Survey, Quarter 3, 2011).

Employed persons are those aged 15–64 years who, during the reference week: did any work for at least one hour; or had a job or business, but were not at work during the time survey was carried out (Quarterly Labour Force Survey, Quarter 3, 2011).

Informal employment identifies persons who are in precarious employment situations, irrespective of whether or not the entity for which they work is in the formal or informal sector. Persons in informal employment therefore consist of all persons in the informal sector; employees in the formal sector; and persons working in private households who are not entitled to basic benefits such as pension or medical aid contributions from their employer, and who do not have a written contract of employment (QLFS 3:2011).

Informal sector: The informal sector has the following two components:

• Employees working in establishments that employ less than five employees, who do not deduct income tax from their salaries/wages; and

• Employers, own-account workers and persons helping unpaid in their household business who are not registered for either income tax or value-added tax (QLFS 3:2011).

Unemployed persons are those aged 15–64 years who: Were not employed in the reference week and; Actively looked for work or tried to start a business in the four weeks preceding the survey interview and; Were available for work, i.e. would have been able to start work or a business in the reference week or; Had not actively looked for work in the past four weeks, but had a job or business to start at a definite date in the future and were available (QLFS 3:2011).

Unemployment rate is the proportion of the labour force that is unemployed (QLFS 3:2011).

The **working-age population** comprises all persons aged 15–64 years (QLFS 3:2011).

1.7 Assumptions

a) The questionnaire will be easy to understand and will collect relevant data required for the study.

b) An appropriate and useable number of responses will be obtained. The researcher has no bias in carrying out the study and the study will be objective.

c) The respondents will have adequate material information on the workings of the organizations they represent.

1.8 Outline of proposed research report

The description of the remaining chapters will be outlined below.

Chapter Two, gives a theoretical overview on demographic changes, introduces the topic of age and entrepreneurship, entrepreneurial orientation and business performance, performance management and presents the research framework for the study.

Chapter Three, examines the research methodology it will include the research design and plan, population and sample, data collection instruments and the data analysis procedure, limitations of the study and the validity and reliability of the study.

Chapter Four, presents the results findings.

Chapter Five, discusses the results findings.

Chapter Six, is the concluding chapter that focuses on conclusions, recommendations and suggested areas of further study.

1.9 Conclusion

This first chapter has given the purpose of the study and gives the context for the undertaking of the study. The problem statement is introduced and the significance of the study is highlighted along with the delimitations and

assumptions that will affect the study. The structure of the dissertation is outlined.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The literature review provides an outline of the concepts of age, entrepreneurship and entrepreneurial orientation as well as business performance and provides an overview of the conceptual framework and the factors or themes related to the proposed model.

Entrepreneurship is an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes and raw materials, through organizing efforts that previously had not existed (Shane 2003).

On the other hand entrepreneur orientation (EO) according to Lumpkin and Dess (2001) captures a crucial aspect of the way the enterprise is organized that enhances relationship between the ways in which enterprise combine and transform tangible resources and effectiveness. The entrepreneurial orientation has been found to be a key determinant of firm performance no matter the approach to measurement, regardless using the managerial perceptions of firm level variable to explain process firm's behaviours indicated by the number of specific actions, or resources allocations to understand content.

Covin and Slevin (1989) describe it as reflecting an enterprise's proclivity to engage in innovative, proactive, risk-taking strategic activities.

Increasingly entrepreneurship is being seen as one of the ways in which the problems caused by high employment and its associated effects can be tackled while stimulating economic growth in an economy. The purpose of this research is to analyse critically the role an entrepreneurs age particularly younger and older entrepreneurs has on the notions of entrepreneurial orientation (EO) and business performance (BP).

In this chapter the perspective that the research will take will be slanted towards an African and a South African context as the research also aims to add on to the discourse on entrepreneurship on the continent.

2.2 Background discussion.

2.2.1 Demographics Changes

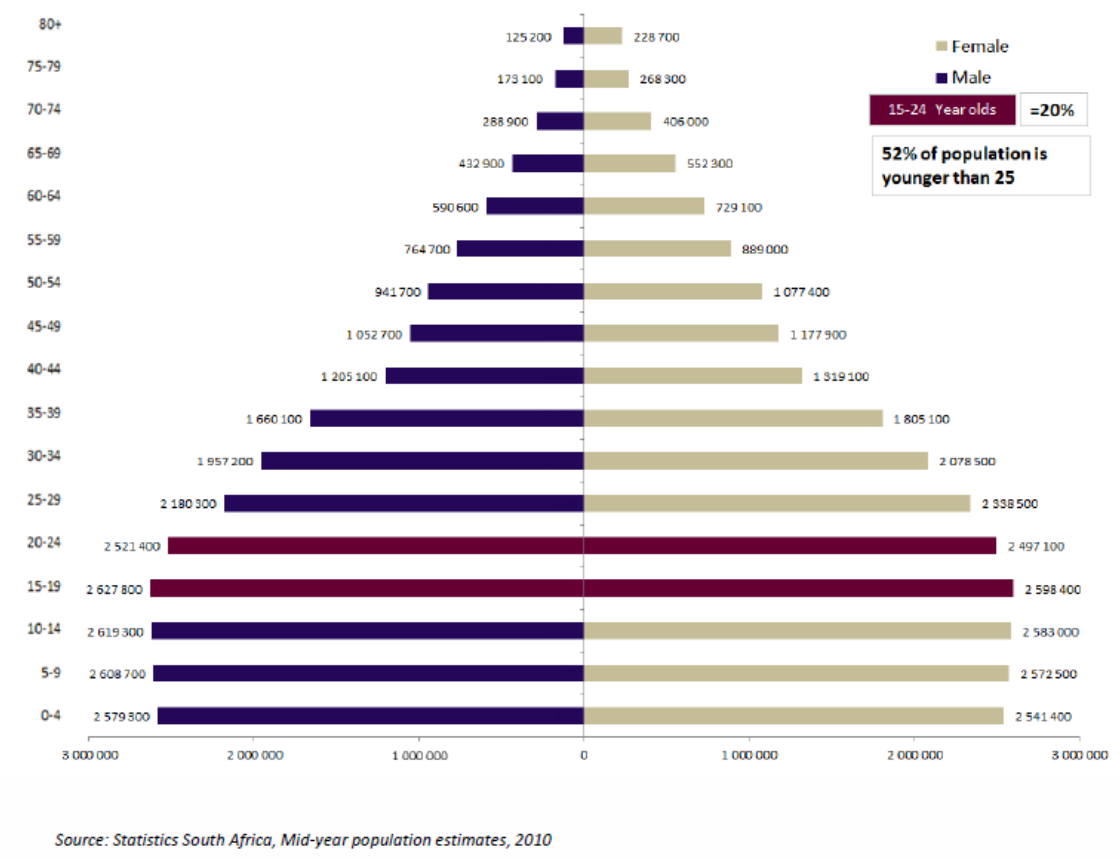
According to the International Labour Organization (2011) the rate of population growth is declining worldwide, though it remains high in some countries and regions. As a result the proportion of the population aged 60 years and over will rise in the more developed regions from 22 % in 2010 to 33 % in 2050, and in the less developed regions from 9 % to 20 %.

The population of working age (25–59 years) will decline in the more developed regions between 2010 and 2050 in absolute and proportional terms, falling from 49 % to 41 % of the total population.

In contrast, the working-age population in the less developed regions will grow slowly as a proportion of the whole, from 43 % in 2010 to 46 % in 2050.

One of the major implications of this change is that a country like South Africa's economic growth will need to depend even more heavily than today on the productivity of the entire workforce, through increased participation rates, especially among women and older workers.

It must be noted however that over 40 % of South Africans between the ages of 18-24 are not in formal education, nor employed nor disabled that they cannot work. This is a large loss of human capital that can potentially contribute to the economic wellbeing of the country (Smith 2011). This is problematic due to South Africa's large youth population.



Source: Statistics South Africa, Mid-year population estimates, 2010

Figure 1 Mid-year population estimates, 2010

2.2.2 Age and Entrepreneurship

Age categories can be defined in several ways depending on the purposes for which these age groups are utilised. The Youth Act of The Republic of South Africa Government Gazette Volume 523 Cape Town, 8 January, 2009 Number 31780 defines youth in the following manner. Act number 54, 2008 defines youth as a person between the ages of 14-35. This act supersedes the National Youth Development Agency Act, 2008 and the National Youth Commission Act, 1996, Act 19 of 1996 as well as the national Youth Commission amendment act, 2000, Act 19 of 2000.

There are generally 3 age groups that are frequently illustrated in articles of entrepreneurship: youth 18-34, non-youth 35-54 and seniors who are over 55.

Differing perspectives on age and entrepreneurship are illustrated below:

According to the GEM Reports (2009, 2010) in South African the prevalence of early stage entrepreneurial activity tends to be relatively low in the 18-24 age categories, it peaks in the 25-34 year old category and then declines with increase in age with the sharpest decrease after the age of 54.

While the Youth Development Network (YDN) paper on the export group marketing meeting that was held in Nairobi, Kenya described youth as the segment of the population that falls within the 15-35 age bracket. Most perspectives on entrepreneurship treat it as a preserve of the youth.

However, an article prepared for the Ewing Marion Kaufman Foundation by Stangler (2009) holds that contrary to popular held assumptions on the American economy the highest rate of Entrepreneurial Activity has belonged to the 55-64 year age group.

The 20-34 year bracket that is popularly profiled in popular culture has the lowest rate on entrepreneurship. From 1996-2007 Activity for 55-64 was higher than 20-34 category and trends may emerge from this as the Kaufmann Firm Survey shows that 2/3 of founders are from 35-54 age groups.

The average age of founders of technology companies has been 39 years. It is important to note that the observations were deemed to be a one-time occurrence. However, they underscore that fact that youth are not the only members of society who can make a positive contribution to an economy.

According to Kautonen (2008) a distinction was made when comparing different ages of entrepreneurs in Finland based on the following categories: third age where entrepreneurs aged 50 and above, while prime age entrepreneurs where those aged from 20-49. In the study it was observed that 16 % of firms that were established were done so by individuals over the age of 50 indicating that

the issue of older entrepreneurs is not a marginal issue and would therefore require further consideration.

In an Australian study Weber and Schaper (2004) note that traditional research on entrepreneurship has overlooked the significant role that elderly or grey entrepreneurs play, furthermore the focus on other categories tends to overlook an important reality that most entrepreneurs are older than is generally believed. Using data from the Australian Bureau of Statistics (2001) they noted that 31 % of small businesses in Australia were started by those over the age of 50. This data was also supported by the country's GEM Report (2002).

Singh and De Noble (2003) are of the view that older entrepreneurs can be classified into three categories based on their motivation to form a new enterprise:

- Constrained Entrepreneur, who has wanted to start a business but was unable to due to constraints faced before and therefore the idea lay dormant.

- Rational Entrepreneur, who sees self-employment as a natural career progression and a manner in which they can increase their wealth.

- Reluctant Entrepreneur, who is forced into self-employment due to a lack of acceptable alternatives and insufficient wealth to retire early

There are a number of differing terms and definitions that are used to describe older or more mature entrepreneurs. Weber and Schaper (2004) quotes (Seymour 2002) describing several terms used to identifying late stage entrepreneurship which includes the phrases "grey entrepreneurs," "senior entrepreneurs," "seniorpreneurs", "third age entrepreneurs," "elder entrepreneurs," and "second career entrepreneurs." It is important to realise that there is no consensus on the exact cut off age or a conclusive definition of who an older entrepreneur is.

Table 1 GEM 2010 Involvement in early-stage entrepreneurial activity, by age

Age category	2005	2006	2008	2009	2010
18-24 years	16%	22%	17%	17%	20%
25-34 years	30%	31%	27%	26%	36%
35-44 years	25%	24%	23%	28%	24%
45-54 years	14%	13%	24%	21%	14%
55-64 years	15%	10%	9%	8%	6%

The GEM Report utilizes the following age categories consistently 18-24, 25-34, 35-44, 45-54 and 55-64. These are the categories that will continue to be used in this research as the GEM consortium is the leading authority on entrepreneurship research at the moment along with the Kaufman Foundation.

Furthermore the age categories are aligned with the Quarterly Labour Force Survey (QLFS) which is a household-based sample survey conducted by Statistic South Africa (Stats SA). It collects data on the labour market activities of individuals aged 15 years and above who live in South Africa. The report only covers labour market activities of persons aged 15-64 years. This broad category of individuals is defined as employed persons and is composed of those aged 15-64 years who, during the reference week of the survey: did any work for at least one hour; or had a job or business, but were not at work temporarily.

The only difference with the GEM Report is the initially category which is 15-24 rather than 18-24. The age categories derived from the GEM Report will continue to be used in this report.

The GEM Report survey has seen South Africa participate since 2001; it therefore provides useful data on the extent of and nature of entrepreneurship in South Africa. The measure used as in the recent GEM 2010 report is Total Early-stage Entrepreneurial Activity (TEA) Index. This is a measure of the prevalence of business start-ups and new firms in those aged 18-64.
In 2010, South Africa ranked 27th out of 59 countries, with its TEA rate of 8.9 % being below the average (11.9 %) of all participating countries. In all the previous GEM surveys, South Africa's performance in terms of relative position

has consistently been below the median. 2010 is the first year that this trend has been reversed. South Africa's TEA rate of 8.9 % is a significant improvement on the 2009 TEA rate of 5.9 %; however, it is still below the average for all efficiency-driven economies (11.7 %) as well as significantly below the average for all middle- to low-income countries (15.6 %). It is important to note that the GEM Report (2005) notes that although the TEA rate provides a quantitative assessment of entrepreneurial activity, it does not provide much information about the quality of that entrepreneurship. An important factor to look at in this regard is the proportion of start-ups to new firms, as well as the prevalence of established businesses.

Start-up or nascent entrepreneurs are actively involved in setting up a business they will own or co-own, and have paid wages or salaries for less than three months. New firms have survived the liability of newness and have paid salaries and wages for more than three months but less than three and a half years. Established businesses have survived beyond three and a half years.

Other notable findings of the GEM Report (2010) where concerned with the profile of South African entrepreneurs by age. Those aged between 25-44 years old where the most active in the entrepreneurial sphere while the number of individuals involved in the 18-24 year old category was relatively low. After the age of 54 the sharpest decline in TEA is observed amongst South African entrepreneurs. Though the data can be seen to shadow the general trends of other GEM survey participants there are a number of repercussions and importance in understanding these figures from a South African perspective as entrepreneurship is seen as lynchpin in alleviating the plight of unemployment and poverty in South Africa.

In the QLFS Quarterly Labour Force Survey, Quarter 3, 2011 which covers a period from July to September, the inactivity rate by age for both sexes between 15–24 years was 74.7 % which was a 0.2 % change over the last quarter and 0.6 % year on year change thereby underscoring the dire employment situation for young South African youth. While the Quarterly Labour Force Survey,

Quarter 4, 2011 which covers a period from October to December, inactivity rate by age for both sexes between 15–24 years was 75.1 % representing a 0.4 % change over the last quarter and negative 0.5 % year on year change underscores the persistent low participation rates of youth.

The table that follows illustrates how few individuals from this group are unemployed and just how many are economically inactive relative to other age groups.

Table 2 Extract of Socio-demographic characteristics – South Africa QLFS Quarterly Labour Force Survey, Quarter 3, 2011

	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Qrt-to-qrt change	Year-on-year change	Qrt-to-qrt change	Year-on-year change
	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Thousand	Per cent	Per cent
Age group of the employed	**12 975**	**13 132**	**13 118**	**13 125**	**13 318**	**193**	**343**	**1,5**	**2,6**
15–24 yrs	1 295	1 271	1 304	1 318	1 297	-21	2	-1,6	0,2
25–34 yrs	4 365	4 379	4 333	4 314	4 417	103	52	2,4	1,2
35–44 yrs	3 707	3 806	3 847	3 800	3 847	47	140	1,2	3,8
45–54 yrs	2 501	2 545	2 519	2 529	2 596	67	95	2,6	3,8
55–64 yrs	1 106	1 130	1 116	1 164	1 162	-2	56	-0,2	5,1
Age group of the unemployed	**4 396**	**4 137**	**4 364**	**4 538**	**4 442**	**-96**	**46**	**-2,1**	**1,0**
15–24 yrs	1 364	1 240	1 289	1 309	1 319	10	-45	0,8	-3,3
25–34 yrs	1 791	1 738	1 868	1 933	1 851	-82	60	-4,2	3,4
35–44 yrs	801	758	780	861	857	-4	56	-0,5	7,0
45–54 yrs	354	324	356	364	341	-23	-13	-6,3	-3,7
55–64 yrs	87	76	71	72	75	3	-12	4,2	-13,8
Age group of the not economically active	**14 702**	**14 924**	**14 832**	**14 772**	**14 795**	**23**	**93**	**0,2**	**0,6**
15–24 yrs	7 596	7 762	7 698	7 682	7 711	29	115	0,4	1,5
25–34 yrs	2 415	2 487	2 437	2 425	2 439	14	24	0,6	1,0
35–44 yrs	1 504	1 494	1 477	1 490	1 493	3	-11	0,2	-0,7
45–54 yrs	1 397	1 387	1 386	1 372	1 331	-41	-66	-3,0	-4,7
55–64 yrs	1 790	1 795	1 834	1 803	1 821	18	31	1,0	1,7

The International Labour Organization (2011) report shows that future economic growth will depend more heavily than today on the productivity of the entire workforce which includes youth and older entrepreneurs as well. It is very important that an understanding of the youngest and oldest entrepreneurs be sought and not only the middle range of entrepreneurs as is commonly the case at the moment.

Levesque and Minniti (2006) created an economic based study to understand why the percentage of individuals attempting the creation of firms was highest amongst people aged 25-35; the model considers age, risk aversion and wealth as important determinants of an individual's choice to become entrepreneurial. Conclusions reached were that individuals' experience an age effect in that barring all things being equal, as individuals age the relative return to entrepreneurship is lessened. For each age grouping individuals are able to individually specify an allocation of time between work and leisure that

maximises those individuals expected utility. If individuals allocate time to starting a new firm they forego an instant income while expecting a stream of future returns.

Older individuals are more likely to allocate more time to waged labour and relatively less time to new firm creation due to the fact that the discount attached to every dollar of future income increases as the individual gets older. Essentially activities that require a time commitment before income is realised are penalized in comparison to those that provide immediate payoffs like a steady job. Supporting these assertions Tyrowicz and Nestorowicz (2010) in a Polish study found that the young were less likely to undertake the entrepreneurial risk and prefer waged employment even at the price of extended periods of unemployment in the event that there was a case of labour market contraction, similar to the period faced in South Africa after the 2008 world recession.

Previous studies have shown that older people are more capable of being entrepreneurs and running a business over their younger counterparts due to the accumulated financial, human and social capital over a life time career (Singh and DeNoble 2003; Webber and Scheper 2004). However, studies done by Curran and Blackburn (2001) show that older people are less likely to be engaged in the entrepreneurial sphere. Another study by Rotefoss and Kolvereid (2005) showed that competencies that are essential for entrepreneurship increase with age while intentions are decreased. There seems to be a clear distinction between ability and motivation amongst older people with regards to being entrepreneurial.

The GEM Report (2010) shows a worrying trend in that Involvement in early-stage entrepreneurial activity by older entrepreneurs particularly those in the 55-64 age category has sharply declined consistently between 2005 and 2010.

2.2.3 Entrepreneurial Orientation (EO) and Business Performance (BP)

(Miller 1983, Covin and Slevin 1989,1991) where some of the pioneers of the Entrepreneurial Orientation concept (EO) and its impact on a business, they identified risk taking, innovation and being proactive as important components to a successful business operation. Though the study was focused on larger, established firms the ideas and concepts may also be applicable to younger firms. The importance of understanding behaviour that is conducive to entrepreneurship is important so that future generations of South African entrepreneurs can be coached and stirred towards successfully managing their businesses and contributing to the nation's economic wellbeing.

Of importance to the researcher is whether certain behaviours that are important to entrepreneurs are specific or common to all entrepreneurs. According to Arbaugh, Cox and Camp (2009) who quoted a study carried out by (Kreiser, Marino and Weaver 2002) found that the measures of EO constructs put forward by Covin and Slevin (1989) can be generalized across differing countries. This particular study had a limited scope in that only 6 countries were considered in the study. It is therefore essential that more studies and research be carried out regarding EO on individual countries this will enhance the ability of more multidisciplinary studies to be carried out in the future which are in the vein of the GEM Report that is one of the leading authoritative research sources of entrepreneurship.

This is important as researchers such as Aldrich (2000) are concerned with the fact that the majority of research on entrepreneurship which is heavily biased towards the North American landscape tends to assume that the constructs they research are universal across cultures, countries and settings without proper testing to confirm whether this view or opinion is indeed true or not.

The research by Arbaugh et al (2009) which consisted of a sample of finalist worldwide from the 2000 Entrepreneur of the Year competition yielded a number of interesting findings, in that it was found that EO is globally

generalizable to developed countries, and it can possibly be used to explain behaviours in developing countries as well. In addition the study also revealed that individual characteristics of entrepreneurship and firm level characteristics may also be generalizable across borders. The study was able to also show that there exists significant relationship between some performance factors and not others in relation to EO. The researchers believe this lends weight to the argument that EO may be a moderator rather than a direct influence of firm level performance.

Some limitations were also noted however which are also relevant to this current study, though the study aim was on firm level behaviour which is based on responses of a single informant from each firm. This single informant may best be able to provide and asses the overall condition of the firm there is a risk that certain aspects may be overestimated or underestimated.

In another separate study carried out on the Nigerian Oil Sector and the relationship of EO and Export Marketing Performance the researchers Ezirim and Nwokah (2009) found that there was a weak influence by the firms entrepreneurial orientation and their growth in sales, profit and market share. Even export market knowledge, export risk and innovative behaviour which are the dimensions of the firms' entrepreneurial orientation of the firms studied revealed weak and positive influence on growth in sales, negative influence on their growth in sales. Export market knowledge and export risk showed weak and positive influence on growth in market share while the firms' while innovative behaviour indicated a negative influence on growth in market share.

The report by Ezirim and Nwokah (2009) concluded that weak firms' entrepreneurial orientation is pivotal to their low export marketing performance and practical considerations were noted that required core competencies in export market knowledge, willingness to take export risk and innovative behaviour to be improved in order to enhance the entrepreneurial orientation.

The report highlighted that the core fundamentals of business were lacking and therefore needed to be urgently rectified in order for the industry as a whole to

show any noticeable improvement. This is important to understand since it shows how the EO and BP constructs have had differing impacts in the developed and the developing world. For South Africa the lesson should be that though it is laudable to seek to improve an economy or sector greatly the basics must always be put in place before moving on to the next stage. This is akin to eating your vegetables first to ensure greater health.

An interesting large scale study was carried out by Dyduch (2008) in which he sought to measure the link between corporate entrepreneurship and performance within a business. The merits of this study was that it was carried out in Poland and not in North America like most literature on entrepreneurship, Poland can be considered a transition economy as for many years it operated a command economy. It can be argued that South Africa is a transition economy as well as it only gained independence in 1994 and it has an economy that in some instances resembles a developed nation and in others a developing nation.

The study by Dyduch (2008) attempts to reconcile several measures that link EO and BP into an integrated measure that can be used to reflect the firms' link with EO and BP best. These measures are Entrepreneurial Management by Stevenson and Jarillo (2001), Entrepreneurial Orientation Scale by Lumpkin and Dess (1996), Entrepreneurial Performance Index by Morris (1998) and The Corporate Entrepreneurship Activity Index (CEAI) by Morris and Kuratko (1990).

The differing scales where scientifically analysed in order to ensure that similar measurement criterion where not duplicated and where consistent and the findings of the study revealed that following a correlation analysis using the integrated measures the factors of pro-activeness, flexibility, resource orientation, strategy orientation and innovation where important factors that are highly correlated with financial performance suggesting that being ahead of threats, being able to predict changes, and looking out for opportunities has the highest translation to a firms results in a transition economy such as Poland's. Another large scale study was carried out in a transition economy, this time China in which EO and BP relationship was examined. This research by Chow

(2006) highlighted the growing importance of entrepreneurial firms in transitional economies like China by showing that EO had a significant effect on firm profitability. The researcher quotes the work of Malik (1997) who asserts that private entrepreneurship in China began to flourish in the late 1980s; this spirit led to the subsequent high growth in the economy and in part was responsible for the assimilation of people who had experienced mass layoffs from state owned enterprises (Peng 2001).

On the other hand several factors had a low and sometimes negative correlation with performance and these factors included risk taking, pressure on effectiveness, growth orientation, and reward philosophy. This is similar to results obtained in a Taiwanese study by Yang (2008) that looked into the way leadership styles affect EO at Small and Medium Enterprises (SMEs) and the subsequent effects on business performance. The study confirmed the results of Covin and Slevin (1989) who found that entrepreneurial orientation was positively related to performance. A comparison of the three dimensions of entrepreneurial orientation showed that high levels of innovation and pro-activeness may contribute to high business performance while risk taking is not a significant contributor to predicting business performance; this is in line with the work of Drucker (1985) who concluded that entrepreneurs are typically not risk takers.

The research was also able to ascertain that the differing measures and tools used to measure the link between EO and BP had a strong relationship. This is important as researchers in differing geographical areas are able to carry out research that can be comparable to a certain extent. The Dyduch (2008) study provides clear empirical evidence of EO measures that lead to improved business performance whilst also identifying EO factors that may hinder business performance as well. It should be noted that though the sample size was vast the results are from one transition economy and similar countries such as Latvia, Czech or Estonia were not included in the study.

The Yang (2008) study was quantitative in nature and sampled top level managers who were identified as CEOs, Owners, Founders, Managers,

Presidents or Heads of SMEs. They were targeted because they were considered the most informed about the businesses overall operational activities. The study is relevant as it provides a guide towards the outline of the research to be undertaken by the researcher in the quest to understand the relationship between EO and BP in South Africa.

Other research on the constructs of EO and BP has focused on the relationships that entrepreneurs have developed and how this affects a firm. A study carried out in the Netherlands by Stam and Elfring (2008) on entrepreneurial orientation and social capital by examining how the configuration of a founding team's intra- and extraindustry network ties shape the relationship between entrepreneurial orientation and new venture performance. Social capital was defined as the actual and potential resources available to the firm as a result of the network of relationships it is able to exploit. The study revealed that the configuration of intra- and extraindustry social capital can explain both negative and positive effects of a firm's entrepreneurial orientation. It was found that the fit of between entrepreneurs social capital resources and the unique resources needs associated with an entrepreneurial orientation were important.

The research demonstrated how differing social capital conduits shape the relationship between entrepreneurial behaviour and business performance. It clearly demonstrated the implications on performance of particular network configurations as a result of a firm's entrepreneurial orientation. Study shows that firm performance can be enhanced by stimulating entrepreneurial orientation and building social ties to other firms in the industry they operate in.

There are a number of studies that analyse the individual level behaviour such as Quince and Whitaker (2003) and firm level behaviour of a firm separately in order to explain the relationship of EO and BP or other relevant measures.

A study by Poon, Ainuddin and Junit (2006) from Malaysia took a slightly different approach in that a model was tested that used both individual level and firm level variables for explaining the performance of entrepreneurial firms.

For individual level variables three self-concept traits were selected as these have a theoretical relationship with firm performance. They are: achievement motive, internal locus of control and generalised self-efficacy. Firm level behavioural variables were measured using entrepreneurial orientation. This was due to the fact that such firms are willing to innovate, be proactive relative to marketplace opportunities, be aggressive towards competitors and take risks (Covin and Slevin, 1991; Lumpkin and Dess 1996). In entrepreneur led firms the behaviours of the firm and that of the entrepreneur are likely to be the same.

The Poon et al (2006) model examined relationships among the three self-concept traits, entrepreneurial orientation and the link to firm performance from a sample of 96 entrepreneurs.

The result obtained showed amongst the individual level variables, internal locus of control was positively related to firm performance, generalised self-efficacy had no direct influence on firm performance, it did however influence firm performance positively through its effect on entrepreneurial orientation and that self-attributed achievement motive was not significantly related to entrepreneurial orientation or firm performance.

The model had proposed that the construct of entrepreneurial orientation would have played a mediating role between the individual level variables and firm performance. This assertion was however not borne out by the conclusion of the research results.

The model was important in that it took a holistic view of the relationship of variable to firm performance as it considered individual as well as firm level variables as well. However this made the model rather complex as well as each measure or variable (achievement motive, internal locus of control, generalised self-efficacy, entrepreneurial orientation, and firm performance) has a particular instrument that has to be used in order to obtain responses. It would be interesting to find out if instruments were tested to ensure that they were not culturally bound.

In addition there were 3 direct major hypotheses to be tested and 3 indirect ones that needed to be tested as well. This is of some concern as well as the sample size included only 96 usable respondents a richer set of data would have perhaps provided more insightful information, the study is however a good start for future researches who are interested in more complex entrepreneurial relationships that impact a firms performance in markets other than developed nations.

The study did however substantiate previous finding (Covin and Slevin 1991; Lumpkin and Dess 1996; Chow 2006) that support the assertion that entrepreneurial orientation has a noticeable impact on the performance of entrepreneur led firms.

Entrepreneurial Orientation also plays an important impact on Corporate Entrepreneurship (CE) which has two primary aims: the creation and pursuit of new venture opportunities and strategic renewal (Guth and Ginsberg 1990). This is similar to what a small entrepreneurial firm would do but carried out on a larger more strategic scale for a larger corporate organization. Firms that would like to engage in successful corporate entrepreneurship need to have an entrepreneurial orientation. Dess and Lumpkin (2005) carried out an in depth review and study on the role this construct plays in stimulating effective corporate entrepreneurship.

Based on the works of Miller (1983) who argued that an entrepreneurial firm engages in product market innovation, may also seek to undertake ventures that may be risky and are essentially the first to come up with proactive innovations in advance of their competitors in a market. This was one of the first early works to propose the dimensions of Innovation, risk taking and proactiveness. Two further dimensions of entrepreneurial orientation were proposed in the works of (Lumpkin and Dess 1996). These Five Dimensions by Dess and Lumpkin (2005) which are innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy pervade the decision making styles and practices of a firm’s members.

Previous work by Lumpkin and Dess (2001) cautions that the factors often work together to enhance a firms entrepreneurial orientation. Firms that are only strong in a few aspects of EO can be very successful. This is in line with work by Stetz, Howell, Stewart, Blair and Fottler (2000) which found that the individual dimensions of EO were more robust predictors of firm growth than a summated one-dimensional EO construct. Of great importance to the relationship of EO and BP was a meta-analysis by Rauch, Wiklund, Lumpkin and Frese (2004a) that included a 42 samples from 39 studies and the overall correlation between EO and performance was moderately large across these studies. This study also observed that individual EO dimensions, type of performance criteria, business size, and industry type moderated the EO performance relationship. There was an earlier study that was carried out by Wiklund (1999) which also found a direct link between the EO and BP construct.

For example the relationship was found to be strongest in high tech industries because risk taking, innovative behaviour and proactive strategies are essential in coping with a dynamic environment. This provides a clear contrast to the oil industry in Nigeria in the study by Ezirim and Nwokah (2009) that showed that EO and Performance relationship was poor. This is in line with research carried out by (Miller and Friesen 1983, Covin and Slevin 1989) who found that the relationship between entrepreneurial posture and performance may be much less positive or even negative in uncompetitive environments. One of the explanations for this could be the assumption of this risk may be necessary for survival in hostile environments. In non-hostile environments firms are not typically forced to engage in uncertain, resource-consuming endeavours in order to maintain viability. Entrepreneurial posture may result in a sustainable competitive advantage in a benign environment as in a hostile environment, such a posture may not be essential for superior performance, and could possibly represent an unwarranted risk for smaller firms.

It is important to understand the dimensions of EO as put forward by (Miller 1983; Covin and Slevin 1989; Dess and Lumpkin 2005) as they are an important component of this current research.

2.2.3.1 Autonomy

It is important for an environment that encourages thinking to be encouraged. Companies that have an overall entrepreneurial mission use a top down approach to stimulate entrepreneurial activity. Most of the best ideas for firms come from the bottom up. The acceptance of these ideas is not always welcomed.

There are a number of ways that can be used to encourage autonomy within an organization. For example a work environment that is physically separate from headquarters and free of the normal job requirements and pressures can be very useful.

Reorganization of work units can be done to stimulate entrepreneurial endeavours; established firms with traditional structures often have to break out of such moulds in order to remain competitive. In these instances the use of autonomous work units and teams have been shown to improve organizational coordination and control as well as enhance the number of creative solutions through the sharing of members tacit knowledge (Pfefer 1998). Autonomy may have unintended consequences as well as teams may lack co-ordination and sustained support from upper management.

2.2.3.2 Innovativeness

According to Dess and Lumpkin (2005) innovativeness refers to a firm's efforts to find new opportunities and novel solutions. It involves creativity and experimentation that results in new products, new services, or improved technological processes. This requires firms to depart from existing practice. Inventions and new ideas need to be nurtured even when their benefits are unclear. This can lead to a firm achieving competitive advantages.

Innovation takes many different guises: Technological Innovativeness consist of research and engineering efforts aimed at developing new products and processes, Product Market Innovativeness includes market research, product design as well as innovations in advertising and promotion. Administrative

Innovativeness refers to novelty in management systems, control techniques, and organizational culture.

In spite of the great potential rewards for innovation it does carry great risk as not all efforts yield results and research and development and other innovations efforts are often the first to be cut back during an economic downturn.

2.2.3.3 Proactiveness

This refers to a firm's efforts to seize new opportunities. Such organizations are able to monitor trends, identify the future needs of clients, and anticipate changes in demand or emerging problems that can lead to new venture opportunities. Being able to identify changes must be followed up with willingness to act upon those insights.

This is an effective manner to create competitive advantages as it puts competitors in a position of having to respond to successful initiatives. According to Lieberman and Montgomery (1988) first mover advantage refers to the benefits gained by firms that are the first to enter new markets, establish brand identity, implement administrative techniques or adopt new operating technologies within an industry.

This first mover strategic position is not always successful as customers may not be keen to commit to a new way of doing things and some companies may rush ideas to market before they are ready.

Being proactive can take the following forms: Introducing new product or technological capabilities ahead of competitors and continuously seeking new product or service offerings. This needs to be carried out in conjunction with careful monitoring and scanning of the environment if this dimension is to be exploited as a competitive advantage in the market place.

2.2.3.4 Competitive Aggressiveness

This refers to a firm's efforts to outperform its industry rivals, companies with this disposition are willing to confront competitors in the market by carrying out aggressive behaviours. This may involve being assertive in leveraging the results of other entrepreneurial activities such as innovativeness and proactiveness. This is done in order to ensure the chances of a firm's survival and competitive position in an industry are not diminished.

This can primarily be done in two ways: The entering of markets with drastically lower prices, large firms are able to enter lucrative markets serviced by smaller firms as they are able to withstand a longer period of narrow margins in order to gain market share. Moreover, a business may also copy the business practices or techniques of successful entrepreneurs.

This competitive aggressive stance may not always yield desires results as competitors and customers may not view the firm's actions in an industry as being desirable or acceptable, for example a company may make pre-announcements of new products to either pre-empt rivals or scare off potential competitors, this behaviour may not be acceptable or ethical in some quarters.

2.2.3.5 Risk taking

Risk taking is a firm's willingness to tolerate uncertainty, it may involve a firms willingness to seize a venture opportunity even though it has no guarantee or way of knowing if the venture will be successful or not. There are three main categories of risk that a business will be expose to; business risk taking, financial risk taking and personal risk taking:

- Business risk taking involves venturing into the unknown without knowing the probability of success. This risk is inherent with entering in untested markets or committing a firm to an unproven technology.
- Financial risk taking on the other hand requires that a firm borrows heavily or commit to a large portion of its resources in order to grow. Risk

is used in this context to refer to the risk /return ratio prevalent in financial analysis.

- Personal risk taking involves the positions an executive assumes in favour of particular strategic decisions that may have an impact on the career of the individual.

Risk taking involves taking chances and it is not gambling as the methods used by companies to strengthen their competitive positions via risk taking includes researching and assessing risk factors to minimise uncertainty and using tried and tested true practices and techniques that have worked in other domains.

This supports the findings by Drucker (1985) who argued that successful entrepreneurs are typically not risk takers. Instead they take steps to minimise risks by carefully understanding them. Consequently they avoid focusing on risk and remain focused on opportunity.

Updated work on the link between EO and BP that was a meta-analysis by Rauch, Wiklund, Lumpkin and Frese (2004b) that included 53 samples from 51 studies and the overall correlation between EO and BP was moderately large across these studies and therefore a relevant construct to models that are currently being used. The study was carried out in light of the fact that a cumulative body of work on EO had been collected and review of existing knowledge was timely.

A meta-analysis serves as a guide for future studies into areas of particular importance, further more due to the fact that firms pursuing EO encounter risk (Drucker 1985; Dess and Lumpkin 2005) they must decide how to allocate scare resources, it is therefore essential to know the positive or negative effects of the EO and BP relationship and also the magnitude in order to justify using that orientation. An analysis also serves to confirm or repudiate whether the dimensions of EO are culturally bounded as the formulation of the EO model and original empirical tests were mainly carried out in a North American context in the studies done by (Miller 1983, Covin and Slevin 1989, Lumpkin and Dess 1996). A review of existing literature an identification of potential shortcomings

of prior research can be identified and recommendations for future studies can be put forward.

Rauch et al (2004b) provided great insight into the relationship moderator values play in models of EO and BP link. Prior research indicates that performance can be improved when key variables are correctly aligned Neman and Slevin (1993) in addition to this earlier work by Rosenberg (1968) asserts that introducing moderators into bivariate relationships helps reduce the potential for misleading inference and permits more precise and specific understanding of a relationship. The meta-analysis identified a number of existing variables that potentially moderate the EO-BP relationship, it also showed that there was little consensus on what constitutes a suitable moderator with literature showing a number of internal and external variable being included in research.

Results of the meta-analysis showed that correlation between EO and BP was moderately large across these studies; further observations showed national culture, business size, and industry type moderated the EO-BP relationship.

National culture as a moderator to the relationship between EO and BP is of similar magnitude in different cultural settings making a study in EO and BP in South Africa using dimensions of studies done by (Miller 1983, Covin and Slevin 1989, Lumpkin and Dess 1996) appropriate.

Business Size moderates the EO-BP relationship and the association was stronger in micro businesses than in small businesses, there was however no difference between micro and large businesses or between small and large businesses. No definite conclusions were reached regarding the application of size to future studies other than the fact that it might be beneficial to use size as a moderator rather than as control variable in future research.

Industry Type differences emerged showing that high tech firms had a stronger EO and BP relationship than non-high tech firms. This variable is also commonly used as a control variable rather than a moderating variable as well.

Earlier work by Lumpkin and Dess (1996) provides some much needed clarity on the concept of entrepreneurship orientation and its relationship with business performance, this earlier work sought to clarify the EO construct by proposing a contingency framework for investigating the relationship of EO and BP. The earlier dimensions of EO by (Miller 1983, Covin and Slevin 1989, 1991) where refined and Autonomy and Competitive Aggression where added in order to form 5 dimensions of EO. This work viewed EO as a multidimensional construct and explored alternative models for testing the EO relationship, these models where the moderating effects model, mediating effects model, independent effects model and the interactive effects model.

The multifaceted view that exists in entrepreneurship and lack of consensus on entrepreneurship theory makes it a difficult subject to explore. Lumpkin and Dess (1996) made a distinction between Entrepreneurship and Entrepreneurship Orientation.

New Entry explains what entrepreneurship consists of and EO describes how new entry is undertaken. EO deals with the key processes of how business entry is undertaken. New Entry can be undertaken by entering new or established markets with new or existing goods or services.

EO which emerged primarily from a strategic management perspective refers to processes, practices and decision making activities that lead to new entry. The key dimension that characterise EO is propensity to act autonomously, a willingness to innovate and take risks a tendency to be aggressive towards competitors while being proactive amidst the market opportunities encountered.

An important recognition was made in the fact that the 5 dimensions of EO could be present at the stages of Entrepreneurship and Entrepreneurial Orientation as well. The main argument by the researches was that the relationship between EO and BP is context specific and the dimensions of EO vary independently from one another in a given context.

The relationships were all viewed from a firm level perspective, which is an approach that will be taken in this research as well. Some of the reasoning

behind this is that new entry entrepreneurship is primarily a firm level phenomenon and this firm level of analysis was also applied to EO as it is consistent with classical economics which views the individual entrepreneurs as a firm, since a small business is an extension of the individual in charge. This outlook is consistent with much earlier work by Schumpeter (1942) who argued that entrepreneurship would be dominated by firms capable of diverting an increasing amount of resources towards innovation. Covin and Slevin (1991) used small corporations and Strategic Business Units (SBUs) to illustrate the concept of EO.

Lumpkin and Dess (1996) acknowledged the importance of entrepreneurship to the strategic management of firms that has also existed in prior literature to their research. They noted that earlier work had a normative bias towards the fact that in order for a new entry to have high performance firms must also possess a strong EO Covin and Slevin (1991), this is at odds with the findings of Zahra (1993) who asserts that there is little empirical evidence of this effect of entrepreneurship on a company's financial performance.

This led to an integrative framework by the researchers to explore this question.

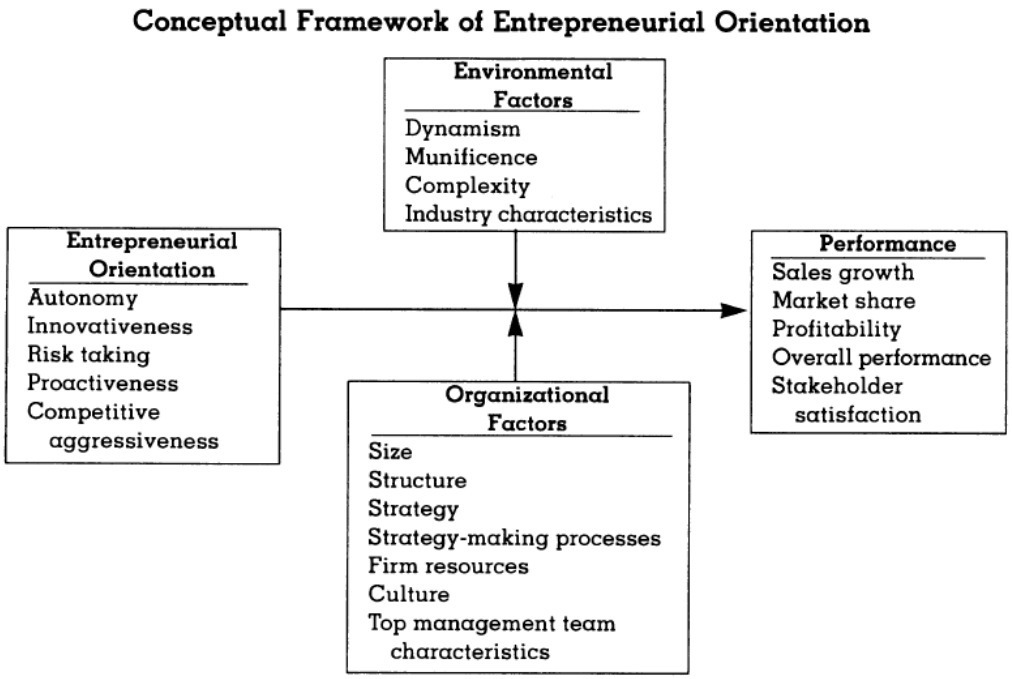


Figure 2 Lumpkin and Dess (1996) Conceptual Framework of Entrepreneurial Orientation

Contingency theory suggests that congruency or fit among key variable such as the environment, structure and strategy are critical in order to obtain optimal performance (Miller 1988). The framework suggested above represents some of the factors that may affect the relationship between EO and performance, it is some of these elements that where instrumental in developing the framework and boundaries for this current research on the EO-BP relationship of South African entrepreneurs.

As has been stated earlier there are a number of perspectives on entrepreneurship, it is logical to assume that several differing factors could therefore affect a relationship. For example Covin and Slevin (1991) discussed the link of strategy, structure and the environment while considering the EO dimensions of innovativeness, risk taking and proactiveness, Miller (1988) also tested contingency variables and individual dimensions and their association with performance.

The importance of the environment that a business exists in allows for a further understanding of how EO contributes to performance outcomes. It is not sufficient to only understand bivariate correlations, contingency relationships

need to be given due consideration as well. Lumpkin and Dess (1996) quote Rosenberg (1968:100) who suggested that the introduction of a third variable (AGE) into the analysis of a two-variable relationship such as (EO-BP) helped reduce the potential for misleading inferences and permits for a "more precise and specific understanding" of the original two variable relationship.

Contingency variable that are related to the entrepreneurial orientation and performance relationship are in two broad categories: organizational (internal) and environmental (external).

Table 3 Internal and External Contingency Variables

Organizational	Environmental
• Structure • Strategy • Strategy Making Process • Firm resources • Culture • Top management • Team characteristics	• Environment • Industry

2.2.4 Performance Measurement

Some interesting guidelines have been suggested by (Lumpkin and Dess 1996) regarding the measurement of performance in the EO-BP relationship. The researchers noted the importance of recognising the multidimensional nature of the performance construct itself due to the fact that during entrepreneurship activity or process a favourable outcome on one dimension may lead to a negative or unfavourable outcome on another. Long term investments may serve to enhance long term sales growth however this is always at the expense of short term profitability. Researchers should therefore be aware that reporting on a single dimension or a narrow range of the performance construct may result in misleading information being conveyed in research.

Therefore in this research the testing of the propositions on EO-BP will best be served by using multiple measures, such as sales growth, market share, and

profitability. Covin and Slevin (1991) state that a firm's economic performance is generally acknowledged to have two primary dimensions, growth and profitability. In addition, Kirchhoff (1977) proposed that an overall performance indicator would be useful in incorporating the firm's goals, objectives and aspiration levels, as well as other elements of broader stakeholder satisfaction. The subjective measure of performance was utilised as (Dess and Robinson 1984; Covin and Slevin 1989) discovered that small firms have unwillingness to provide the desired information; objective data is also not publicly available in all cases making it very difficult to ascertain the accuracy of any reported financial performance figures.

Dess and Robinson (1984) noted that regardless of the framework chosen to conceptualise Organizational Performance (OP), it is a complex and a multi-dimensional phenomenon. Operationalizing such a complex concept is difficult as even when focusing on economic dimensions of (OP) such as return on assets and growth in sales provides a challenge in obtaining accurate performance measures. Researchers assessed business units of multidisciplinary firms and privately held firms.

For multidisciplinary firms it was noted that firms with technically related portfolios had superior performance when related to the average of an entire sample. However, when the profitability of the industries within which the firms competed in was controlled, the firm's profitability dropped to average relative to a weighted average for the industries in which they competed. This is important as it highlights the need to compare performance fairly by attempting to neutralise any bias that may skew the results significantly.

For privately held firms problems were noted in obtaining accurate performance measures similar to multidisciplinary firms. The causes of this differed however, access to performance data on privately held firms is severely restricted and such information is not publicly available as owners' are sensitive to divulging this information. Furthermore, should access to the information be provided for privately held firms there is greater risk of error attributable to the varying accounting standards that have been adopted by various firms. The

organizational form such as sole proprietor, partnership or company may also cause artificial differences.

This study will continue to use these subjective measures due to unavailability and difficulty in obtaining objective data, time and budgetary constraints are also a key consideration and according to Dess and Robinson (1984) the other alternative would be to remove the consideration of performance from the research design if the measure cannot be objective. This extreme is not an option for this research and it is important to point out that subjective measures are not a substitute for objective measures neither are they interchangeable substitutes for objective measures.

In a study by Gupta and Govindarajan (1984) effectiveness data were collected on 12 performance dimensions: sales growth rate, market share, operating profits, and profit to sales ratio, cash flow from operations, return on investment, new product development, market development, R&D activities, cost reduction programs, personnel development, and political/public affairs. Covin and Slevin (1989) modified these dimensions to form 9 performance dimensions which are adopted for this current research.

Another interesting aspect of the research was the proposal of alternative contingency models to guide future researchers in research of the EO-BP relationship

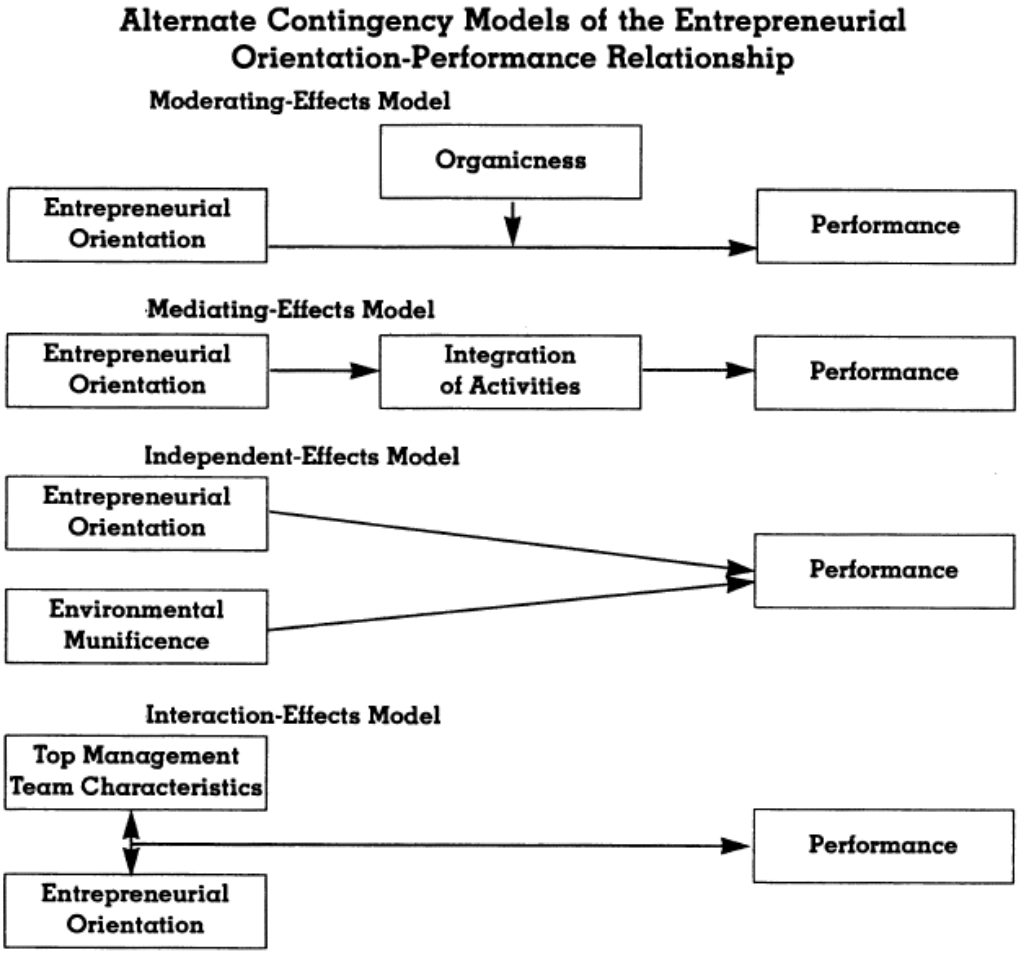


Figure 3 Alternate Contingency Models of EO-BP by Lumpkin and Dess (1996)

2.3 Linking Entrepreneurial Orientation and Business Performance

The first sub-problem seeks to understand the link between entrepreneurial orientation and business performance of firms in South Africa .The concept of entrepreneurial orientation has been unpacked along with its various determinants such as autonomy, innovativeness, proactiveness, competitive aggressiveness and risk taking. Several performance management dimensions that are required to measure the effective performance of firms were also reviewed in the literature. Notably Covin and Slevin's (1989) 9 performance dimensions. Entrepreneurial Orientation as put forward by (Miller 1983; Covin and Slevin 1989; Dess and Lumpkin 2005) has been found to be a key

determinant in most research literature in so far as it impacts the performance of a business. The following hypothesis is put forward:

2.3.1 Hypothesis 1

H_0 There is no relationship between Entrepreneurial Orientation (innovation, proactiveness, and risk taking) and Business Performance of SMEs in South Africa.

H_1 There is a relationship between Entrepreneurial Orientation (innovation, proactiveness, and risk taking) and Business Performance of SMEs in South Africa.

2.4 Age and Entrepreneurial Orientation

The second sub-problem seeks to understand how the age of an entrepreneur affects the entrepreneurial orientation of a firm. Entrepreneurs classified by age may be known as young entrepreneurs, older entrepreneurs, grey entrepreneurs, late stage entrepreneurs. Cressy and Storey (1995) and Kautonen (2008) carried out research that highlights the importance that older entrepreneurs played in the survival and start-up of new firms, these contributions were not marginal bolstering the idea that all ages of entrepreneurs need to be taken seriously along with younger ones as they have a noticeable impact and contribution in the business environment.

A study by Ruis and Scholman (2012) investigated the relationship between the age of the entrepreneur and objectives, competitive strategy made up of (Innovation, Marketing, and Price Discounting) as well as performance of the firm, while a study by Chow (2006) did find a marginal positive effect of age on the entrepreneurial orientation concept.

Entrepreneurship Orientation according Covin and Slevin (1989) reflects an enterprise's proclivity to engage in innovative, proactive, risk-taking strategic activities. It can be considered a strategy that a firm takes up. Understanding

what impact age has on a firm embarking on an entrepreneurial orientation strategy led to the following hypothesis development.

2.4.1 Importance of Age in Entrepreneurship

Of great interest particularly to this research is the moderating effect Models of EO-BP by Lumpkin and Dess (1996) in (Figure 3) which serves as a basis for guiding the research framework on the relevance between the variables of EO and BP with AGE. One of the propositions from this relationship can be stated as:

The relationship between EO and BP will be affected by AGE of entrepreneurs. Firms with younger entrepreneurs will have a higher performance than firms with older entrepreneurs. This relationship can also be expressed on the other end of the quantum by expressing the age as older versus younger as well.

An ILO (2006) study has shown that young people aged 18-34 were most likely to become active entrepreneurs, as one-third of all successful entrepreneurs emanate from this group. Regarding younger entrepreneurs a study by Morrow, Panday and Richter (2005) cautions that the conventional labour market is unable to absorb all those seeking work in the immediate future making the need for younger people to begin staring up their own businesses and creating opportunities through their own efforts crucial.

Cressy and Storey (1995) suggest that the survival rates of business by older entrepreneurs are higher than those by younger entrepreneurs while Kautonen (2008) carried out a study that highlighted the fact that a number of firms were founded by individuals over the age of 50 years old and therefore should not be treated as a marginal issue. Though the contribution was not as high as that for younger entrepreneurs the impact of economically active individuals was significant.

A more recent study by Ruis and Scholman (2012) to investigate the relationship between the age of the entrepreneur and objectives, strategy and performance of the firm was carried out in The Netherlands. Concerning the

objective of the firm, the study did not find a clear sign of an age effect. The competitive strategy of the firm showed a strong negative relation between age and the innovation strategy, indicating that older entrepreneurs are less innovative than younger entrepreneurs.

The results concerning performance showed a negative relation with age. As the age of the entrepreneur increases, the turnover appeared to remain stagnant. In addition, as age increases, entrepreneurs will not only have a decreasing probability of a growing turnover, but also an increasing probability of a decreasing turnover. This is similar to Levesque and Minniti (2006) conclusions reached that individuals' experience an age effect in that barring all things being equal, as individuals age the relative return to entrepreneurship is lessened.

Another study by Prihatin Dwi Riyanti (2004) showed that age significantly influences business achievement. Care must be taken to interpret age however; In this case age was not only chronological in nature, but entrepreneurial as well. The length of time someone manages his or her business. The longer someone is involved in a business, the richer his or her accumulated experiences are, thereby making him or her more capable of managing a business successfully.

It must be noted that the research by Lumpkin and Dess (1996) was important as it clarified the EO construct sufficiently for future researchers, it was also able to link and suggest that effective EO may be an example of good strategic management, further highlights where the suggestions that EO may be especially important for small new entrants that are struggling to develop a management team or organize resources efficiently, and developing strategy. This was similar to the observation made by Covin and Slevin (1989) in relation to small firms in hostile environments. During start up the researchers observed that EO may be the only thing that firm has going for it until survival issues can be satisfied. This is very important in the context of the challenges faced in South Africa as mentioned in the GEM Reports (2009, 2010).

Further evidence of the importance of entrepreneurship is a study that was carried in Indonesia a developing country like South Africa. SMEs in Indonesia contributed to 53.6 % of the country's GDP in 2007 and of the 6.3 % economic growth experienced during that time 2.4 % was attributed to the performance of SMEs (Kusumawhardhani, McCarthy and Perera 2009).

Therefore an understanding of EO and BP relationship can be desirable. For example future research may consider whether a higher EO in Indonesia over South Africa contributed to a higher performance of 5-6 % GDP over 56.6 % GDP, or what impact the population's age played in this factor as well.

Entrepreneurship can thus contribute effectively to alleviating some of the social economic problems that are highlighted in an OECD Economic Survey of South Africa.

South Africa has an extreme and persistent low employment problem, which interacts with other economic and social problems such as inadequate education, poor health outcomes and crime. While the unemployment rate fell steadily from 2002 through 2007, helped by the strong cyclical upswing, it never fell below 20% and by the first quarter of 2010 was back above 25%, near the levels of 2004. As in other countries, vulnerable groups are most affected by unemployment, and in South Africa the problem is most extreme for Black youth, for whom the unemployment rate exceeds 50% (OECD 2010).

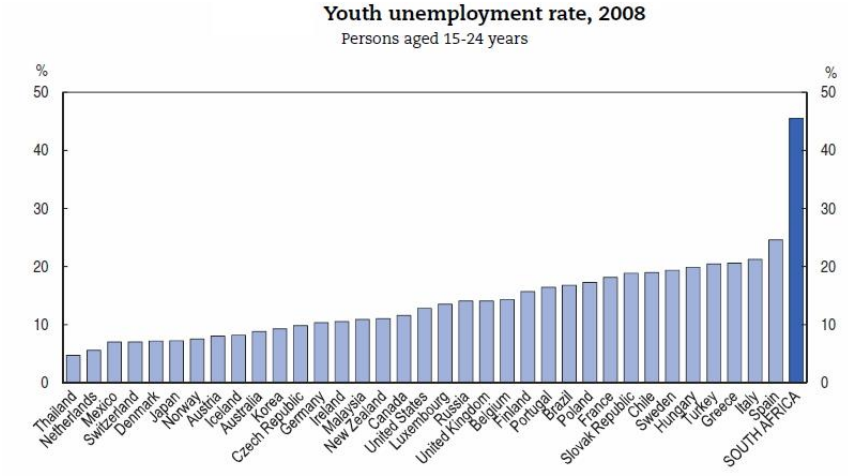


Figure 4 Youth Unemployment 2008

2.4.2 Hypothesis 2

H_0 Age has no impact on the Entrepreneurial Orientation (innovation, proactiveness, and risk taking) of SMEs in South Africa.

H_2 Age has an impact on the Entrepreneurial Orientation (innovation, proactiveness, and risk taking) of SMEs in South Africa.

2.5 Age and Business Performance

The third sub-problem seeks to understand how the age of an entrepreneur affects the business performance of a firm.

Ruis and Scholman (2012) investigation of the relationship between the age of the entrepreneur with the objectives, competitive strategy and performance of the firm did not find a clear sign of an age effect regarding objectives. However, the competitive strategy of the firm showed a strong negative relation between age and the innovation strategy, performance results showed a negative relation with age as well. As individuals aged the results and impacts on business performance were negligible or negative. The following hypothesis was developed to test the impact of age on business performance.

2.5.1 Hypothesis 3

H_0 Age has no impact on the Business Performance of SMEs in South Africa.

H_3 Age has an impact on the Business Performance of SMEs in South Africa.

2.6 Research Framework

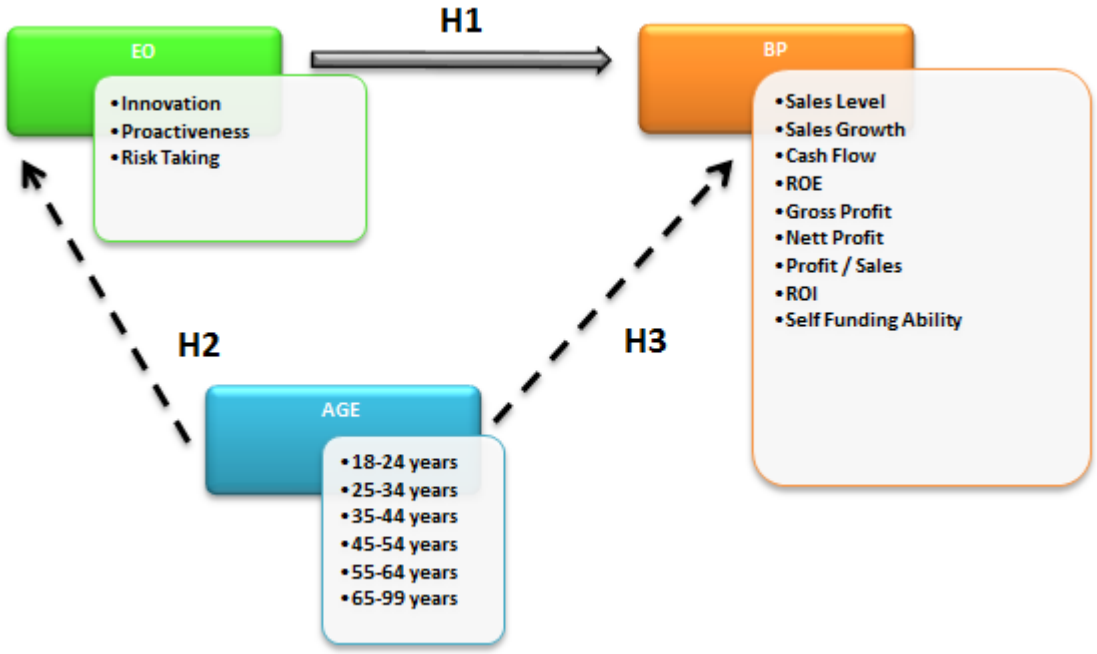


Figure 5 Research Framework

This model of entrepreneurship was developed by following the guidelines put forward by Covin and Slevin (1991) who suggested that a meaningful organizational model must have the following characteristics:

- The ultimate dependent variable must be firm performance, though entrepreneurship is studied for a number of reasons, the overriding reason is the widespread belief that entrepreneurship activity stimulates general economic development as well as the economic performance of individual firms.
- Variables are clearly defined as this allows models to be developed which precisely integrate conceptually similar streams of research and theories, thereby allowing the testing of the relationships depicted in the model allowing for validation, rejection or modification of the model.
- The model must include environmental, organizational and individual level variables. This is because environmental variable can provide a reasonable starting point for a firm behaviour model of entrepreneurship, while organizational variable can affect the ability of firm to engage in entrepreneurial activity. Finally, individual managers can have a strong

and direct impact on the entrepreneurial potential, behaviour and effectiveness of firms.

- Models must also include direct and moderator effects.

2.7 Conclusion

There are a number of factors that impact the way a business is conceived as well as run in the industry that it operates in. Coupled to this there may be internal and external factors that will affect the business. Entrepreneurial Orientation as put forward by (Miller 1983; Covin and Slevin 1989; Dess and Lumpkin 2005) has been found to be a key determinant in most research literature that affects a firms performance no matter what approach has been utilised. This performance may take different forms and has been given varied meanings as there is no consensus on the measures of performance to be utilised, this multidimensional nature of the performance construct itself is due to the fact that during entrepreneurship activity or processes a favourable outcome on one dimension may lead to a negative or unfavourable outcome on another.

Furthermore, demographic changes will continue to have a major impact on the world of business, major implications of this change is that for a country like South Africa economic growth will need to depend even more heavily than today on the productivity of the entire workforce, through increased participation rates of all able bodied individuals (International Labour Organization 2011). Cressy and Storey (1995) suggest that the survival rates of business by older entrepreneurs are higher than those by younger entrepreneurs, suggesting that these businesses perform better overall. Kautonen (2008) carried out a study that highlighted the fact that a number of firms were founded by individuals over the age of 50 years old and therefore should not be treated as a marginal issue. Ruis and Scholman (2012) investigated the relationship between the age of the entrepreneur with the objectives, competitive strategy and performance of the firm. His final analysis led to the conclusion that they are significant age effects

which need to be explored further due to the lack of detailed information on the topic.

CHAPTER 3: RESEARCH METHODOLOGY

This section underlines the methods of research that have been utilised in this research. The quantitative method used in this research will be reviewed and discussed along with its advantages and disadvantages as well as justification for this particular research. The nature of the research design has been highlighted along with the method that will be used to collect data, data collection and analysis in relation to this study will be provided, followed by a discussion on the validity and reliability of this study.

3.1 Research Methodology and Paradigm

The Research paradigm for this project is routed in positivism and a quantitative method will be utilized in order to capture, analyse and interpret the data collected. Easterby-Smith, Thorpe and Jackson (2008) point out that the key idea of the positivist approach is that the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition.

The following philosophical assumptions of this method put forward by Easterby-Smith et al (2008) make it suitable for the form of research that will be carried out:

- Independence, the observer must be independent from what is being observed allowing this form of research to have a higher level of credibility.
- Value freedom, the research produced will strive for impartiality and objectivity.
- Causality, the aim of social science should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour.

- Hypothesis and Deduction, science proceeds through a process of hypothesizing fundamental laws and then decides what kind of observations will demonstrate the truth or falsity of the hypotheses.
- Concepts need to be operationalized in a way which enables facts to be measured quantitatively. In this research the survey will be designed in a manner that allows measurable facts to be collected that are relevant in answering the research questions and objectives.
- Reductionism, problems as a whole are better understood if they are reduced into the simplest elements. This research will attempt to understand the topic by analysing themes through literature review and linking the themes of the independent variable, and dependent variable through results.
- Generalization, in order to be able to generalize about regularities in human and social behaviour it is necessary to select samples of sufficient size from which inferences may be drawn about the wide population. Since this study uses a small convenience sample of 103 respondents they will be no attempt to make sweeping generalizations.

The research seeks to make inferences of the effect AGE has on the EO-BP relationship within a South African Context.

The main strength of the positivist approach is that it provides a wide coverage of the range of situations and surveys can be fast and economical especially in instances where statistics are aggregated from fairly large samples.

This approach has its drawbacks as well as it is a rather inflexible and artificial approach, it does not give a good understanding of processes or the significance that individuals will place to particular actions. This method is not helpful when trying to generate theories and data gathered may be irrelevant for the purpose at hand.

This is important for this particular research as the attempt is not to generate new theories but to understand the existing EO-BP relationships using tools that are already in existence.

3.2 Research Design

Inferential survey which is aimed at establishing relationships between variables will be utilized. This will be a self-administered questionnaire to reach the required respondents.

This cross sectional survey can be used to identify relationships between given variables.

A Questionnaire Survey was utilized this was given directly to respondents who read the instructions and questions and then recorded their answers.

According to Nadler (1977) there are several advantages of utilizing this particular research design:

Responses obtained can be quantified and easily summarised, it is easy to use with large samples of data as well, it is a relatively cheap and cost effective method of collecting required data and a large volume of data can be obtained and utilized by the researcher. Neuman (2011) states further advantages that include the ability to reach a large geographic area, the respondent can complete the questionnaire at their convenience and check records if they need to in order to provide more accurate information.

On the other hand the following disadvantages exist, a questionnaire is non-empathetic, the fact that the questions are predetermined may lead to issues being missed, data may also be over interpreted and response bias can also occur when using this form of data collection method (Nadler 1977).

3.3 Population and Sample

3.3.1 Population

The term population refers to the whole set of entities from which evidence is gathered Easterby-Smith et al (2008) or the total collection of elements about which we wish to make some inferences Cooper and Schindler (1998), this

research defines the population as the number of entrepreneurs within Johannesburg across the following age ranges of respondents: Below 18, 18-24, 25-34, 35-44, 45-54, 55-64 and 65-99. These age categories used in this research correspond to those used by the GEM consortium which is currently the leading authority on entrepreneurship research. The population was obtained and selected non-randomly using a convenience sample and therefore generalization to all entrepreneurs in Johannesburg cannot be made.

3.3.2 Sample and sampling method

Sampling involves selecting some elements in a population we may draw conclusions about the entire population (Cooper and Schindler 1998).

A convenience sample was utilised for this study due to the need for access to the population and constraints of time .The units that are selected for inclusion in the sample were the easiest to access by the researcher.

The advantages of convenience sample stems from the ease of being carried out with few rules governing how the sample should be collected. The relative cost and time required to carry out a convenience sample are small in comparison to probability sampling. This enabled the researcher to achieve sample size in relatively fast and inexpensive way. The convenience sample helped gather useful data and information that would not have been possible using probability sampling techniques as a reliable list of population elements was not readily available (Neuman 2011).

According to Neuman (2011) disadvantages of convenience sampling are that it can lead to the under-representation or over-representation of particular groups within the sample. Since the sampling frame is not known, and the sample is not chosen at random, the inherent bias in convenience sampling means that the sample is unlikely to be representative of the population being studied. This factor greatly undermines the ability to make generalisations from the sample drawn from the population being studied as the sample can give a distorted view by seriously misrepresenting the population.

A total of 170 questionnaires were distributed this resulted in a final sample of 103 completed questionnaires, representing a completion rate of 60.5 %. Bailey (1982) reflects on the fact that most researchers regard 100 respondents as the minimum as there may be several subpopulations the researcher wishes to study or several variables to be controlled for. This number will allow for significant observations to be made with the collected data. This is in line of later work by Cooper and Schindler (1998) who state that the researcher may also be interested in making estimates concerning various subgroups of the population, and then the sample must be large enough for each of these sub groups to meet the desired level of precision. Furthermore, according to the central limit theorem for sufficiently large samples (n=30) the sample means will be distributed around the population mean approximately in a normal distribution. Even if the population is not normally distributed, the distribution of sample means will be normal if there is a large enough set of samples and if there is a larger spread or variance with data a larger sample is required (Cooper and Schindler 1998).

However, a number of similar studies dealing with entrepreneurial orientation and performance have used the following sample sizes and methods: Gupta and Govindarajan (1984) collected data from general managers of 58 SBU's (Small Business Units) within 8 diversified firms in the geographic locations of Massachusetts, Connecticut and New York. The need for access and constraints of time as well as funding prevented the use of random sampling techniques and in this study only 58 out of 70 firms provided useable data representing an 82.8 % response rate.

While a study by Kautonen (2008) on age used a random sample of 3900 businesses and received 939 useable responses giving a 24.1 % response rate. Ruis and Scholman (2012) in a recent exploratory study that compared the impact of age on performance amongst other variables utilised an existing panel consists of around 2,000 small businesses, which are interviewed several times

a year about different subjects regarding entrepreneurship a final sample of 1,676 respondents was selected, a response rate of 83.8 %.

Dess and Robinson (1984) contacted 26 manufacturing firms which satisfied a set of requirements and sampling constraints that included size, geographic location and industrial classification of 102 questionnaires mailed 95 responses were received representing a 93.1 % response rate. This is in contrast to Covin and Slevin (1989) who contacted 1225 single industry owned firms which netted a final sample of 344 firms a 28.1 % response rate although only 161 questionnaires were utilised for their study.

In order to ensure that the participants took part in the research the benefits of the research were explained and a summary of results was to be made available to them upon completion of the research should they elect to receive them.

3.4 The research instrument

The research instrument used to gather data will be a survey questionnaire that gathers data on the businesses and the measures required to test the hypothesis. A letter attached in **Appendix A** will include details of the research being carried out and ethical steps taken by researcher .The survey will be utilised as this is more cost effective and the data can be collated quickly and efficiently. The advantages of a survey are that responses can be quantified and easily summarised; it is easy to use with large samples, relatively inexpensive and can obtain large volume of data over a short period of time. Disadvantages are that the instrument is non-empathic, predetermined questions may miss issues, data may be over interpreted and response bias may occur.

3.4.1 Demographic Data

The Global Entrepreneurship Monitor 2010 Adult Population Survey was consulted in generating demographic related questions for the survey, with the

exception of the question on Age of firm which was derived from the GEM Report (2009) and Industry classification, derived from The Standard Industrial Classification (SIC) which was designed for the classification of establishments according to their kind of economic activity, and provides standardised framework for the collection, tabulation, analysis and presentation of statistical data on establishments (Widd and Diggines 2009). The nine major divisions in South Africa are:

- Agriculture, Hunting, Forestry And Fishing
- Mining And Quarrying
- Manufacturing
- Electricity, Gas And Water Supply
- Construction
- Wholesale And Retail Trade; Repair Of Motor Vehicles, Motor Cycles And Personal And Household Goods; Hotels And Restaurants
- Transport, Storage And Communication
- Financial Intermediation, Insurance, Real Estate And Business Services
- Community, Social And Personal Services

The SIC acts as a guide to aid in the classification of a business and the collection of data. This research will not focus on all industries and in an effort to ensure that statistical data is classified effectively the following forms of business ownership will be utilised: Sole Proprietorship (1 owner), Closed Corporation (1 to 10 owners), Partnership (2 to 20 owners), Private Company (1 to 50 owners) and Other.

3.4.2 Entrepreneurial Orientation (EO)

Covin and Slevin (1991) nine item scale will be utilised to measure EO. The first three items on the scale assess the firm's tendency towards innovation, the second three items assess the firm's proactive orientation, and the third three items assess the firms risk taking propensity. The respondents will be asked to characterize their firms' strategic posture in terms of these nine items. The

mean ratings on these items were used as the firms' strategic posture scores. Higher scores reflect strategic posture or entrepreneurial orientation.

Yang (2008) utilized the Entrepreneurial Orientation Questionnaire (EOQ) which was developed by Covin and Slevin (1989) and it is the most widely used questionnaire for measuring that construct. The EOQ contains nine items and uses a 7 point scale to measure the three dimensions of Entrepreneurial Orientation (Innovation, proactiveness and risk taking). It is used to assess three components of entrepreneurial orientation, with three items measuring innovation, three items measuring proactiveness and three items measuring risk-taking.

Using pre-existing survey questions can provide accurate measures as they are pre-tested before first usage, such that the degree of validity and the quality of data are likely to be high for any subsequent studies carried out however a disadvantage of using pre-existing questions is the potential result of low data quality if measures are unreliable (Hyman, Lamb and Bulmer 2006).

3.4.3 Business Performance (BP)

For the performance measure Covin and Slevin (1991) instrument will be utilised. It is a modified version of an instrument developed by Gupta and Govindarajan (1984).

The respondents will first be asked to indicate on a five-point Likert type scale, ranging from 'of little importance' to 'extremely important', the degree of importance their firm attaches to each of the following financial performance criteria: sales level, sales growth rate, cash flow, return on shareholder equity, gross profit margin, net profit from operations, profit to sales ratio, return on investment, and ability to fund business growth from profits. The respondents were then asked to indicate on another five-point Likert-type scale, ranging from 'highly dissatisfied' to 'highly satisfied', the extent to which their firm's top managers are currently satisfied with their firm's performance on each of these

same financial performance criteria. For this research a seven-point Likert-type scale was used instead for satisfaction values. These 'satisfaction' scores were multiplied by the 'importance' scores in order to compute a weighted average performance index for each firm. Yang (2008) created business performance scale that contains eight items and uses a 7 point Likert scale. Four indicators of growth were; sales growth, employment growth, sales growth compare to competitors, and market share compared to competitors. The three financial performance indicators were gross profit, return on sales (ROA), and return on investment (ROI), the final indicator was one of overall performance/success to business performance adapted from (Lumpkin and Dess 1996).

According to Knight (2000) previous studies have often used self-reports to gather business performance data and the results have proven to be reliable. Furthermore, work by Wiklund (1999) suggested that performance measures should include both growth and performance measures.

3.5 Procedure for data collection

Data was collected with the aid of a survey questionnaire.

3.6 Data analysis and interpretation

All collected data was analysed electronically using the IBM SPSS Statistics 20 for the descriptive statistics, MS Excel and Eviews 7 for the regression analysis. This was done with the aid of a trained statistician along with the researcher's input.

The following statistical tests were carried out on the collected data:

- Univariate analysis was used measured the central tendency and dispersion of the data.
- Bivariate analysis using the index of correlation and regression analysis was utilized.
- Multivariate data was analysed using multiple regressions models.

Widd and Diggines (2009) describe the follow up step of data display as tabulation which combines the mass of raw data into a number of categories, which are then represented in tables or graphs that allow meaningful analyses and deductions to be made. The primary aim of this is to, determine the data distribution, to see what is typical in the data, determine the variance of the data and determine the significance of relationships of data sets. This is done through simple and cross tabulation of data. This will be important for this study in order to find out if relationships that were previously not considered can provide additional insight into understand the information collected.

Data interpretation is the final stage of data analysis. When statistical analysis is carried out it is necessary to describe the data, to measure significance and indicate relationships between sets of data (Widd and Diggines 2009).

Describing Data, this will be done via descriptive statistics to show how data is distributed, to group data characteristics and indicate how this data varies:

- Frequency distribution indicates how the data is distributed over the various categories.
- Percentages will be used as they reveal the relative importance of figures more clearly than the original data.
- The three central measures of tendency, mode, median and mean will be used to reflect the most probable or appropriate response to a question
- Measures of dispersion will be utilised to reflect how the data is spread around the measures of central tendency: range, variance, standard deviation, and the variant coefficient will be calculated.

3.6.1 Measuring Significance/Hypothesis Testing

Due to the fact that it is neither economical nor practical to collect data from the whole population a convenience sample was used to make an approximation of the population statistics within a given range. Significance refers to how sure a researcher is that a difference or relationship exists. The f-statistic, t-tests and variance analysis will be used to measure significance. As the researcher wants

to determine whether statistical differences exist between the hypothesis determined beforehand and the actual data gathered (Luck and Rubin 1987). A significance level of 0.10 that corresponds to a confidence level of 0.90 will be used.

3.6.2 Measuring Statistical Relationship

The researcher is often interested in determining whether there is a relationship between a set of dependent and a set if independent variables. Correlation and regression analysis is used to measure the relationship between two or more interval variables. In both methods the change in one variable is linked to a change in the other variable (Widd and Diggines 2009).

3.6.3 Methods that determine relationships

Correlation methods deal with the simultaneous occurrence between variables and provide information about the degree of association between variables.

When the correlation coefficient is exactly -1 or +1. There is a perfect correlation between the variables. If one variable is known the other can be predicted exactly.

When the correlation coefficient is between 0 and -1. There is a negative correlation between the variables. This means the higher one variable is the lower, the other will be.

When the correlation coefficient is between 0 and +1. There is a positive correlation between the variables. This means the higher one variable is the higher, the other will be.

Regression methods deal with the cause and effect relationship between the variables and attempt to answer two questions:

What change will occur in the dependent variable in response to a specific change in the independent variable?

What is the likely value of the dependent variable given the value of the independent variable?

Methods that determine structure in multivariate data

Analytical techniques are used to systemise, summarise and simplify complex multivariate data. These techniques represent a number of interdependent statistical techniques that include; factor analysis, cluster analysis and multidimensional scaling. The objective is to study mutual associations or interrelationships among relevant variables (Luck and Rubin 1987).

3.7 Limitations of the study

- The methodology used in this research is predominantly a positivist social science approach. Within the field of research there are competing approaches based on philosophical assumptions about the purpose and nature of social reality. Therefore the same topic may be approached from a different angle as well.
- Convenience sampling can lead to the under-representation or over-representation of particular groups within the sample. Since the sampling frame is not known, and the sample is not chosen at random, the inherent bias in convenience sampling means that the sample is unlikely to be representative of the population being studied.
- No testing on whether instruments used in the study are culturally bounded has been conducted.
- All collected data will be analysed electronically using computer software by a trained statistician along with the researcher's input, it is possible that certain information could be over looked or over analysed.
- As a self-sponsored international student, researcher is limited in access to funds as well as time available to carry out the project.
- Exclusive reliance on self-report measures for business performance is not ideal.

3.8 Validity and reliability

3.8.1 External validity

This is an assessment of whether the results could be applied to other contexts or situations and to what extent this may be possible (Quinton and Smallbone 2006). For quantitative studies the representativeness of the sample is key issue in generalizing to a larger population. However, since a convenience sample was utilized this study does not claim to meet the criterion regarding External Validity.

Cooper and Schindler (1998) identified several threats to external validity:

- The reactive effect is one of sensitising subjects by the pre-test so they respond to the experimental stimulus in a different way. Due to the nature of this research and budget limitations no pretesting was carried out on any subjects therefore this threat was reduced.
- Interaction of selection is the process by which test subjects are selected for an experiment and may threaten external validity. It is possible that the population from which one selects subjects may not be the same as that which one wishes to generalize results from. In this research the link between Age, EO and BP within South Africa will be carried out on several entrepreneurs. What is not known is whether successful or unsuccessful entrepreneurs will provide information that can be extrapolated to the whole population. However, the researcher does not seek one form of entrepreneur over another. The need for access and constraints of time as well as funding prevented the use of random sampling techniques in this study. Therefore a convenience non-probability sample was selected limiting the ability to extrapolate the results to the general population of entrepreneurs in South Africa.

3.8.2 Internal validity

Quinton and Smallbone (2006) build upon the work of Bryman and Bell (2003) who proposed that in a quantitative study the test of internal validity will focus on causality, the test must measure how confident the researcher is that the independent variable is at least partly responsible for the variation found in the dependent variable.

Cooper and Schindler (1998) look into the issue of internal validity as – "do the conclusions we draw about a demonstrated experimental relationship truly imply cause?"

Cooper and Schindler (1998) identified several threats to internal validity:

- History, during the time that an experiment is taking place, some events may occur that confuse the relationship being studied. In many experiments a control measure is taken of the dependent variable before a manipulator is introduced. After the manipulation an after measurement is taken as well. This will not be possible with this research due to budgetary reasons.
- Maturation, changes may occur due to the passage of time and are not specific to any particular event. This is a concern for studies that cover a long period of time. This study or survey will not be affected by this as data will be collected over a short period of time, the survey does not take longer than 10 minutes to be completed.
- Testing, the process of taking a test can affect the scores of a second test. It is not known if this aspect will be present or not to researcher as there is no way of finding out if a similar questionnaire has been completed by respondent before.
- Instrumentation, this threat to internal validity results from changes between observations, in measuring instrument or in observer. For this research this is significantly reduced as no observer will be present while respondent does the survey and the same questions will be used for each measurement.

- Selection threat refers to the differential selection of subjects for experimental and control groups. This is not relevant for this research as no experiment will be undertaken due to budgetary considerations.
- Experiment Mortality occurs when the composition of the study group changes during the test. This is unlikely to be an issue as study is not an experiment and respondents will have adequate material information on the workings of the organizations they represent to answer the questionnaire within a 10 minute period.

3.8.3 Reliability, Stability, Equivalence and Internal Consistency

Reliability is concerned with estimates of the degree to which a measurement is free of random or unstable error, reliable instruments are robust and work well under differing times and conditions (Cooper and Schindler 1998).

Stability refers to the reliability of the test instrument and whether secure consistent results can be obtained with repeated measurements with the same instrument. For EO and BP the instruments pioneered by (Miller 1983, Covin and Slevin 1989, 1991) have provided consistent results repeatedly over the years.

Equivalence refers to the degree to which alternative forms of the same measure produce same or similar results. According to Knight (2000) previous studies have often used self-reports to gather business performance data and the results have proven to be reliable.

Internal Consistency is a measure of the degree to which instrument items are homogenous and reflect the same underlying constructs. Specialised correlational formulas will be utilised to ensure this measure is present.

The study therefore presented the table below to show the reliability test results that were conducted using Cronbach's Alpha. According to Nunally (1978) a recommended coefficient alpha of 0.70 is necessary for basic research. The value for measuring Innovation was lower at 0.68 suggesting that further

refinement of the measure is necessary. No items were excluded to push the score up.

Table 4 Reliability Tests - Cronbach's Alpha

	The Variables	No of Items	Cronbach's Alpha
1	Entrepreneurial Orientation (Innovation)	6	0.68
2	Entrepreneurial Orientation (Proactiveness)	6	0.72
3	Entrepreneurial Orientation (Risk Taking)	6	0.84
4	Business Performance (Importance)	9	0.84
5	Business Performance (Satisfaction)	9	0.92

3.9 Conclusion

The chapter examined the quantitative research methodology utilized as well as the research design chosen for the study was explored and explained. The population was defined and the use of a convenience sample was justified. The data collection instrument which consisted of a survey questionnaire and the data analysis procedures used were explained along with their usefulness and limitations to the study. Finally, the validity and reliability of the study instruments were tested and interpreted.

CHAPTER 4: PRESENTATION OF RESULTS

4.1 Introduction

The previous chapter explained the data preparation and collection methods. The data was collected from the respondents and analysed. Descriptive statistics, cross-tabulations and inferential statistics were performed on the data. This chapter deals with the analysis and presentation of the empirical data. However, before the data was analysed, reliability tests were performed on the data, using Cronbach's Alpha.

The chapter reveals the results by looking at the demographics profile of the respondents, followed by a sequential presentation and description of the results obtained for the three hypotheses along with a conclusion regarding the strength of the tested hypotheses.

4.2 Demographic profile of respondents

A total of 170 questionnaires were distributed to respondents using a convenience sample this resulted in a final sample of 103 completed questionnaires, representing a response rate of 60.5 %.

4.2.1 Descriptive Statistics

The descriptive statistics obtained from the study are illustrated in the table below. They contain details of the mean, standard deviation and percentiles for all of the 32 questions from the survey questionnaire.

Table 5 Descriptive Statistics from sample of respondents

	Mean	Std. Deviation	Percentiles		
			25	50	75
Innovation Q1	4.504854369	1.841108928	3	5	6
Innovation Q2	4.588235294	1.770791294	3	5	6
Innovation Q3	2.549019608	1.744169643	1	2	3.25
Innovation Q4	4.529411765	1.686908722	3	5	6
Innovation Q5	3.343137255	1.87476783	2	3	5
Innovation Q6	4.264705882	1.994678418	2	5	6
Proactive Q1	3.009803922	1.732022786	2	3	4
Proactive Q2	4.264705882	1.652639477	3	4	5
Proactive Q3	3.16	1.756488692	2	3	4
Proactive Q4	4.588235294	1.655192497	4	5	6
Proactive Q5	3.225490196	1.817989656	2	3	4
Proactive Q6	4.465346535	1.972634565	3	5	6
Risk Q1	3.490196078	1.645546634	2	3	4
Risk Q2	4.6	1.842264746	4	5	6
Risk Q3	3.421568627	1.815424967	2	3	5
Risk Q4	4.725490196	1.724355886	4	5	6
Risk Q5	3.637254902	1.716485101	2	3	5
Risk Q6	4.490196078	1.772982597	4	5	6
Q7	4.427184466	0.587482862	4	4	5
Q8	4.417475728	0.693446519	4	5	5
Q9	4.611650485	0.509382743	4	5	5
Q10	3.841584158	1.007300087	3	4	5
Q11	4.174757282	0.706096484	4	4	5
Q12	4.330097087	0.632274908	4	4	5
Q13	4.128712871	0.687944276	4	4	5
Q14	4.067961165	0.807588226	4	4	5
Q15	4.475728155	0.623787611	4	5	5
Q16	3.621359223	0.829794504	3	4	4
Q17	4.961165049	1.357060911	4	5	6
Q18	4.902912621	1.382769054	5	5	6
Q19	4.72815534	1.238232253	4	5	6
Q20	5.029126214	1.216361584	5	5	6
Q21	5.058252427	1.186734213	4	5	6
Q22	5.155339806	1.135499213	4	6	6
Q23	4.941747573	1.251079869	4	5	6
Q24	4.912621359	1.394012379	4	5	6
Q25	6.359223301	2.159585876	5	7	8
Q26	2.446601942	1.29651233	1	2	4
Q27	2.563106796	0.681260408	2	3	3
Q28	1.640776699	0.838466959	1	1	2
Q29	4.427184466	1.57556054	3	5	6
Q30	1.349514563	0.479148302	1	1	2
Q31	2.737864078	0.441946786	2	3	3
Q32	2.912621359	1.306895709	1	4	4

4.2.2 Demographic Data

This section presents and describes the business information related to the firms, and the respondent's answering on behalf of the businesses. Questions relating the classification of business and the ownership structure, the period of operation, the number of employees in the business, the ages of the respondents, their genders, their educational level as well as population grouping. Questions 25-32 were used to collect demographic data.

4.2.2.1 Industry Classification

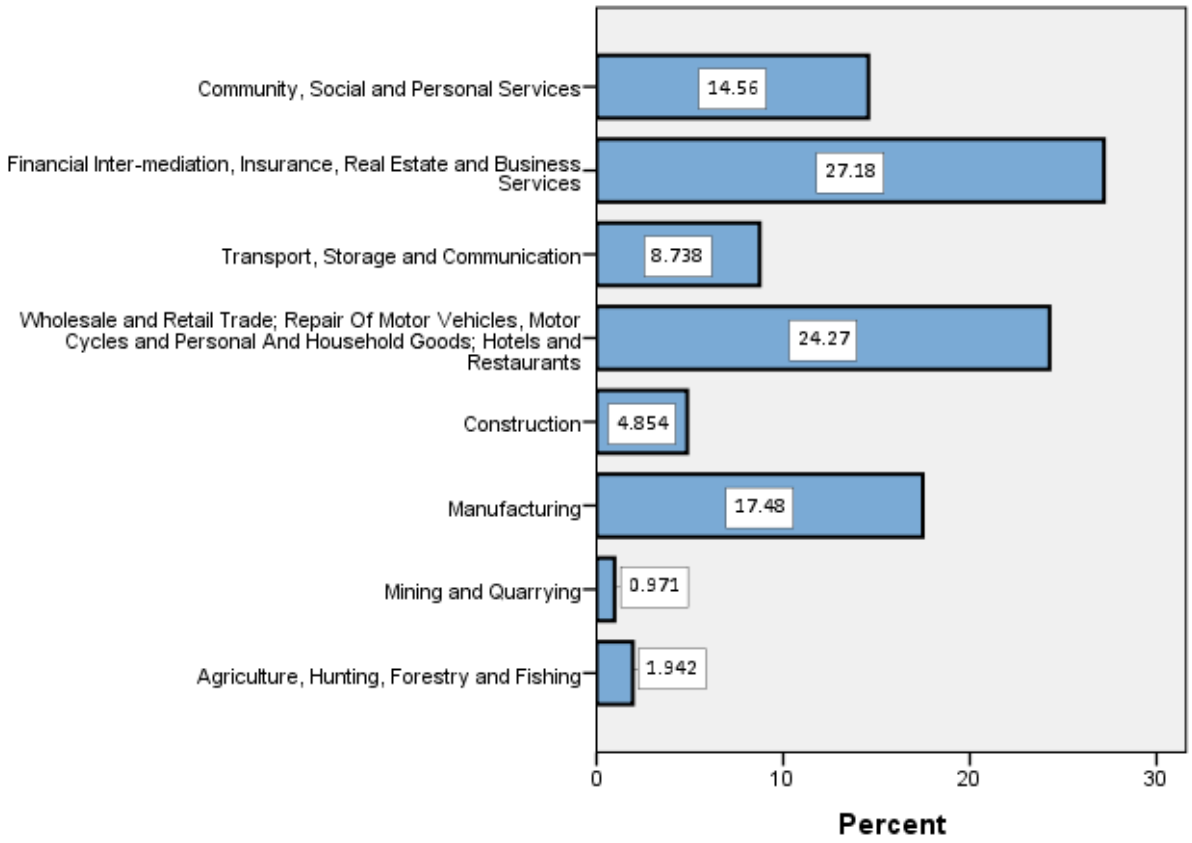


Figure 6 Industry classification

The Standard Industrial Classification (SIC) which was designed for the classification of establishments according to their kind of economic activity shows that financial intermediation, insurance, real estate and business services made up the largest percentage at 27.2 % followed by wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants at 24.3 % and manufacturing at 17.5 %. With

agriculture, hunting, forestry and fishing at 1.9 %, mining and quarrying at 1 %, electricity, gas and water supply was not selected by any of the respondents, construction at 5%, transport, storage and communication 8.7 % while community, social and personal services made up 14.6 %.

4.2.2.2 Ownership Structure

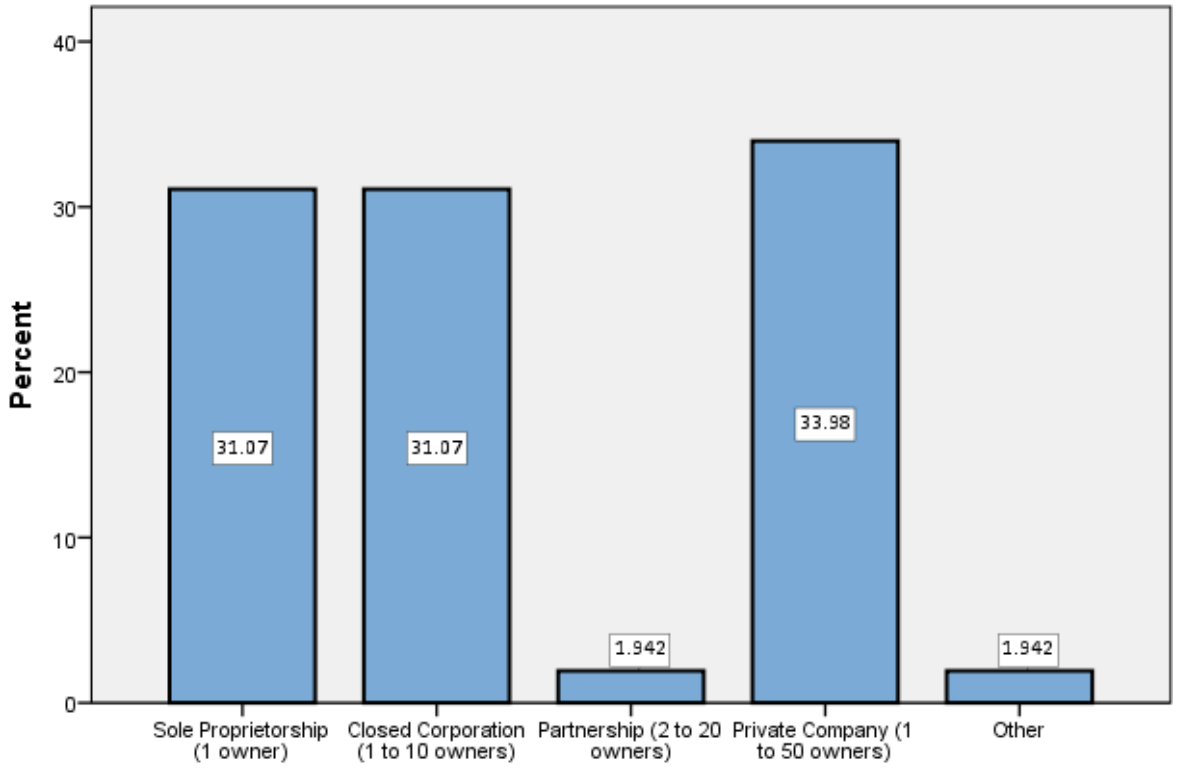


Figure 7 Ownership structure

The information above shows the categories of business ownership as well as the number of businesses in each category from the sample. An equal number of firms were sole proprietorships and closed corporations at 31.1 % each, with 34 % of the firms being private companies. The remainder of the firms were partnerships and those under the other category had a percentage of 1.9 %. The data obtained shows that a total of 62 % of the firms fell in the Sole Proprietorship and Closed Corporation categories.

4.2.2.3 Period of Operation

Table 6 How long has this business been paying salaries and wages for?

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 3 months	11	10.7	10.7	10.7
3 months to 3.5 years	23	22.3	22.3	33.0
More than 3.5 years	69	67.0	67.0	100.0
Total	103	100.0	100.0	

The number of years that each business has been in operation is described above. Three broad categories are utilised, less than 3 months, between 3 months to 3.5 years and more than 3.5 years. The length of time that the business had been paying salaries and wages for was used to find out how long the business had been in operation. The data shows that 10 % of the businesses had been in operation for less than 3 months and 22 % had been in operation for a period of between 3 months to 3.5 years, finally most businesses had been in operation for a period of more than 3.5 years as 67 % of respondents show.

4.2.2.4 Firm Size

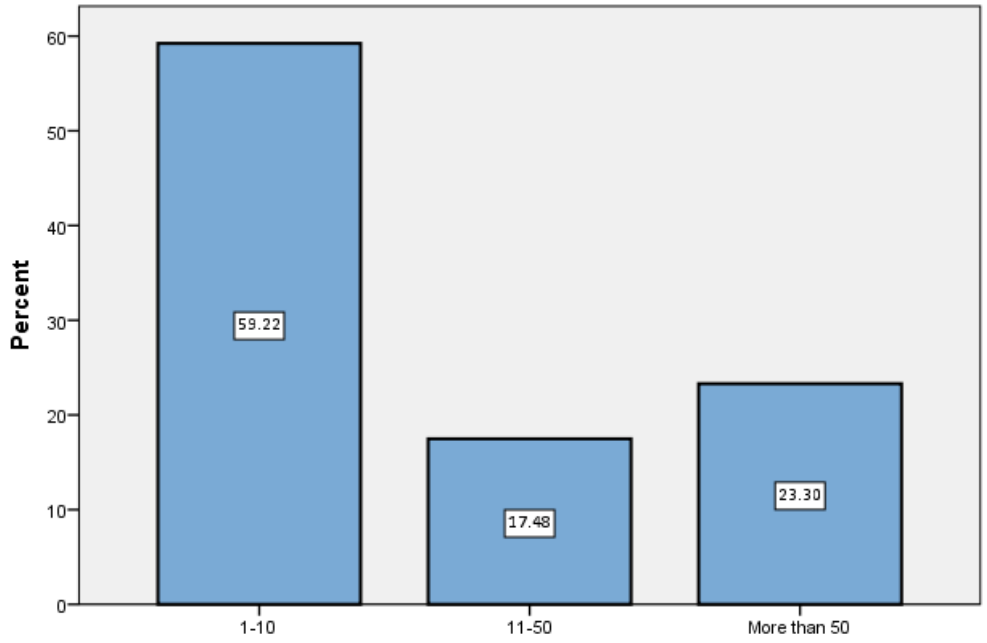


Figure 8 Firm Size

The firm size was measured by looking at the total number of people that work for the organization while excluding the owners of the organization from the

tally. A majority of the firms at 59 % had between 1 to 10 people working for them excluding the founders and 17 % of the firms employed 11 to 50 people. The remaining 23 % of firms employed more than 50 people.

4.2.2.5 Age of Respondents

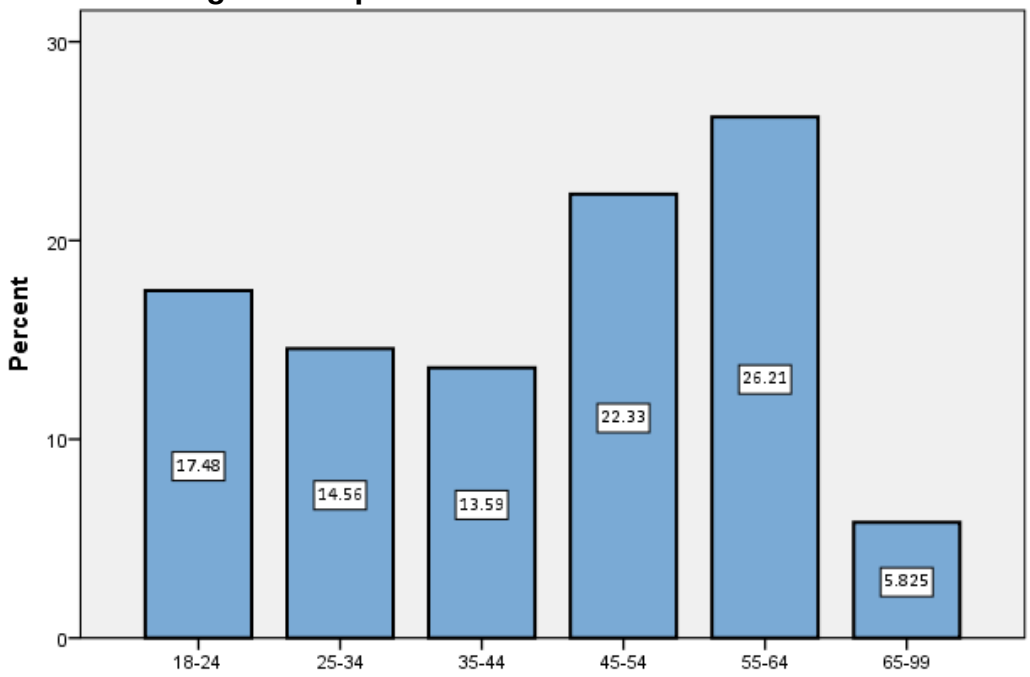


Figure 9 Age of Respondents

The ages of the respondents were distributed as follows those aged below 18 were not represented, 18 to 24 made up 17 %, 25 to 34 made up 14 %, the 35 to 44 year olds at 13 % and 45 to 54 year olds at 22 % , with 55 to 64 at 26 % and the 65 to 99 category filling the remaining 6 %.

4.2.2.6 Gender of Respondents

Table 7 What is your gender?

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	67	65.0	65.0	65.0
Female	36	35.0	35.0	100.0
Total	103	100.0	100.0	

The gender composition of the sector reveals an imbalance between male and female with 65 % male and 35 % female respondents.

4.2.2.7 Education Level of Respondents

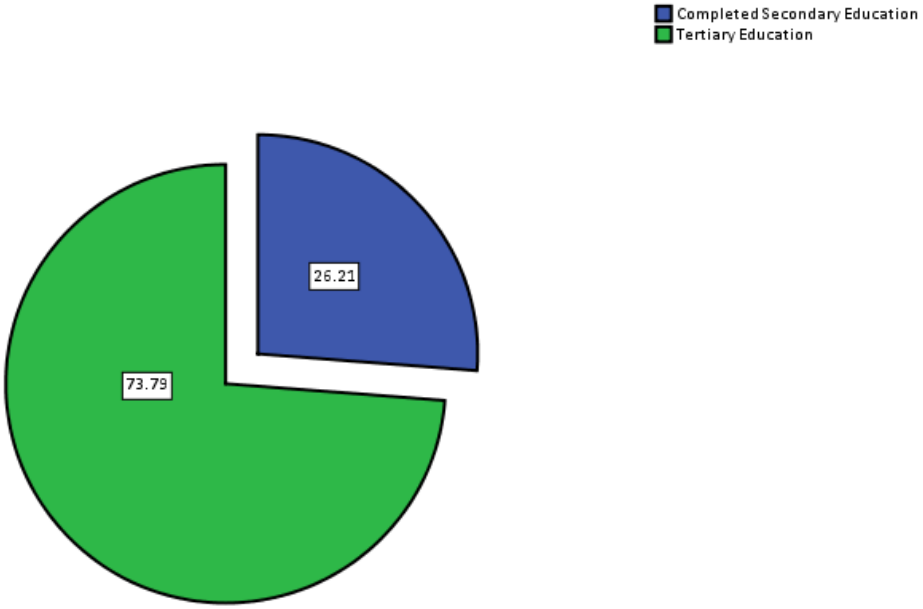


Figure 10 Education Level of Respondents

The highest level of education attained was recorded as follows, 73 % of respondents had a tertiary qualification, while 26 % had completed their secondary education, and none of the respondents selected the category “not completed secondary education”.

4.2.2.8 Cross Tabulation Age and Educational Level

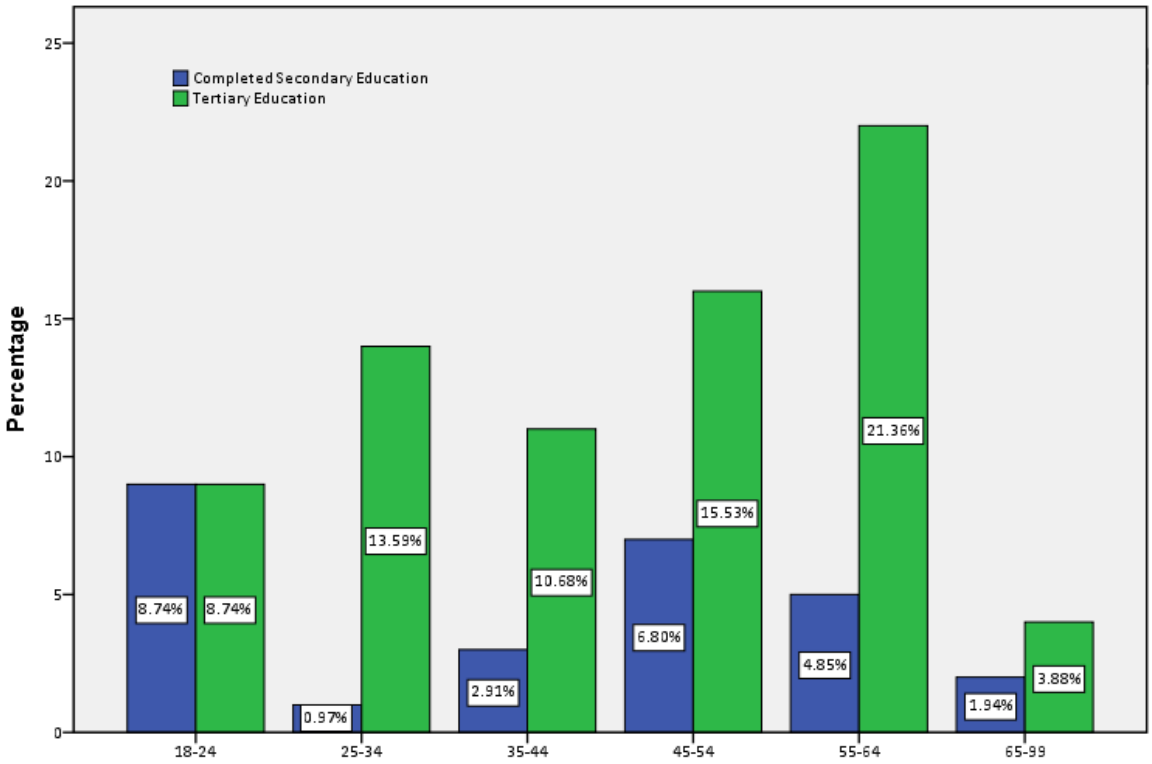


Figure 11 Cross Tabulation Age and Educational Level

The ages of the respondents were distributed as follows in (Figure 9) those aged below 18 were not represented, 18-24 made up 17 %, 25-34 made up 14 %, the 35-44 year olds at 13 % and 45-54 year olds at 22 %, with 55-64 at 26 % and the 65-99 category filling the remaining 6 %.

These ages were cross tabulated with educational level of respondents; the 18-24 year olds had an equal number of people who had completed secondary education and tertiary education at 8.7 % in each category, of the 25-34 year olds 1 % completed secondary education and 13.6 % had a tertiary qualification, the 35-44 age category had 3 % completing secondary education and 10.7 % with a tertiary education,45-54 year olds had 6.8 % with completed secondary education and 15.5 % with a tertiary education. In the 55-64 year category there were 4.9 % of people who had completed secondary education and the highest number of respondents with a tertiary education at 21.3 %. The final age category of 65-99 had 1.9 % and 3.9 % of respondents completed secondary and tertiary education respectively.

4.2.2.9 Population Group of Respondents

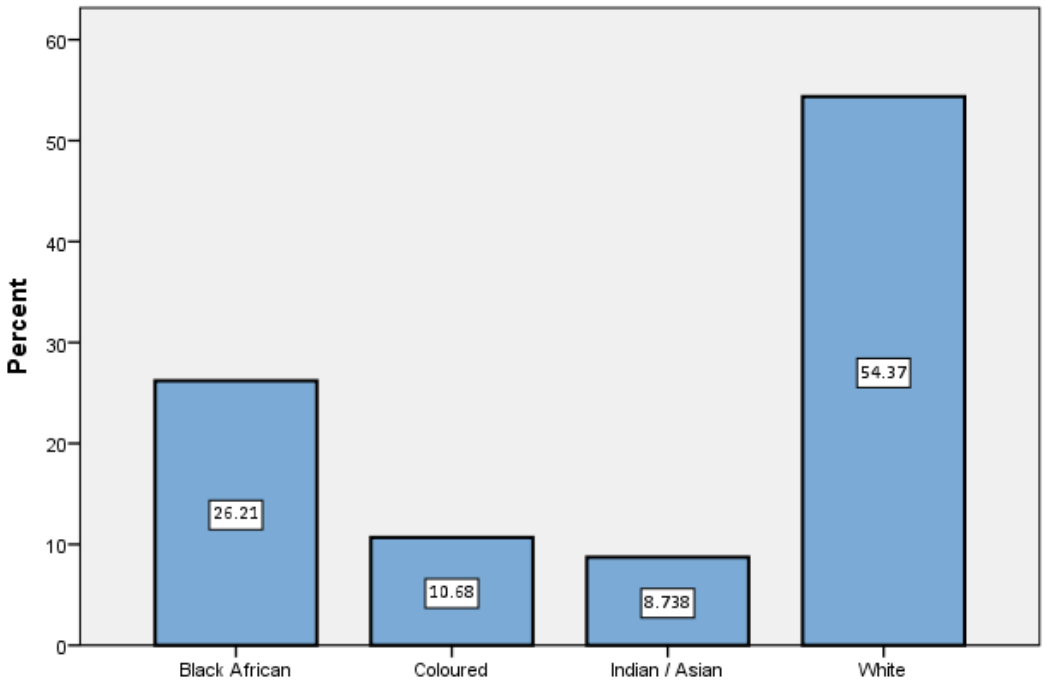


Figure 12 Population Group of Respondents

The largest group of respondents by population group was White respondents who made up 54 % of the sample, followed by Black Africans at 26 %, Coloureds at 10.6 % and Indian / Asians made up the remaining 8.7 % of respondents.

4.3 Results pertaining to Hypothesis 1

Table 8 Regression Analysis Entrepreneurial Orientation and Business Performance

```
============================================================
Dependent Variable: BP_FINAL
Method: Least Squares
Date: 11/21/12   Time: 20:10
Sample: 1 103
Included observations: 102
============================================================
     Variable      CoefficientStd. Errort-Statistic  Prob.
============================================================
  INNOVATION_TOT    -7.520626   4.464295  -1.684617   0.0952
 PROACTIVENESS_TOT   11.60564   4.410827   2.631171   0.0099
     RISK_TOT       -7.050147   16.95963  -0.415702   0.6785
         C           383.1211   31.02465   12.34893   0.0000
============================================================
R-squared            0.069324    Mean dependent var 406.5490
Adjusted R-squared   0.040834    S.D. dependent var 272.7662
S.E. of regression   267.1391    Akaike info criteri14.05184
Sum squared resid    6993602.    Schwarz criterion  14.15478
Log likelihood      -712.6439    Hannan-Quinn criter14.09353
F-statistic          2.433285    Durbin-Watson stat 1.631691
Prob(F-statistic)    0.069504
============================================================
```

The multivariate regression model for EO-BP that was put forward above shows that for every unit of productivity, business performance will increase by 11.60564 units due to the impact or influence of the proactiveness variable this particular observation is also statistically significant at the 1% level.

Innovation also plays a part as for every unit increase in innovation business performance decreased by 7.520626 units and is statistically significant at the 10% level. Risk is not statistically significant but in this model business performance will decrease by 7.050147 units for every unit of risk increased.

The Analysis of Variance table provides statistics about the overall significance of the model being fitted. The Prob (F-Statistic) is 0.069504 shows that there was a statistical significant relationship between the independent variables in the model and the dependent variable at an alpha level of .10 and confidence level of 90 %.

R-Squared shows that 6.9 % of the dependent variable is explained by the independent variables, the coefficients serve to show that out of the three variables of innovation, proactiveness and risk the biggest contributor to model is proactiveness as it is the only variable that has a positive value and is also significant statistically at 1 %. Adjusted R-Squared was measured at 4 % for the model and as a whole the model is significant at 10 %.There is evidence to support the acceptance of the first alternative hypothesis.

4.4 Results pertaining to Hypothesis 2

Table 9 Regression Analysis Age and Entrepreneurial Orientation

Dependent Variable: EO_TOTAL
Method: Least Squares
Date: 11/23/12 Time: 08:25
Sample: 1 103
Included observations: 102

Variable	Coefficient	Std. Error	t-Statistic	Prob.
_18___24	2.586207	3.256843	0.794084	0.4290
_55___64	-0.154534	2.751175	-0.056170	0.9553
C	6.413793	1.550567	4.136417	0.0001

R-squared	0.007108	Mean dependent var	6.803922
Adjusted R-squared	-0.012951	S.D. dependent var	11.73304
S.E. of regression	11.80877	Akaike info criteri	7.804532
Sum squared resid	13805.25	Schwarz criterion	7.881737
Log likelihood	-395.0311	Hannan-Quinn criter	7.835795
F-statistic	0.354343	Durbin-Watson stat	2.044079
Prob(F-statistic)	0.702520		

The dummy variable model was developed to find the link between AGE and EO, the model shows that the coefficient that relates to age for the total model is 6.413793, however we can clearly see that for every ‘unit” the 18-24 year old category has a positive contribution of 2.5867207 while the 55-64 year old category shows a negative contribution of -0.154534 to the overall model.

The direction of the data suggests a relationship in the dummy variable model of age with entrepreneurial orientation, however the model does not allow for statistically significance testing to be done. The model suggests that the second

alternative hypothesis should be considered based on the strength of the empirical model alone as the 18-24 category adds an additional 2.5867207 to the bench mark score of 6.413793, showing a notable and measurable effect.

4.5 Results pertaining to Hypothesis 3

Table 10 Cross tabulation: Would you be willing to indicate the range that best describes your age? * How long has this business been paying salaries and wages for?

		How long has this business been paying salaries and wages for?			Total
		Less than 3 months	3 months to 3.5 years	More than 3.5 years	
Would you be willing to indicate the range that best describes your age?	18-24	10	8	0	18
		90.9%	34.8%	0.0%	17.5%
	25-34	1	7	7	15
		9.1%	30.4%	10.1%	14.6%
	35-44	0	1	13	14
		0.0%	4.3%	18.8%	13.6%
	45-54	0	2	21	23
		0.0%	8.7%	30.4%	22.3%
	55-64	0	5	22	27
		0.0%	21.7%	31.9%	26.2%
	65-99	0	0	6	6
		0.0%	0.0%	8.7%	5.8%
Total		11	23	69	103
		100.0%	100.0%	100.0%	100.0%

The cross tabulation of age categories with the length of time the firm has been in business shows that for businesses operating for less than 3 months the 18-24 year old category were involved in 91 % of the businesses and 25-34 year olds the remaining 9 %.

For businesses who have paid a salary or wage for 3 months to 3.5 years, 18-24 made up 34.8 % of respondents, with 25-34 at 30.4 %, 35-44 at 4.3 %, 45-54 at 8.7 % and 55-64 with 21.7 %. For businesses older than 3.5 years, the 18-24 year category was not represented; 25-34 had 10 %, 35-44 with 18.8 %, 45-54 with 30.4 %, 55-64 with 31.9 % and 65-99 with 8.7 %

Due to the limitation of the MS Excel and Eviews 7 used to analyse the multiple regressions and dummy variable relationships the Age and BP relationship was analysed sequentially in order to ensure that the results obtained where relevant. The researcher was unable to run the full set of age categories as variables in relation to the level of business performance.

Therefore the dummy variable regression model was run on (18-24), (25-34) and (35-44) year old age categories and (45-54) and (55-64) old age categories. The (65-99) group was not considered as this group made up the remaining 6 % of the overall sample and the size had no statistical significance. Further model was run to see the relationship between younger entrepreneurs in the 18-24 age category and those in the 55-64 year old category in order to see what impact age has on the performance of businesses, on our focus categories.

4.5.1 Regression Model BP1 for ages (18-24) (25-34) and (35-44)

Table 11 Regression Model BP1 for ages (18-24) (25-34) and (35-44)

```
============================================================
Dependent Variable: BP_FINAL
Method: Least Squares
Date: 11/23/12   Time: 08:20
Sample: 1 103
Included observations: 103
============================================================
     Variable      CoefficientStd. Errort-Statistic  Prob.
============================================================
     _18___24        110.3155   73.64087   1.498020   0.1373
     _25___34        6.315476   79.01742   0.079925   0.9365
     _35___44       -33.87500   81.21277  -0.417114   0.6775
         C           390.0179   36.31946   10.73854   0.0000
============================================================
R-squared            0.028000    Mean dependent var 405.6117
Adjusted R-squared  -0.001454    S.D. dependent var 271.5925
S.E. of regression   271.7899    Akaike info criteri14.08600
Sum squared resid    7313106.    Schwarz criterion  14.18832
Log likelihood      -721.4288    Hannan-Quinn criter14.12744
F-statistic          0.950630    Durbin-Watson stat 1.877771
Prob(F-statistic)    0.419288
============================================================
```

The total coefficient for the model showing the link between AGE and BP is 390.0179.We can see that AGE does have impact on BP in the following way:

with the age that contribute the "most" to business performance being the 18 - 24 age group, as the differential of 110.3155 affected by the this group has the most positive affect, followed by the 25-34 year old group which has a differential of 6.3155476. The age group that has the most negative effect therefore detracts the most from business performance is the 35-44 year old category shows a negative contribution of -33.87500 to the overall model.

4.5.2 Regression Model BP2 for ages (45-54) and (55-64)

Table 12 Regression Model BP2 for ages (45-54) and (55-64)

```
============================================================
Dependent Variable: BP_FINAL
Method: Least Squares
Date: 11/23/12   Time: 08:19
Sample: 1 103
Included observations: 103
============================================================
     Variable      CoefficientStd. Errort-Statistic  Prob.
============================================================
     _45___54       -73.87449   68.03487  -1.085833   0.2802
     _55___64       -46.87771   64.42461  -0.727637   0.4685
         C           434.3962   37.42732   11.60640   0.0000
============================================================
R-squared            0.013227    Mean dependent var 405.6117
Adjusted R-squared  -0.006509    S.D. dependent var 271.5925
S.E. of regression   272.4750    Akaike info criteri14.08166
Sum squared resid    7424261.    Schwarz criterion  14.15840
Log likelihood      -722.2057    Hannan-Quinn criter14.11275
F-statistic          0.670190    Durbin-Watson stat 1.850128
Prob(F-statistic)    0.513894
============================================================
```

The total coefficient for the model is 434.3962 and the age that contribute the "most" to business performance being the 55-64 age group, as the differential affected by this group has the least negative affect at -46.87771. The age group that has the most negative effect therefore detracts the most from business performance is the group of 45-54 year olds with -73.87449.

4.5.3 Regression Model BP3 for ages (18 -24) and (55-64)

Table 13 Regression Model BP3 for ages (18 -24) and (55-64)

```
============================================================
Dependent Variable: BP_FINAL
Method: Least Squares
Date: 11/23/12   Time: 08:20
Sample: 1 103
Included observations: 103
============================================================
     Variable      CoefficientStd. Errort-Statistic  Prob.
============================================================
     _18___24        115.6954   73.03768   1.584051   0.1163
     _55___64        2.880587   63.06727   0.045675   0.9637
         C           384.6379   35.54483   10.82121   0.0000
============================================================
R-squared            0.026031    Mean dependent var 405.6117
Adjusted R-squared   0.006552    S.D. dependent var 271.5925
S.E. of regression   270.7014    Akaike info criteri14.06860
Sum squared resid    7327922.    Schwarz criterion  14.14534
Log likelihood      -721.5331    Hannan-Quinn criter14.09969
F-statistic          1.336343    Durbin-Watson stat 1.875882
Prob(F-statistic)    0.267457
============================================================
```

The total coefficient for the model is 384.6379 and the age that has the highest contribution to business performance is the 18-24 year old age group, as the differential affected by this group has the most positive effect at 115.6954. This is followed by the contribution of the 55-64 year old age group whose differential is only 2.880587.

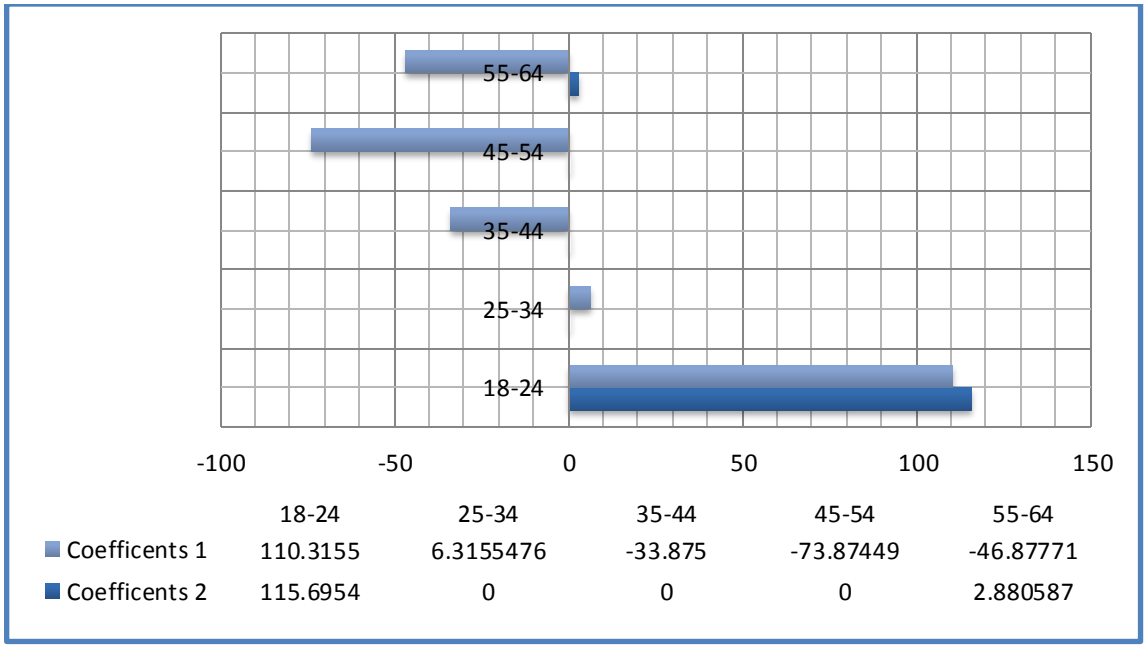


Figure 13 Summary of Coefficients: Regression Model BP1 (18-24) (25-34) and (35-44) with Regression Model BP2 for ages (45-54) and (55-64) compared to Regression Model BP3 (18-24) and (55-64)

The above figure helps clarify the effect that age has on business performance, the Regression Models BP1 for ages (18-24) (25-34) and (35-44) with Regression Model BP2 for ages (45-54) and (55-64) jointly represented by the legend Coefficients 1 and Regression Model BP3 for ages (18-24) and (55-64) represented by the legend Coefficients 2 shows the impact that 18-24 have on business performance for both models the coefficient is above 100.There is a difference when the 55-64 year old is compared between the two additional models however. The "older entrepreneurs" in the 55-64 year old category perform "satisfactorily" when compared to their peers in the 35-44 and 45-54 categories. This doesn't say much in this model as both of these peers did not have any positive contribution to their particular model groupings.

Even the 25-34 year old respondents did not have huge impact as their positive contribution was relatively small with a differential contribution of 6.3155476 to their respective model.

The conclusion regarding third hypothesis is influenced by the fact that Age has a noticeable impact on EO and BP as we can see that for all regressions run in particular Regression Models BP1 for ages (18-24) (25-34) and (35-44) with

Regression Model BP2 for ages (45-54) and (55-64) and Regression Model BP3 for ages (18-24) and (55-64) ,observations between “younger” and “older” entrepreneurs showed noticeable recordings that with increased age brings about diminished levels of performance and in some cases negative levels of performance.

The direction of the data suggests a relationship in the dummy variable regression models of age with business performance, however the models do not allow for statistically significance testing to be done. The model suggests that the third alternative hypothesis should be considered.

For the study it can be empirically be concluded that though age showed a favourable performance measure in business performance for younger respondents and less favourable performance in each subsequent age group, we cannot assume that there is a link though the results analysed show that there is a possible connection.

4.5 Conclusion

This chapter aimed to give a broad overview and presentation of data collected by using the survey questionnaires, the data pertaining to the demographics and the three components of Entrepreneurial Orientation (Innovation, proactiveness, and risk taking) and business performance was described. This information is instrumental in allowing the researcher to answer questions put forward in $\mathbf{H_1}$, $\mathbf{H_2}$ and $\mathbf{H_3}$. Final results for the multivariate regression analysis and dummy variable regression analysis show that for the entrepreneurial orientation (EO) and business performance (BP) relationship, proactivity of the entrepreneur had a major influence, while risk taking and innovation did not have a major effect on this relationship.

Other key finding of the research showed a suggestion of AGE having an inverse relationship with entrepreneurial orientation (EO) and business performance (BP) as well. The direction of the data suggests a relationship in the dummy variable regression model of age with entrepreneurial orientation,

age with business performance, however the model does not allow for statistically significance testing to be done. The models suggest that the second and third alternative hypothesis should be considered based on the empirical strength of the results obtained in this study.

CHAPTER 5: DISCUSSION OF THE RESULTS

5.1 Introduction

This chapter aims to discuss and explain the results of the analysed data presented in Chapter Four. The collected and analysed data will be explained from the demographic profile of all respondents through to the results pertaining to the hypotheses that were developed.

5.2 Demographic profile of respondents

A total of 170 questionnaires were printed out and distributed. This resulted in a final sample of 103 completed questionnaires, representing a completion rate of 60.5 %. According to Bailey (1982) 100 respondents is regarded as the minimum as there may be several subpopulations the researcher wishes to study or several variables to be controlled for. Other studies concerned with age have had response rates of 24.1 % Kautonen (2008) and 83.8 % Ruis and Scholman (2012). Those dealing with EO and BP like Dess and Robinson (1984) who had 93.1 % and Covin and Slevin (1989) who obtained a 28.1 % response rate.

5.2.1 Demographic data

This section discusses and explains the business information related to the firms, and the respondent's answers on behalf of the businesses

- **Industry Classification**

Financial intermediation, insurance, real estate and business services made up the largest percentage at 27.2 %, followed by wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants at 24.3 %, manufacturing at 17.5 % and community, social and personal services made up 14.6 %, transport, storage and communication 8.7

%, construction at 5%, agriculture, hunting, forestry and fishing at 1.9 %, mining and quarrying at 1 %. Though the industry classifications obtained are not directly comparable, the GEM Report 2010 for South Africa shows that for established business of which most of the sampled businesses belong to, most business activity took place in the business services (13.5 %), consumer services (39.4 %) and transformative sectors (42.9 %). The transformative sector of which construction is a part of has a lower representation in this research at 5 %.It must be noted that the study used a convenience sampling method and that furthermore the GEM Report 2010 captured some of the effects of the build-up leading to the 2010 FIFA world cup that saw increased activity in the transformative sector.

- **Ownership Structure**

The data obtained shows that a total of 62 % of the firms fell in the Sole Proprietorship and Closed Corporation categories. This is a study on small businesses so the figure is not surprising as these ownership structures are easier to incorporate.

- **Period of Operation**

In South Africa the GEM Report 2010 shows that the majority of early stage entrepreneurs make up 64.8 % of business entities and for established businesses this figure is 39.4 %. This is a relatively high sectorial distribution that is borne out by data collected as most established businesses in the survey had been in operation for a period of more than 3.5 years as reflected by 67 % of respondents

- **Firm Size**

A majority of the firms at 59 % had between 1 to 10 people working for them excluding the founders and 17 % of the firms employed 11 to 50 people. The remaining 23 % of firms employed more than 50 people. This is not entirely surprising as the majority of businesses are fairly small. A study by Kusumawhardhani, McCarthy and Perera (2009) in Indonesia showed that small firms had a noticeable contribution to a country's GDP. SMEs in Indonesia contributed to 53.6 % of the country's GDP in 2007. The GEM Report 2010 showed that for the same categories 44 % of respondents provided employment to between 1 to 10 people, with 33 % to 11-50 and 7 % with more than 50.

- **Age of Respondents**

According to the GEM reports (2009, 2010) in South African the prevalence of early stage entrepreneurial activity tends to be relatively low in the 18-24 age categories, it peaks in the 25-34 year old category and then declines with increase in age with the sharpest decrease after the age of 54. This observation was not necessarily borne out by this study as the highest number of respondents came from the 55-64 (26 %) age category this could in part be explained by the fact that convenience sampling was employed furthermore there is a mismatch of the gender balance as well with 65 % male and 35 % female respondents. It must be noted however that in a study by Weber and Schaper (2004) there was an observation that 31 % of small businesses where in fact started by those over the age of 50 so it should not be surprising that more people at this age are involved with business as many people are still productive and active at this age as well.

- **Gender of Respondents**

The gender composition of the sector reveals an imbalance between male and female with 65 % male and 35 % female respondents. This is similar to most studies on entrepreneurship that were highlighted in the GEM reports (2009, 2010) reports. The overall consensus is that different cultural norms and customs may well account for this variance. For the two reports from 2009 to 2010 South Africa saw the participation rates of men drop from 60 % in 2009 to 54 % in 2010. This was accompanied by a rise in the female participation rate from 40 % to 46 %. Given this rise it may be safe to say that the convenience sample may well have not accurately captured the gender balance of businesses.

- **Education Level of Respondents**

The highest level of education attained was recorded as follows, 73 % of respondents had a tertiary qualification, while 26 % had completed their secondary education, and none of the respondents selected the category “not completed secondary education”. It is unwise to make any inferences on educational levels that have been collected for this survey as the following factors need to be borne in mind: a convenience sample was used, the imbalance of males to females in the study is 65:35 and the number of White respondents is 54 % in a country that has a large Black African majority.

- **Population Group of Respondents**

The largest group of respondents by population group was White respondents who made up 54 % of the sample, followed by Black Africans at 26 %, Coloureds at 10 % and Indian/Asians made up the remaining 8 % of respondents.

This data that was collected using a convenience sample differs greatly from the actual prevalence of entrepreneurship in the population. First of all Black Africans make up 79.2 % of the overall population in South Africa according to the countries GEM Report 2010 and the prevalence in early stage

entrepreneurial activity based on population group was 74.2 % Black Africans, 7.8 % Coloured, 5 % Indian / Asian and 13 % White.

Census (2011) shows that the Black African population group accounts for 78,2% of the working age population while the White population accounts for 9,3%, the coloured population for 9,1% and the Indian/Asian population for 2,8%. One would expect that more respondents even those collected via a convenience sample would have a higher percentage of Black African respondents.

However, in terms of the labour force participation rate in South Africa the reverse is true as Black Africans have the lowest participation rates while the White population group has the highest (Census 2011).

5.3 Discussion pertaining to Hypothesis 1

The results obtained are in contrast to Yang (2008) who found positive correlations for all the determinants of Entrepreneurial Orientation. However, risk taking was calculated to be a poor predictor of business performance after a regression analysis was run. The fact that risk had no significant bearing is not surprising as findings by Drucker (1985) show that successful entrepreneurs are typically not prone to take risks they rather minimise risk while they seek to understand and exploit opportunities instead.

These results support the findings of Lumpkin and Dess (1996) that were of the opinion that entrepreneurial orientation dimensions can vary independently from one another depending on the context of the particular interactions that occur.

The literature review also highlights work by Lumpkin and Dess (2001) who cautions that several factors often work together to enhance a firms entrepreneurial orientation. Firms that are only strong in a few aspects of EO can be very successful. This is in line with work by Stetz et al (2000) which found that the individual dimensions of EO were more robust predictors of firm growth than a summated one-dimensional EO construct.

Other studies by (Covin and Slevin 1991; Lumpkin and Dess 1996; Chow 2006; Poon, Ainuddin and Junit 2006) were also able to support the assertion that entrepreneurial orientation has a noticeable impact on the performance of entrepreneur led firms. The studies above are also important as they highlight that the EO construct can be generalizable outside of America as the study from Poon et al (2006) is Malaysian while the Chow (2006) study was conducted on Chinese firms. Arbaugh et al (2009) found that EO is globally generalizable to developed countries, and it can possibly be used to explain behaviours in developing countries as well.

Though most of the studies that were reviewed and supported in the literature review showed a positive link between the level of EO and BP Ezirim and Nwokah (2009) found that there was a weak relationship in the Nigerian Non-Oil sector, perhaps the linkage of EO and BP has varying degrees of influence based on the sector.

The information garnered from the model as well as previous supporting evidence from prior studies allows us to confidently accept the alternative hypothesis that was put forward on the strength of the empirical and statistical results.

5.4 Discussion pertaining to Hypothesis 2

The direction of the data suggests a relationship in the dummy variable regression model of AGE with entrepreneurial orientation (EO).The dummy variable regression model shows that the level of EO is higher in younger entrepreneurs than in older entrepreneurs however the model does not allow for statistically significance testing to be done. The model suggests that the second alternative hypothesis should be considered as the analysis of the empirical data shows a clear relationship.

These observation may well be different had more observations been collected in the study as the 18-24 year old category consists of 18 respondents and the 55-64 year old group contains 27 respondents. Bailey (1982) reflects on the

fact that most researchers regard 100 respondents as the minimum as there may be several subpopulations the researcher wishes to study or several variables to be controlled for. Though the study did reach this criterion the spread of respondents in each age group cannot be considered optimal as sub populations that may have yielded interesting information within each age category were not discovered or highlighted.

Ruis and Scholman (2012) their investigation of the relationship between the age of the entrepreneur with the objectives, competitive strategy and performance of the firm did not find a clear sign of an age effect regarding objectives. However, a study by Chow (2006) did find a marginal positive effect of age on the entrepreneurial orientation concept.

The 31 % of small businesses that were started by older entrepreneurs in Australia that were observed by Weber and Schaper's (2004) study provided evidence of the importance that this age class played in contributing economically. The study was also supported by results from the Australian Bureau of Statistics Report (2001) and the countries GEM Report (2002). Entrepreneurship Orientation according Covin and Slevin (1989) reflects an enterprise's proclivity to engage in innovative, proactive, risk-taking strategic activities. The Australian studies show that more members of the older population were willing to take the strategic risk of starting up their own enterprises.

These results differ from later studies concerning older entrepreneurs like that of Rotefoss and Kolvereid (2005) that showed competencies that are essential for entrepreneurship increase with age while intentions are decreased. Motivations to actually start up a firm are lessened in older people. This may in part explain the reason why, in this study the 18-24 year old category had a higher level of EO compared to the 55-64 year old category.

5.5 Discussion pertaining to Hypothesis 3

The research showed a suggestion of AGE having an inverse relationship with business performance (BP) as well. The direction of the data suggests a relationship in the dummy variable regression model of age with business performance, however the model does not allow for statistically significance testing to be done. The models suggest that the third alternative hypothesis should be considered.

Furthermore study confirms work by Kautonen (2008) who concluded more age related research was required in order to find out more accurately how older entrepreneurs make a contribution even as his study highlighted the fact that a number of firms were founded by individuals over the age of 50 years old and therefore older entrepreneurs should not be treated as a marginal issue.

In this study an interesting fact was the 55-64 and 65-99 year old age groups made a 32 % contribution to the respondent population, this is a figure that must be put into perspective as a convenience sample was utilised and there was a male and female imbalance of 65 % and 35 %. The population grouping also showed that more White people were represented in this study than would be accounted for the large Black African population in South Africa. The Census (2011) confirmed that the population of Black Africans slightly increased to 79, 2 % while the share of the Indian/Asian population remained constant. The percentage of the White population has declined slightly from 10.9 % in 1996 to 9.6 % in 2001 and 8.7 % in 2011.

Cressy and Storey (1995) suggest that the survival rates of business by older entrepreneurs are higher than those by younger entrepreneurs; in order for a business to survive long it has to perform well and survive. In the survey most firms had been in operation for a period of more than 3.5 years as reflected by 67 % of respondents.

The actual tested observations between “younger” and “older” entrepreneurs showed a noticeable recording that with increased age brings about diminished

levels of performance and in some cases negative levels of performance. This is similar to literature reviewed in a study by The International Labour Organization (2006) showing that young people aged 18-34 were most likely to become active entrepreneurs, as one-third of all successful entrepreneurs emanate from this group.

Ruis and Scholman (2012) in their investigation of the relationship between the age of the entrepreneur with the objectives, competitive strategy and performance of the firm did not find a clear sign of an age effect regarding objectives. However, the competitive strategy of the firm showed a strong negative relation between age and the innovation strategy, performance results showed a negative relation with age as well. As individuals aged the results and impacts on business performance were negligible or negative.

Covered earlier on was the importance of the EO and BP relationship to a firm that was confirmed in several studies including that by Dess and Lumpkin (2005).One of the antecedents that affected business performance in the EO and BP relationship was risk taking.

Risk taking involves taking chances and it is not gambling as the methods used by companies to strengthen their competitive positions via risk taking includes researching and assessing risk factors to minimise uncertainty and using tried and tested true practices and techniques that have worked in other domains.

On the individual level, personal risk taking involves the positions an executive assumes in favour of particular strategic decisions that may have an impact on the career of the individual.

The total coefficient for the model showing the relationship of the “younger” and “older” entrepreneurs is 384.6379 and the age that has the highest contribution to business performance is the 18-24 year old age group, as the differential affected by this group has the most positive effect at 115.6954. This is followed by the contribution of the 55-64 year old age group whose differential is only 2.880587. Perhaps younger people have a higher risk tolerance than the older entrepreneurs as suggested by Levesque and Minniti (2006) who concluded

that individuals' experience an age effect in that barring all things being equal, as individuals age the relative return to entrepreneurship is lessened.

5.6 Conclusion

The chapter aimed to explain the results pertaining to the hypotheses that were developed. The first alternative hypothesis was proven to be statistically significant and accepted.

The model strongly suggests that the second and third alternative hypothesis should be considered based on the empirical evidence. The dummy variable regression model however does not allow for statistical significance testing.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATION

6.1 Introduction

This chapter aims to give an overview of the results of the study which were formulated from the problem statement in Chapter One, the literature review in Chapter Two, the research methodology in Chapter Three and the presentation and discussion of results in Chapter Four and Five. Amongst other things a summary of the final findings as well as highlights of the final conclusions are discussed. Specific recommendations for the stakeholders who will be impacted by the particular study are also put forward. Finally, suggestions for further research are also put forward as well.

6.2 Conclusions of the study

Entrepreneurial Orientation as put forward by (Miller 1983; Covin and Slevin 1989; Dess and Lumpkin 2005) has been found to be a key determinant of a firms performance no matter what approach has been utilised. This performance may take different forms and has been given varied meanings as there is no consensus on the measures of performance to be utilised.

The performance construct is multidimensional in nature, due to the fact that during entrepreneurship activity or processes a favourable outcome on one dimension may lead to a negative or unfavourable outcome on another. The use of self-reports to gather business performance data and the results have proven to be reliable as in this study and that by Knight (2000). Furthermore, work by Wiklund (1999) suggested that performance measures should include both growth and performance measures in order to have a higher level of reliability when measuring the performance construct.

South Africa as a developing country increasingly depends on entrepreneurship as one of the ways in which the problems caused by high employment and its associated effects can be tackled while stimulating economic growth in an economy and therefore business performance.This study, completed by means of a convenience sample, aimed to analyse critically the role an entrepreneurs age particularly younger and older entrepreneurs has on the notions of entrepreneurial orientation (EO) and business performance (BP) in a South African context.

The study found that more than other factors the proactivity of the entrepreneur influenced the entrepreneurial orientation (EO) relationship, while risk taking and innovation did not have a major effect on this relationship and subsequent performance of the business (BP). Other studies by (Covin and Slevin 1991; Lumpkin and Dess 1996; Chow 2006; Poon, Ainuddin and Junit 2006) were also able to support the assertion that entrepreneurial orientation has a noticeable impact on the business performance of firms.

For the part of the study on the link of age with entrepreneurial orientation the direction of the data suggests a relationship as the model shows that the level of EO is higher in younger entrepreneurs than in older entrepreneurs, based on our study and the results showing that for BP the proactivity variable played the most significant role, we can reflect that in this study younger entrepreneurs are perhaps more proactive. However, the dummy variable regression model does not allow for statistically significance testing to be done. Ruis and Scholman (2012) in their investigation of the relationship between the age of the entrepreneur with the objectives, competitive strategy and performance of the firm did not find a clear sign of an age effect regarding objectives. However, a study by Chow (2006) did find a marginal positive effect of age on the entrepreneurial orientation concept.

The actual tested observations between “younger” and “older” entrepreneurs showed a noticeable recording that with increased age brings about diminished levels of performance and in some cases negative levels of performance. This is similar to literature reviewed in a study by Ruis and Scholman (2012) in their

investigation of the relationship between the age of the entrepreneur with the objectives, competitive strategy and performance of the firm did not find a clear sign of an age effect regarding objectives. However, the competitive strategy of the firm showed a strong negative relation between age and the innovation strategy, performance results showed a negative relation with age as well. As individuals aged the results and impacts on business performance were negligible or negative. This is in contrast to a study by Prihatin Dwi Riyanti (2004) who showed that chronological age and entrepreneurial age significantly influences business achievement.

The results of our model analysed show that there is a possible connection between the age of an entrepreneur and business performance, this study also confirms work by Kautonen (2008) who concluded more age related research was required in order to find out more accurately how older entrepreneurs make a contribution.

6.3 Recommendations

The study aimed to add to entrepreneurship literature concerning South Africa by building on the work of other researchers such as (Covin and Slevin 1989, 1991; Lumpkin and Dess 1996, 2001) by demonstrating a link between the components of entrepreneurship and performance. This was met as this link was established allowing academics to use the findings of the study to build other research findings based on the findings and challenges presented in this research.

Another interesting aspect of the study was to see if results of the study could also be obtained in South Africa and this was achieved as the EO and BP relationship was confirmed. This research therefore adds value to entrepreneurs, future researchers and policy makers.

The study also adds to research on entrepreneurship that is not heavily biased towards the North American market that is prevalent in most literature on the EO and BP construct.

Some limitations were noted which are relevant to this current study, though the study aim was on firm level behaviour which is based on responses of a single informant from each firm. This single informant may best be able to provide and asses the overall condition of the firm there is a risk that certain aspects may be overestimated or underestimated, future research must find way of getting richer and more objective data.

It is strongly recommended that further research be carried out in the field on entrepreneurship and the related effects of age at all levels. In the research carried out by Prihatin Dwi Riyanti (2004), Chow (2006), Levesque and Minniti (2006), Kautonen (2008), Ruis and Scholman (2012) which considered the effects of age , one of the major and consistent underlying themes was centred on the fact that reliable and detailed information was not readily available regarding the age effects. There is limited amount of literature that currently explores the subject in depth.

6.4 Suggestions for further research

Though an understanding of the link between entrepreneurial orientation and business performance, amongst younger and older entrepreneurs in South Africa was explored it would be important to find out if the EO and BP relationship would be strengthened by a more detailed and larger study that may yield more sub-populations in the data. This would be important as in this study only the proactivity component influenced the EO – BP relationship, a larger study may help clarify whether innovation and risk taking will play a more prominent part.

Alternatively a similar study in other South African provinces or major cities can be carried out. This can be carried out using the same methodology and measurement instrument.

Age was a major component of the research carried out, and future research should perhaps consider weighting the contribution made by each age category that is involved in some way. Comparing 18-24 year olds with 55-64 year olds

without taking into consideration their weighting with regard to their prevalence in the population may skew results.

The same rational for a larger study to test the AGE – BP relationship as regards to EO should also be considered as results analysed show that there is a possible connection that could not be substantiated statistically.

The research also used several measures to capture performance information. The rational was to ensure that the subjective measures were accurately measured. It would be interesting to find out if a smaller set of performance measures would yield accurate information in this regard. A study may also be performed on firms that report only objective finance data that can be easily compared, perhaps in a single industry as a control measure.

The study carried out showed that there is a need to carry out more empirical research on entrepreneurship in general as well as that which is concerned with understanding the phenomenon of age and how it interacts in either hindering or promoting the cause of entrepreneurship and the quality of entrepreneurship as there is limited amount of literature that currently explores the subject in depth.

REFERENCES

Aldrich, H. (2000) Learning Together: National Differences in Entrepreneurship Research. In D.L Sexton and H. Landstrom (eds.), *The Blackwell Handbook of Entrepreneurship*, Blackwell: Oxford, pp. 5-25.

Arbaugh, J., Cox, L. and Camp, S. (2009) Is Entrepreneurial Orientation a Global Construct? A Multi-Country Study of Entrepreneurial Orientation, Growth Strategy, and Performance, *The Journal of Business Inquiry*, 8(1), pp. 12-25.

Australian Bureau of Statistics (2001), *Characteristics of Small Business*, Australia Cat. 8127.0, ABS, Canberra.

Bailey, K. (1982) *Methods of Social Research, Second Edition*, The Free Press, New York.

Bryman, A. and Bell, E. (2003) *Business Research Methods*, Oxford University Press.

Callaghan, C. and 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), pp. 28-48.

Census (2011) *Statistical release – P0301.4 / Statistics South Africa*. Statistics South Africa, Pretoria.

Chow, I. (2006) The Relationship Between Entrepreneurial Orientation And Firm Performance in China, *SAM Advanced Management Journal*, 71(3), pp. 11–20.

Cooper, D. and Schindler, P. (1998) *Business Research Methods*, Irwin/McGraw-Hill, Boston.

Covin, J. and Slevin, D. (1989) Strategic Management of Small Firms in Hostile and Benign Environments, *Strategic Management Journal*, 10, pp. 75-87.

Covin, J. and Slevin, D. (1991) A Conceptual Model of Entrepreneurship as Firm Behaviour, *Entrepreneurship Theory and Practice*, 16, pp. 7-24.

Cressy, R. and Storey, D (1995) *New Firms and Their Banks*, Warwick University Business School and Nat West.

Curran, J. and Blackburn, R. (2001) Older People and the Enterprise Society: Age and Self-Employment Propensities, *Work, Employment and Society*, 15, pp. 889-902.

Dess, G. and Lumpkin, G. (2005) The Role Of Entrepreneurial Orientation In Stimulating Effective Corporate Entrepreneurship, *Academy of Management Executive*, 19(1), pp. 147-156.

Dess, G. and Robinson, R. (1984) Measuring Organizational Performance in the Absence of Objective Measure: The Case of the Privately-Held Firm and Conglomerate Business Unit, *Strategic Management Journal*, 5(3), pp. 256-273.

Drucker, P. (1985) *Innovation and Entrepreneurship*, Harper and Row, New York.

Dyduch, W. (2008) Corporate Entrepreneurship Measurement for Improving Organizational Performance, *Journal of Economics & Management*, 4, pp. 16-40.

Easterby-Smith, M., Thorpe, R. and Jackson, P. (2008) *Management Research*, Third Edition, SAGE Publications Ltd., London.

Ezirim, A. and Nwokah, N. (2009) Firms Entrepreneurial Orientation and Export Marketing Performance In The Nigerian Non-Oil Sector, *European Journal of Scientific Research*, 35(3), pp. 318-336.

Gupta, A. and Govindarajan, V. (1984) Business Unit Strategy, Managerial Characteristics, and Business Unit Effectiveness at Strategy Implementation, *Academy of Management Journal*, 27, 1984, pp. 25-41.

Guth, W. and Ginsberg, A. (1990) Guest Editors Introduction: Corporate Entrepreneurship, *Strategic Management Journal*, 11(5), pp. 5-15.

Herrington, M., Kew, J. and Kew, P. (2009) *Tracking Entrepreneurship in South Africa: a GEM Perspective*, Graduate School of Business, University of Cape Town.

Herrington, M., Kew, J. and Kew, P. (2010) *Global Entrepreneurship Monitor: 2010 South African Report*, Graduate School of Business, University of Cape Town.

Hindle, K. and Rushworth, S. (2002) *SensisTM GEM Australia: 2002*, Swinburne University Press, Melbourne.

Hyman, L., Lamb, J., and Bulmer, M. (2006) The Use of Pre-Existing Survey Questions: Implications for Data Quality, *European Conference on Quality in Survey Statistics*, Cardiff, UK, pp. 1-8

International Labour Office (2010) *A Skilled Workforce for Strong, Sustainable and Balanced Growth: A G20 Training Strategy*, International Labour Office, Geneva.

International Labour Organization (2006) Global Employment Trends For Youth, International Labour Organization, Geneva.

Kautonen, T. (2008) Understanding the Older Entrepreneur: Comparing Third Age and Prime Age Entrepreneurs in Finland, *International Journal of Business Science and Applied Management*, 3(3), pp. 3-13.

Kent, R. (1993) *Marketing Research in Action*, Routledge, London. Pp. 165-167.

Kirchhoff, B. (1977) Organization Effectiveness Measurement and Policy Research, *Academy of Management Review*, 2, pp. 347-355.

Knight, G. (2000) Entrepreneurship and Marketing Strategy: The SME under Globalization, *Journal of International Marketing*, 8(2), pp. 12-32.

Kreiser, P., Marino, L., and Weaver, K. (2002) Assessing the Psychometric Properties of the Entrepreneurial Orientation Scale: A Multi-Country Analysis, *Entrepreneurship Theory and Practice*, 26(4), pp. 71-94.

Kusumawhardhani, A, McCarthy, G. and Perera, N. (2009) Framework of Entrepreneurial Orientation and Networking: A Study of SMEs Performance in A Developing Country. *Proceedings of the Australian and New Zealand Academy of Management Conference*. Adelaide, Australia: Australia and New Zealand Academy of Management. pp. 1-16

Levesque, M and Minniti, M. (2006) The Effect of Aging on Entrepreneurial Behaviour, *Journal of Business Venturing*, 21(2), pp. 177-194.

Lieberman, M. and Montgomery, D. (1988) First Mover Advantages, *Strategic Management Journal*, 9, pp. 41-58.

Luck, D., and Rubin, S. (1987) *Marketing Research*, Prentice Hall, New Jersey. pp. 515.

Lumpkin, G. and Dess, G. (1996) Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance, *Academy of Management Journal*, 21, pp. 135-172.

Lumpkin, G. and Dess, G. (2001) Linking Two Dimension of Entrepreneurial Orientation to Firm Performance: The Moderating Role of Environment and Industry Life Cycle, *Journal of Business Venturing*, 16, pp. 429-451

Malik, R. (1997) *Chinese Entrepreneurs in The economic Development of China*, Greenwood Publishing Group, Inc., Westport CT 06881

Miller, D. (1983) The Correlates of Entrepreneurship in Three Types Of Firms, *Management Science*, 29, pp. 770-791.

Miller, D. (1988) Relating Porter's Business Strategies to Environment and Structure: Analysis and Performance Implications, *Academy of Management Journal*, 31, pp. 280-308.

Miller, D. and Friesen, P. (1983) Strategy-Making and Environment: The Third Link, *Management Journal*, 4, pp. 221-235.

Morris, M. (1998) *Entrepreneurial Intensity: Sustainable Advantage for Individuals, Organizations and Societas*, Quorum Books, Westport

Morris, M. and Kuratko, D. (2002) *Corporate Entrepreneurship: Entrepreneurial Development within Organization*, Harcourt Collage Publishers, Orlando.

Morrow, S., Panday, S. and Richter, L. (2005) *Where we're at and where we're going: Young people in South Africa 2005*, Umsobomvu Youth Fund, Johannesburg.

Nadler, D. (1977) *Feedback and Organizational Development – Using Data Based Methods*, Addison-Wesley Publishing Company, Reading, Massachusetts.

Naman, J. and Slevin, D. (1993) Entrepreneurship and the Concept of Fit: A Model and Empirical Tests, *Strategic Management Journal*, 14, pp. 137-153.

Neuman, W. (2011) *Social Research Methods – Qualitative and Quantitative Approaches*, Sixth Edition, Pearson, New York.

Nunally, J. (1978) *Psychometric Theory*, McGraw-Hill, New York.

OECD (2008) *Measuring Entrepreneurship - A Digest of Indicators, OECD-Eurostat Entrepreneurship Indicators Program*, OECD Statistics Directorate, Paris.

OECD (2010) *Economic Survey of South Africa.*

Peng, M. (2001) How Entrepreneurs Create Wealth In Transition Economies, *Academy Of Management Executive*, 15(1), pp. 95-110.

Pfefer, J. (1998) *The Human Equation: Build-up Profits By Putting People First*, Harvard Business School Press, Cambridge.

Poon, J., Azimah, R. and Junit, S. (2006) Effects of Self Concept Traits and Entrepreneurial Orientation on Firm Performance, *International Small Business Journal*, 24(1), pp. 61-82.

Prihatin Dwi Riyanti, B. (2004). Factors influencing the success of small-scale entrepreneurs in Indonesia. In B. N. Setiadi, A. Supratiknya, W. J. Lonner, & Y. H. Poortinga (Eds.) *On-going themes in psychology and culture*, Online Edition, FL: International Association for Cross-Cultural Psychology, Melbourne.

Quince, T. and Whitaker, H. (2003) Entrepreneurial Orientation and Entrepreneurs Intensions and Objective, *ESRC Centre for Business Research*, University of Cambridge, Working Paper No. 271.

Quinton, S. and Smallbone, T. (2006) *Postgraduate Research A Critical Guide*, SAGE Publications, London.

Rauch, A., Wiklund, J., Lumpkin, G. and Frese, M. (2004a) Entrepreneurial Orientation and Business Performance: Cumulative Empirical Evidence, *In Babson College-Kaufmann Foundation Entrepreneurship Research Conference*, Babson College, Wellesley, MA.

Rauch, A., Wiklund, J., Lumpkin, G. and Frese, M. (2004b) Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future, *Entrepreneurship Theory and Practice* (Post Review Version)

Republic Of South Africa (2009) National Youth Development Agency Act No.54 of 2008, *Government Gazette Number 31780*, The Government Printing Works Cape Town

Rosenberg, M. (1968) *The Logic of Survey Analysis*, Basic Books, New York.

Rotefoss, B. and Kolvereid, L. (2005) Aspiring, Nascent and Fledgling Entrepreneurs: An Investigation of the Business Start-Up Process, *Entrepreneurship and Regional Development*, 17, pp. 109-127.

Ruis, A. and Scholman, G. (2012) *Ageing and entrepreneurship - An empirical study of the relationship between entrepreneurial age and objectives, strategy and performance*, EIM Business and Policy Research, The Netherlands.

Schumpeter, J. (1942) *Capitalism, Socialism, and Democracy*, Harper & Brothers, New York.

Seymour, N. (2002) *Starting up after 50*, http://www.eric.ed.gov/PDFS/ED476585.pdf [Accessed 13 February, 2012]

Shane, S. (2003) *A General Theory Of Entrepreneurship*, The Individual-Opportunity Nexus, Edward Elgar, Cheltenham, UK.

Singh, G. and DeNoble, A. (2003) Early Retirees as the Next Generation of Entrepreneurs, *Entrepreneurship Theory and Practice*, 23(3), pp. 207-226.

Smith, J. (2011) *Connecting Young South Africans to Opportunity; Literature Review and Strategy*, The DG Murray Trust, South Africa.

Stam, W. and Elfring, T. (2008) Entrepreneurial Orientation and New Venture Performance: The Moderating Role of Intra and Extraindustry Social Capital, *Academy of Management Journal*, 51(1), pp. 97-111.

Stangler, D. (2009) *The Coming Entrepreneurship Boom*, Kansas City, MO: Ewing Marion Kauffman Foundation. Retrieved from http://www.kauffman.org/uploadedFiles/the-coming-entrepreneurial-boom.pdf

Statistics South Africa (2010) *Mid-Year Population Estimates*. www.statsa.gov.za

Statistics South Africa (2011) *Quarterly Labour Force Survey – Quarter 3*. www.statsa.gov.za

Statistics South Africa (2011) *Quarterly Labour Force Survey – Quarter 4*. www.statsa.gov.za

Stetz, P., Howell, R., Stewart, A., Blair, J. and Fottler, M. (2000) Multidimensionality Of Entrepreneurial Firm-Level Processes: Do The Dimensions Covary? *In Frontiers of Entrepreneurial Research*, Babson College, Wellesley, MA.

Stevenson, H. and Jarillo, J. (2001) A Paradigm of Entrepreneurship: Entrepreneurship Management, *Strategic Management Journal*, 22, pp. 953-968.

Tyrowicz, J. and Nestorowicz, J. (2010), *Cynicism Starts Young: Age and Entrepreneurship Over Transition*, No 2010-02, Working Papers, Faculty of Economic Sciences, University of Warsaw.

Venkataraman, S. (1997) The Distinctive Domain of Entrepreneurship Research, In Katz, J. (ed.), *Advances In Entrepreneurship, Firm Emergence And Growth*, JAI Press, Greenwich, pp. 119-138.

Von Broemsen, M., Wood, E. and Herrington, M. (2005) *Global Entrepreneurship Monitor: 2005 South African Executive Report*, Graduate School of Business, University of Cape Town

Weber, P. and Schaper, M. (2004) Understanding the Grey Entrepreneur, *Journal of Enterprising Culture*, 12(2), pp. 147-164.

Widd, J., and Diggines, C. (2009) *Marketing Research*, Juta and Company Ltd, Cape Town

Wiklund, J. (1999) The Sustainability of the Entrepreneurial Orientation-Performance Relationship, *Entrepreneurship Theory and Practice*, 24(1), pp. 37-48.

Yang, C. (2008) The Relationship Among leadership Styles, Entrepreneurial Orientation, and Business Performance, *Managing Global Transitions*, 6(3), pp. 257-275.

Youth Development Network (2004) South Africa Addressing Youth Unemployment: The Most Pressing Post-Apartheid Development Challenge For Youth, Prepared For An Expert Group Meeting In Nairobi, Kenya.

Zahra, S. (1993) A Conceptual Model Of Entrepreneurship As Firm Behaviour: A Critique And Extension, *Entrepreneurship: Theory and Practice*, 17(4), pp. 5-21.

Zikmund, W. (1999) *Exploring Marketing Research*, The Dryden Press, Chicago, pp. 686-687

APPENDIX A

Letter to Respondents

Dear Respondent

I am completing a Master's Degree at The University of Witwatersrand, Johannesburg Business School (WBS). My thesis is on, Entrepreneurial Orientation, Age of Owner and Small Business Performance in Johannesburg. Towards gathering data on the subject I would be grateful if you could take about 10 minutes of your time to answer my online questionnaire.

The questionnaire will not be gathering any personal data only information related to the study. Confidentiality will be observed throughout the research process and the final report will be for academic purposes, and it will be made available to you on request for your benefit.

I will be available at all times to answer your questions.

Thank you for your kind assistance.

Yours sincerely,

Mr Chiku Kaunda

Cell: + 27 73 407 6073

Email: chicokaunda@aim.com

Actual Research Instrument

Entrepreneurial Orientation, Age of Owner and Small Business Performance in Johannesburg

The following questions will give you an opportunity to tell us more about your business.
Please answer openly and truthfully.

(Select the number that represents how you feel with 1 = Lowest and 7 = Highest)

In general, the top managers of my firm favour…

	1	2	3	4	5	6	7
A strong emphasis on the marketing of tried and true products or services	❍	❍	❍	❍	❍	❍	❍
A strong emphasis on R&D, technological leadership, and innovations	❍	❍	❍	❍	❍	❍	❍

How many new lines of products or services has your firm marketed in the past 5 years?

	1	2	3	4	5	6	7
No new lines of products or services	❍	❍	❍	❍	❍	❍	❍
Very many new lines of products or services	❍	❍	❍	❍	❍	❍	❍
Changes in product or service lines have been mostly of a minor nature	❍	❍	❍	❍	❍	❍	❍
Changes in product or service lines have usually been quite dramatic	❍	❍	❍	❍	❍	❍	❍

In dealing with competitors, my firm…

	1	2	3	4	5	6	7
Typically responds to actions which competitors initiate	❍	❍	❍	❍	❍	❍	❍
Typically initiates actions which competitors then respond to	❍	❍	❍	❍	❍	❍	❍
Is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc.	❍	❍	❍	❍	❍	❍	❍
Is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.	❍	❍	❍	❍	❍	❍	❍
Typically seeks to avoid competitive clashes, preferring a 'live-and-let-live' posture	❍	❍	❍	❍	❍	❍	❍
Typically adopts a very competitive, 'undo the-competitors' posture	❍	❍	❍	❍	❍	❍	❍

In general, the top managers of my firm have…

	1	2	3	4	5	6	7
A strong proclivity for low risk projects (with normal and certain rates of return)	❍	❍	❍	❍	❍	❍	❍
A strong proclivity for high risk projects (with chances of very high returns)	❍	❍	❍	❍	❍	❍	❍

In general, the top managers of my firm believe that…

	1	2	3	4	5	6	7
Owing to the nature of the environment, it is best to explore it gradually via incremental behaviour	❍	❍	❍	❍	❍	❍	❍
Owing to the nature of the environment bold, wide ranging acts are necessary to achieve the firms objectives	❍	❍	❍	❍	❍	❍	❍

When confronted with decision making situations involving uncertainty, my firm…

	1	2	3	4	5	6	7
Owing to the nature of the environment, it is best to explore it gradually via incremental behaviour	❍	❍	❍	❍	❍	❍	❍
Owing to the nature of the environment bold, wide ranging acts are necessary to achieve the firms objectives	❍	❍	❍	❍	❍	❍	❍

Business Performance Part 1

Please indicate the degree of importance that the firm attaches to the following criteria:

Sales Level
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Sales Growth Rate
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Cash Flow
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Return on Shareholder Equity (ROE)
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Gross Profit Margin
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Net Profit from Operations
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Profit to Sale Ratio
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Return on Investment (ROI)
- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Ability to Fund Business Growth from Profits

- ❍ Not at all Important
- ❍ Very Unimportant
- ❍ Neither Important nor Unimportant
- ❍ Very Important
- ❍ Extremely Important

Business Performance Part 2

Please indicate the extent to which your firm's top managers are currently satisfied with the firm's performance.

Sales Level

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Sales Growth Rate

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Cash Flow

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Return on Shareholder Equity (ROE)

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Gross Profit Margin

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Net Profit from Operations

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Profit to Sale Ratio

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Return on Investment (ROI)

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Ability to Fund Business Growth from Profits

- ❍ Very Dissatisfied
- ❍ Dissatisfied
- ❍ Somewhat Dissatisfied
- ❍ Neutral
- ❍ Somewhat Satisfied
- ❍ Satisfied
- ❍ Very Satisfied

Demographic Data

The following questions are for statistical purposes only. They are solely to help us analyse the data from the survey. In no way will you be identified with your answers.

What industry best describes the classification of your business?

- ❍ Agriculture, Hunting, Forestry and Fishing
- ❍ Mining and Quarrying
- ❍ Manufacturing
- ❍ Electricity, Gas And Water Supply
- ❍ Construction
- ❍ Wholesale and Retail Trade; Repair Of Motor Vehicles, Motor Cycles and Personal And Household Goods; Hotels and Restaurants
- ❍ Transport, Storage and Communication
- ❍ Financial Inter-mediation, Insurance, Real Estate and Business Services
- ❍ Community, Social and Personal Services

What form of ownership structure best describes the classification of your business?

- ❍ Sole Proprietorship (1 owner)
- ❍ Closed Corporation (1 to 10 owners)
- ❍ Partnership (2 to 20 owners)
- ❍ Private Company (1 to 50 owners)
- ❍ Other

How long has this business been paying salaries and wages for?

- ❍ Less than 3 months
- ❍ 3 months to 3.5 years
- ❍ More than 3.5 years

Not counting the owners, how many people are currently working for this business?

- ❍ 1-10
- ❍ 11-50
- ❍ More than 50

Would you be willing to indicate the range that best describes your age?

- ❍ Below 18
- ❍ 18-24
- ❍ 25-34
- ❍ 35-44
- ❍ 45-54
- ❍ 55-64
- ❍ 65-99

What is your gender?

- ❍ Male
- ❍ Female

What is the highest level of education you have completed?

- ❍ Not Completed Secondary Education
- ❍ Completed Secondary Education
- ❍ Tertiary Education

Would you be willing to indicate the population group that best describes you?

- ❍ Black African
- ❍ Coloured
- ❍ Indian / Asian
- ❍ White

Thank you for taking the time to complete this survey.

APPENDIX B

Consistency Matrix

An understanding of the link between entrepreneurial orientation and business performance, amongst younger and older entrepre neurs in South Africa needs to be explored.					
Sub-problem	Literature Review	Hypotheses or Propositions or Research questions	Source of data	Type of data	Analysis
The first sub-problem seeks to understand the link between entrepreneurial orientation and business performance of firms in South Africa.	Covin and Slevin (1989) Covin and Slevin (1991) Dess and Robinson (1984) Dess and Lumpkin (2005) Gupta and Govindarajan (1984) Knight (2000) Lumpkin and Dess (1996) Lumpkin and Dess (2001) Miller (1984) Dyduch (2008) Rauch, Wiklund, Lumpkin and Frese (2004a) Rauch, Wiklund, Lumpkin and Frese (2004b) Yang (2008)	H1 To what extent does Age impact on the relationship between Entrepreneurial Orientation (innovation, proactiveness, and risk taking) and Business Performance of SMEs in South Africa?	Covin and Slevin (1989) Entrepreneurial Orientation Scale Using Likert Scale 1-7: In general, the top managers of my firm favour… How many new lines of products or services has your firm marketed in the past 5 years? In dealing with competitors, my firm… In general, the top managers of my firm have… In general, the top managers of my firm believe that… When confronted with decision making situations involving uncertainty, my firm… Covin and Slevin (1989) Business Performance Scale Using Likert Scale 1-5: Sales Level Sales Growth Rate Cash Flow Return On Shareholder Equity (ROE) Gross Profit Margin Net Profit From Operations Profit To Sale Ratio Return On Investment (ROI) Ability to Fund Business Growth From Profits	Ordinal	Median (mean and variance metric)

An understanding of the link between entrepreneurial orientation and business performance, amongst younger and older entrepre neurs in South Africa needs to be explored.					
Sub-problem	Literature Review	Hypotheses or Propositions or Research questions	Source of data	Type of data	Analysis
The second sub-problem seeks to understand how the age of an entrepreneur affects the entrepreneurial orientation of a firm. Entrepreneurs classified by age may be known as young entrepreneurs, older entrepreneurs, grey entrepreneurs, late stage entrepreneurs.	List noted above as well as: Herrington, Kew and Kew (2009)/GEM 2009 Herrington, Kew and Kew (2010)/GEM 2010 International Labour Office (2010) Kautonen (2008) Levesque and Minniti(2006) Republic of South Africa (2009) Seymour(2002) Singh and DeNoble (2003) Stangler(2009) Statistics South Africa (2010) Statistics South Africa (2011) Tyrowicz and Nestorowicz (2010) Weber and Schaper (2004) Youth Development Network (2004)	H2 Age has an impact on the Entrepreneurial Orientation (innovation, proactiveness, and risk taking) of SMEs in South Africa	As Above and, Demographic Data From Questionnaire What Industry best describes the classification of your business? How long has this business been paying salaries and wages for? Not counting the owners, how many people are currently working for this business? Would you be willing to indicate the range that best describes your age? What is your Gender? What is the highest level of education you have completed?	Nominal and ordinal	Frequency counts, percentages/modes Median (mean and variance metric)
The third sub-problem seeks to understand how the age of an entrepreneur affects the business performance of a firm.	As Above	H3 Age has an impact on the Business Performance of SMEs in South Africa.	As Above	Nominal and ordinal	Frequency counts, percentages/modes Median (mean and variance metric