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Generation X and Y:

A comparative analysis of entrepreneurial intent

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A research report proposal submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration

10 November 2010

ABSTRACT

Entrepreneurs are seen to play a vital role in the growth of an economy, particularly in an emerging market such as South Africa. To date, there has been a limited amount of research concerning the drivers, influences and factors that predispose an individual towards entrepreneurial intent within the South African context. Equally so, there is little research on generational theory and how this relates to entrepreneurial activity as a whole. This study focuses on comparing the X and Y generational cohorts in terms of their propensity towards entrepreneurial intent within the context of South Africa.

Research was conducted following an in depth literature review which focused on the concept of entrepreneurship and its effect on the economy, generational theory and the interaction and influence of generational cohort theory on the drivers of entrepreneurial intent.

The data gathered through the course of the literature review was utilised as a theoretical foundation on which to build propositions of entrepreneurial intent and from which a quantitative survey instrument was developed. The quantitative survey was open to any South African individual who falls within the X or Y generational cohort as defined in this study.

Key findings include similarities and differences between the X and Y generational cohort individuals in terms of the following aspects: education and entrepreneurial training; exposure to technology; problem solving; leadership orientation; visionary perspective; the influence of family and organisational support networks; creativity and innovation,   attitude towards risk-taking and self-confidence. It is hoped that the findings contribute to the existing literature on entrepreneurial intent and in particular to that within the South African context of the X and Y generational cohorts.

KEY WORDS

Entrepreneurial intent; Generational cohort; South Africa; Entrepreneurship

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Eleanor Rosalind Brown

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Date

ACKNOWLEDGEMENTS

This research study has afforded me the opportunity to learn about entrepreneurial intent and to deepen my understanding of how Generation X and Generation Y individuals perceive entrepreneurship within the South African context. Through this study, I hope to open the way for those interested in embarking on an entrepreneurial venture, those guiding future entrepreneurs through training and mentorship and those who are supporting future entrepreneurs financially to better understand the drivers of entrepreneurial intent across different generations and how generational theory can influence the way in which these individuals might behave in terms of entrepreneurial intent.

I would like to thank my supervisor, Dr. Alex Antonites, for his passion and ever present commitment and support throughout this process. I believe that Alex has been instrumental in teaching me how to make research fun with his innovative approach and valuable insights on entrepreneurship. Thank you for keeping me on the straight and narrow. It has been a pleasure working with you.

Thank you to Adam Martins, my statistician for enduring my endless demands and for assisting me in achieving my goal. Your relaxed approach and willingness to go the extra mile will not be forgotten.

Thank you to my boss, Kane Xu for giving me the time I needed without question, to complete this degree. I am extremely appreciative of your ongoing support and understanding throughout the past year and I realise that I am truly fortunate to have someone as accommodating as you as my mentor.

I would like to thank my family: my mother, Pauline, my father, Leighton, my brother Adam and my sister-in-law Sharon for encouraging me to never-give up and for their continued love and support throughout this challenging process. I would also like to thank my mother-in-law Louise for being there to support me and my husband Martin during countless weekends and the long hours it took to complete this. Your support is dearly appreciated always. In particular, thank you to both my Mom's, Pauline and Louise for meticulously editing this study for me.

I would now like to express a very special thank you to my loving husband, Martin who has stood by me quietly and relentlessly while I have completed this journey. I have no words to express my gratitude to you for patiently sacrificing so that I could reach my dream. I am amazed and humbled by your support, encouragement and love, without which I would never have been able to see this through.

Finally, I am ever grateful for everyone's love, patience and prayers and for the engaging learning opportunity afforded to me by the Gordon Institute of Business Science over the past two years.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Research title

Generation X and Y: a comparative analysis of entrepreneurial intent.

1.2 Research problem

South Africa faces numerous economic, political and social challenges in its new democracy, a key challenge being that of massive and growing unemployment levels. The latest unemployment figures for the first quarter of 2010 are around 25, 2 percent (Quarterly Labour Force Survey, 2010). This problem is especially evident amongst the country's youth, who more often than not lack the experience, skills and education necessary to access employment in the formal sectors.

Development of an economy can be defined as a process of growth in average production per capita, sustained over a long term period. As such, it is the consequence of the introduction by enterprises of primarily technical and

organizational innovations that enable productivity increases (Liñan, Rodrìguez-Cohard, & Rueda-Cantuche, 2005).

The principal measure of entrepreneurial activity in countries that participate in the Global Entrepreneurship Monitor (GEM) report is known as the 'Total Early stage Entrepreneurial Activity' (TEA) index. This index measures the proportion of people who are involved in setting up a business or owners-managers of new businesses that are less than 42 months old (Liñan *et. al.* 2005).

Figure 1: The entrepreneurial process and GEM operational definitions (GEM 2009)
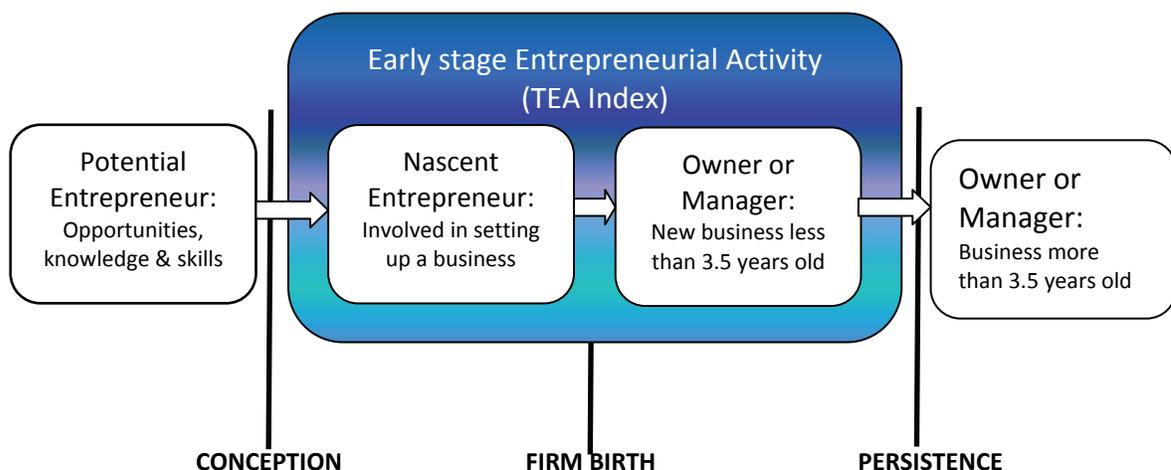
In 2008, South Africa's early-stage entrepreneurial rate was 7.8 percent – significantly behind the average of 13 percent for other middle to low income countries (Herrington, Kew, & Kew, 2008). In 2009, South Africa ranked 35th out of 54 countries, with a TEA rate below the average (11.2 percent) of all participating countries.

This is in line with the findings of previous GEM surveys. Further to this, the 2006 GEM Report showed that South Africa's performance in terms of relative position since 2001, has consistently been below the median, and this trend continues in 2009 (Herrington, Kew, & Kew, 2010).

These below-average trends are cause for concern and confirm the sustained trend of below-average entrepreneurial activity in South Africa (Netshitenzhe & Chikane, 2006). Given the inability of the existing formal sector to absorb the growing labour force coupled with the burgeoning youth unemployment crisis, the government has prioritised small business and entrepreneurial development by introducing several initiatives to stimulate new venture creation (Kropp, Lindsay, & Shoham, 2006). There is, however still some concern that government policies may not be sufficiently efficient in achieving this increased entrepreneurial activity.

Rising unemployment, coupled with disappointing foreign direct investment, has failed to provide a solution to slow economic growth and high unemployment in South Africa (Kingdon & Knight, 2004). Furthermore, as the economically active demographics shift over the next decade, a common problem facing the custodians of economics and the business leaders across all industries is that the recruitment and retention of skilled and talented employees will be exacerbated (Papenhausen, 2006).

The encouragement of entrepreneurship as a career choice and wealth creation opportunity therefore is increasingly viewed as a possible solution to an array of socio-economic issues in this country (Minniti & Lévesque, 2010).

Entrepreneurship is a vital element of well-functioning economies where entrepreneurs introduce innovations into the economic system and may contribute towards higher productivity levels and hence economic growth (Van Stel, Carree, & Thurik, 2005). Economies with higher increases on the entrepreneurial initiative indices tend to show a greater fall in unemployment levels (Liñan *et. al.* 2005).

In addition, market entry by entrepreneurial activity is vital in adjusting markets towards competitive levels and even purely imitative entrepreneurial activity can have growth enhancing effects by stimulating efficiency and promoting the diffusion of technologies (van der Loos, Koellinger, Groenen, & Thurik, 2010). Consequently, the study of entrepreneurial intent (potential) is vital in the endeavour to encourage increased entrepreneurial activity (Webb, Kistruck, Ireland, & Ketchen Jr., 2010).

An important public policy implication arising from previous studies is that educational and training initiatives aimed at increasing entrepreneurial activity should focus on rendering entrepreneurship both desirable and feasible in order for an individual to develop the intention to initiate a new venture (Liang & Dunn,

2008). This is particularly relevant in the South African context where entrepreneurs are believed to hold the key to job creation and poverty alleviation (Netshitenzhe & Chikane, 2006), while self-efficacy beliefs amongst South Africans about initiating a new business venture remain very low (Crane & Crane, 2007).

Gird and Bagraim (2008), in a study of tertiary education level students, found that attitude towards entrepreneurship is the strongest predictor in terms of entrepreneurial intent. The significance of this result is that the age group of the sample utilized for that study corresponds sufficiently with the generational cohorts under review in this research paper in which a descriptive study is undertaken to explore the degree of entrepreneurial intent variation between Generation X, born between 1965 and 1980, (Severt, Fjelstul & Breiter, 2009; Dries, Pepermans & De Kerpel, 2008; Eisner 2005) and Generation Y individuals, born post 1980 (Simoneaux & Stroud, 2009) in South Africa.

The focus of this study is therefore to identify and describe the specific differences and/or similarities between the Generation X and Generation Y individuals studied in order to determine which if either of the generational cohorts have greater entrepreneurial intent and if so, what might be the factors contributing to these results.

The findings are hoped to guide future educational, training and mentorship programmes designed for incumbent and future generations of economically active individuals, with the purpose of stimulating increased entrepreneurial activity.

1.3   Research motivation

1.3.1 The case for exploring entrepreneurial intent in South Africa

Entrepreneurship is becoming a preferred methodology to promote economic growth and development in different regional and national economies (Liñan *et. al.* 2005). As such, entrepreneurs are deemed to be responsible for the promotion of enterprises and businesses; they infuse dynamism in economic activity within their economies; they manage organisational and technical change; and promote the development of innovation and a learning culture within the market environment (Van DeVen, Sapienza, & Villanueva, 2008).

According to a recent report in the Sunday Times (20 September 2009), there are 2,4 million registered companies in South Africa of which 2,2 million are classified as small and/or medium (SME) (Herrington *et. al,* 2010). Unfortunately the availability of accurate entrepreneurial statistics by category (defined by size), industry sector or at a national and provincial level, are non-existent.

According to the 2008 Department of Trade and Industry report (DTI, 2008) the small and medium (SME) sector grew by 27 percent between 2004 and 2007, with the most significant growth associated with medium-sized enterprises (208 percent). The smallest growth occurred among micro enterprises (-5.6 percent).

The small and medium (SME) enterprises listed collectively generate between thirty-five and fifty percent of the country's annual Gross Domestic Product (GDP). They are also responsible for contributing forty-three percent of the total value of salaries and wages paid in South Africa, and the employment of fifty-five to sixty-five percent of the formal private sector employees, available (Nieman & Nieuwenhuizen, 2009).

These figures however, do not explain the increasing failure rate of entrepreneurial start-up ventures in South Africa where more than six out of ten start-ups fail within the first eighteen to twenty-four months (Training cuts the rate of failure - Business Times Survey, 1997).In 2008, South Africa was ranked 23rd out of 43 countries with a TEA rate below the average (10.6 percent) of all participating countries (Herrington *et. al.,* 2008).

This finding is consistent with results of previous surveys. South Africa's TEA rate of 7.8 percent is significantly lower than that of all other efficiency-driven economies that average around 11.4 percent, as well as the average for all middle to low income countries, around 13.2 percent. These below-average trends are cause for concern and confirm the sustained trend of below-average entrepreneurial activity in South Africa (Netshitenzhe & Chikane, 2006).

1.3.2 The case for exploring Generation X and Y

The definition of the word generation as observed by (Nash, 1978) is that it has remained elusive across the decades. A generational cohort may span a period of up to twenty years where each generation is identified by birth year and members have varying outlooks and intentions, potentially influenced by significant life experiences (*Severt et.* al., 2009).

Generation X includes those individuals born between 1965 and 1980 (Severt *et. al.*, 2009; Dries *et. al.* 2008; Eisner 2005). The term, Generation X, was popularised by the writing of Canadian author Douglas Coupland's in his 1991 novel, Generation X: Tales for an Accelerated Culture. This publication initiated the popularization of the term "Generation X".

In 1989 Coupland further explained that the term had actually originated from the name of an eighties punk band called Generation X. The vocalist of the band, Billy Idol had actually borrowed the name for his band from a sociological book by Deverson and Hamblett (1965) of the same name.

Generation X individuals were during an era where divorce was on the increase. Research has shown that Generation X individuals have been left with a strong sense of independence, tend to be selfish and cynical, question authority, are resilient, adaptable, culturally-progressive, have technological savvy, expect immediate results and are committed to their team and their specific bosses within the workplace environment (Cennamo & Gardner, 2008).

In addition, Generation X individuals are said not to be motivated by money exclusively, but instead they look for a work-life balance, favour flexible working hours, embrace the concept of employability, and value opportunities for learning, self-advancement and new challenges (Simoneaux & Stroud, 2009).

In contrast, Generation Y, otherwise known as the Millennials, Yers, Net Generation, Generation Next or Echo Boomers, is defined by individuals born post-1980 but before 1989 (Cennamo & Gardner, 2008). For the Millennials, the most defining experience has been the growth of the Internet and technology (Joshi, Dencker, Gentz, & Martocchio, 2010).

Research indicates that Millennials value lifestyle, career development and travel far more than any preceding generation (Riordan, Griffith, & Weatherley, 2003). Millennials need personal flexibility, professional satisfaction and immediacy for job satisfaction. Millennials also thrive on new challenges, innovation and creativity and expect responsibility early on in their careers (Severt *et. al.* 2009). This generation may be the most adaptable to date in terms of technological skills, and has been said to value the intrinsic aspects of work such as mentoring and training in order to remain marketable to a great extent (Loughlin & Barling, 2001).

It should be noted that in this research, "generation" is used to denote a specific period of time within which the generational members were born rather than as an independent variable, such as age. Every individual is unique and therefore it must be noted that some may not necessarily fit their generational mould as defined by their birth date. For the purposes of this study, the focus is therefore on generalities found within the X and Y generations.

In order to understand a generation's general intent to initiate an entrepreneurial venture, the similarities within the generations and the differences between the generations will need to be reviewed. Generations can be viewed as being similar to cultures, where common values, beliefs and shared experiences form the basis of the definition of the cohort (Papenhausen, 2006).

Based on their individual experiences, many of the people from a distinct generation have been "programmed" to view the world and filter information through their own "generational lenses" (Seaton & Boyd, 2007). This development of personality traits is primarily formed on the basis of experiences during their formative years together with their degree of creativity (Loughlin & Barling, 2001).

This particular study focuses on the X and Y Generations as these include the majority of eligible and developing work force individuals as distinguished by their generational cohort (Riordan *et. al.,* 2003). In many instances, the current senior management within organisations falls within the preceding generational cohort, the "Baby Boomers", who are focusing on retirement from formal employment and may include embarking upon entrepreneurial ventures.

However, this study is focused on the intent to initiate entrepreneurial business as important in long term sustainable economic and business development in the future and therefore the scope is limited to the Generations X and Y. Furthermore, entrepreneurial activity amongst "Baby Boomers" differs from entrepreneurial activity amongst generation Y in that the Baby Boomers bring a lifetime of experience to their endeavours, thus adding a contaminating variable in the research should Baby Boomer generational cohort be included.

As we are focusing on the potential of new entrepreneurial ventures to add value to the South African economy we will concentrate our study around the upcoming generation; of workers and managers within the geographical borders of South Africa.

1.3.3 The case for exploring entrepreneurial intent

Existing studies of entrepreneurship include multiple studies that investigate the intent of an individual, (not a specified generational cohort, as defined by birth date within this study) towards the intent to initiate a business venture. The existing studies of individuals fall clearly into two distinct categories.

The first category identified during previous studies comprised an analysis of the sociological aspects of background and demographics as reasons for successful enterprise creation. The analysis of these aspects led to the establishment of the conditions conducive to the formation or initiation of entrepreneurial ventures (Gnyawali & Fogel, 1994). The results of these findings have highlighted reasons behind entrepreneurship initiation such as the individual being necessity-driven, opportunity-driven or factor-driven (Herrington, Kew, & Kew, 2008).

The second category identified in previous studies focuses on the specific personality traits of the entrepreneurial individuals. Studies undertaken primarily by psychologists within this category, has resulted in useful insights.

Aspects that have been explored in an attempt to explain the concept of entrepreneurial venture initiation and entrepreneurship include: the need for achievement, the need for power (McClelland & Burnham, 1975), internal locus of control (Callaway, 2004), risk taking intent (Brockhaus, 1982), tolerance for ambiguity (Begley & Boyd, 1986) among a few.

The outcomes of these earlier studies on personality traits have yielded only moderate results (Gartner, 1989 & Baron 2000). The reasons for failure are twofold. Firstly there have been problems associated with measuring the various constructs and secondly these constructs may not have been good indicators of entrepreneurship (Acs Z. , 2008).

It must be noted that there appear to be two plausible explanations for the failure of entrepreneurial ventures. Firstly, it can be argued that homogenous characteristics like background factors, cannot explain the individual success or failure of entrepreneurs alone. Secondly, it is neither the conditions nor background factors themselves that are important but instead, it is the impact on the individuals that is of interest. Consequently, the use of pure demographic variables will be avoided.

This is particularly relevant in the South African context of this study due to the discrepancies within the demographics and backgrounds of the potential experimental cohorts sample frame.

To answer the research questions posed by this South African study, the following are the constructs (also indicating the relative questions utilised in the test instrument as part of the data collection process) that have been chosen as variables in particular due to their relevance to entrepreneurial intent and in terms of testing the differences or similarities between generation X and generation Y individuals. The detailed discussions around each variable below can be found in Chapter two (2). (The Q. symbol represents the word question):

i) **Driver's for entrepreneurial action**: this construct includes aspects of the individual in terms to their individual aptitudes (Q. B1), vision (Q. B5), creativity and innovation (Q. B7), problem solving ability (Q. B2), personal traits (Q. B8) and leadership orientation (Q. B4).

ii) **Perceived feasibility and resource advantage** includes the advantage of technology (Q. A11,12,13), the advantage of prior experience (Q. A8), the advantage of the individual's inherent abilities and skills (Q. B3), formal and informal training (Q. A9), education (Q. A10),experience (Q. C2,3,4,5,6), and social circumstance (Q. C1).

iii) **Propensity to act or intent** includes the individual's unique attitude (Q. D1) toward risk, opportunity and success.

iv) **Support networks** include the formal organisational support structures available to entrepreneurs (Q. E1), network building capability and family interaction (Q. B6) of the individual and other related support structures available to support the intent to initiate an entrepreneurial venture.

1.4 The research problem as related to the research objectives

The fostering and encouragement of additional entrepreneurs is a great challenge in South Africa. As such, the existing view that entrepreneurs will always make their own opportunities seems too optimistic however many do and will clearly continue to do so despite the barriers to entry (Shepherd D. , 2003).

Barriers to entry refer to business constraints due to high poverty levels, poor infrastructure, political and/or regulatory instability, inadequately trained and under skilled work-force, the negative effects of the human immuno-deficiency virus or acute immuno-deficiency syndrome (HIV/AIDS) on employees, corruption and poor governance, lack of financing and resources (Netshitenzhe & Chikane, 2006).

In addition to these barriers to entry, small enterprises face many obstacles to growth in South Africa and other developing economies including: (1) difficulty in attracting investment capital and gaining access to markets; (2) isolation and lack of productive linkages with other businesses; (3) lack of business training and expertise for both owners and employees; (4) severe competition; and (5) their customers' low incomes (McDade & Spring, 2005)

The complexities involved in initiating entrepreneurial activity in South Africa at times are so intimidating that they may result in some potential entrepreneurs with

latent talent being lost along the way. Consequently barriers to entry are challenges that have to be tackled if more economic, social and aesthetic capital and wealth are to be created for South Africa through entrepreneurial activity stimulation (Kropp, Lindsay, & Shoham, 2006). The facts show that entrepreneurship in South Africa is well below sustainable levels as measured by the GEM report 2008 (Herrington, Kew, & Kew, 2008).

The aim of this study is to try to identify from a generational perspective which generation has the greater entrepreneurial intent. Two specific generations have been chosen as test cohorts for this study as they correspond with the predominant age cohorts of the present and future South African active contributors to the economy. The objective of identifying the generation that shows a greater intent for entrepreneurial action and behaviour is to derive insights into what aspects of their personalities, influences, environment and support structures have possibly caused this differential behaviour.

Once the key themes have been identified, it is hoped that the findings will indicate what specific aspects, behaviours, experiences and exposures need to be focused upon by individuals in training institutes, educational institutions and mentoring and coaching roles within organisations who are interested in stimulating entrepreneurial activity within South Africa so that their support, nurturing and

mentoring can guide and help to contribute to a sustainable increase in entrepreneurial venture creation (Kropp, Lindsay, & Shoham, 2006).

If it is found that there is indeed a difference in entrepreneurial intent between Generations X and Y, it is hoped that the insights derived from this study can support the identification and leveraging of growth opportunities in the entrepreneurial sector within South Africa, by informing recruitment criteria, training, identification of competency and skill requirements, human capital and leadership development of emerging management (Generation X's) and new entrants (Generation Y's) into the workforce.

1.5   Conclusion

The remainder of this paper is structured as follows:

The next section provides a review of relevant literature. Section 3 provides a discussion of the propositions underpinning this study and section 4 outlines the research design. The results are presented in section 5. A discussion of the results and their implications are provided in the last section.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Entrepreneurship development and generational theory originate across many disciplines. As such a multiplicity of literature sources were consulted in order to gain an understanding of the relevant definitions, concepts and constructs required to effectively relate the objectives of this study.

With the latest results from the Global Entrepreneurial Monitor (GEM) 2009 (Herrington *et. al.,* 2010) report reconfirming that South Africa currently still lags behind other developing nations with regards to their TEA rate, (around 7.8 percent is significantly lower when compared to that of all other efficiency-driven economies that average around 11.4 percent,) a literature review was conducted in order to underpin the basis of this research by attempting to understand the main drivers of entrepreneurial intent and how these relate to generational cohorts.

Existing research and academic studies have been reviewed in order to set a theoretical foundation on which this South African research can be based. This section includes a critical view of the existing theory and how it can be applied to the South African situation and serves to support the researcher's argument for the need to nurture and develop latent entrepreneurial intent and potential in South Africa.

2.2 Definition of the entrepreneur

"Entrepreneur" is a French word with its origin dating back to the 1700s. Since then it has evolved to mean someone who "undertakes a venture". Jean-Baptiste Say, a French economist of the 1800s, stated that: *"...an entrepreneur shifts economic resources out of an area of low productivity into an area of higher productivity and greater yield."* In a more modern definition, the Oxford Dictionary describes an entrepreneur as: *"…one, who organises, manages and assumes the risk of a business enterprise..."*

To the economist, an entrepreneur is one who brings resources, labour, materials, and other assets into combinations that make their value greater than before and also one who introduces changes, innovations, and a new order (Baker & Nelson, 2005). To a psychologist, such a person is typically driven by certain forces—the need to obtain or attain something, to experiment, to accomplish, or perhaps to escape the authority of others (Crane & Crane, 2007).

Sociologists believe that entrepreneurs bring something different to light. They are set apart from other businesses initiators in that they are in the business of doing something new that adds value to society, whether that be by creating/identifying new processes, products or markets (Acs & Virgill, 2009). Not all businesses are entrepreneurial indeed not even all new businesses are necessarily entrepreneurial (Ahmad & Hoffmann, 2008).

Dew and Sarasvathy (2007) have defined an entrepreneur as "a person who habitually creates and innovates to build something of recognized value around perceived opportunities." They further acknowledge that the "person" as defined may not necessarily be an individual but may indeed also comprise a team with an entrepreneurial leader at its centre.

Entrepreneurs are the centre of new venture creation, whereby they capitalise intellectual and physical assets in the process of wealth creation by discovering and transforming unique opportunities into new ventures using innovation (Liang & Dunn, 2008).

The decision to become an entrepreneur (Shavinina, 2006) is an act of will (McGee, Peterson, Mueller, & Sequeira, 2009). While a clear distinction must be made between an enterprising person and an entrepreneur, there is no question that each and every one of us could be more innovative and creative in the way we approach doing things.

The impact of this well intended enterprising behaviour however, may be limited somewhat depending on present and past circumstances (Manev, Gyoshev, & Manolova, 2005) in which individuals find themselves. By definition, entrepreneurs build something significantly different and unique in their endeavours.

Consequently, not everyone can be an entrepreneur however everyone should at least be encouraged to believe that it could always be possible (Martinez, Mora, & Vila, 2007).

A true modern day entrepreneur, Sir Richard Branson (Shavinina, 2006), eloquently sums up much of what has been said about entrepreneurs when he states that:

"...entrepreneurs have been the driving force for growth in countries around the world. Their ability to see opportunities, to see order amongst chaos where others see only issues, problems and disorganisation, has helped transform communities and economies."

Despite there being no singly applicable definition for entrepreneurs, there is no dispute regarding their central role in the entrepreneurial process and the science of entrepreneurship itself. Entrepreneurship can be seen to result from the cumulative influences and contribution of resources in the entrepreneurial process which includes the human capital or inherent knowledge and entrepreneurial intent held by the entrepreneur themselves (Haber & Reichel, 2007).

2.2.1 What is entrepreneurship?

The debate over entrepreneurship is universal. It is spoken of, written about and discussed frequently – both in academia and in the public arena. Regardless of where the debate occurs, entrepreneurship has been identified as being vitally important to the wellbeing of any economy, and its potential to contribute to the creation of employment and the alleviation of poverty has been well documented (Kodithuwakkua & Rosa, 2002).

There are numerous contemporary definitions, many of which evolved during the latter half of the 20th century. Table 1 below summarises the definitions by leaders of entrepreneurship studies between 1934 and 1999 (Herrington, Kew, & Kew, 2010):

Table 1: Entrepreneurship definitions from 1934-1999 (GEM 2009)

Author	Definition
Schumpeter (1934)	Entrepreneurship is seen as new combinations, including the doing of new things that are already being done in a new way. New combinations include: (1) Introduction of new goods; (2) New method of production; (3) opening of new markets; (4) new source of supply; and (5) new organisations
Kirzner (1973)	Entrepreneurship is the ability to perceive new opportunities. This recognition and seizing of the opportunity will tend to "correct" the market and bring it back to equilibrium.
Drucker (1985)	Entrepreneurship is the act of innovation that involves endowing existing resources with new wealth capacity.
Stevenson, Roberts & Grousbeck (1985)	Entrepreneurship is the pursuit of an opportunity without concern for current resources or capabilities.
Rumelt (1987)	Entrepreneurship is the creation of new business: new business meaning that they do not exactly duplicate existing business but have some element of novelty.
Low & MacMillan (1988)	Entrepreneurship is the creation of new enterprise.
Gartner (1988)	Entrepreneurship is the creation of organisations: the process by which new organisations come into existence.
Timmons (1997)	Entrepreneurship is a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach, and leadership balanced.
Venkataraman (1997)	Entrepreneurship research seeks to understand how opportunities to bring into existence future goods and services are discovered, created, and exploited, by whom and with what consequences.
Morris (1998)	Entrepreneurship is the process through which individuals and teams create value by bringing together unique packages of resource inputs to exploit opportunities in the environment. It can occur in any organisational context and can result in a variety of possible outcomes, including new ventures, products, services, processes, markets, and technologies.
Sharma & Chrisman (1999)	Entrepreneurship encompasses acts of organisational creation, renewal, or innovation that occur within or outside an existing organisation.

2.2.2 The entrepreneurship process

Organisations and individual entrepreneurs use entrepreneurship to promote and sustain their competitiveness (Webb *et. al.,* 2010). Entrepreneurship as an activity emerges when an individual seeks to capture the value perceived in entrepreneurial opportunities (herein called opportunities), defined by the potential to create value. They achieve the value creation through the provision of a more desirable end product and/or the provision of a product more efficiently than what is already in existence (or does not exist) in the market (Kropp *et. al.,* 2006).

Research differentiates among individuals that use the entrepreneurship process to create value based on financial rewards (Choi, Lèvesque, & Shepherd, 2008) versus those that seek to create primarily social benefits (Crane & Crane, 2007). Whether the actions of entrepreneurship are aimed at deriving financial rewards and/or some other form of value, the process remains basically the same. The stages of the process are: awareness which leads to recognition and then exploitation of opportunities, followed by decisions concerning growth (Alvarez & Barney, 2007).

In Figure 2 below, awareness, the first stage of the entrepreneurial process, refers to a "motivated intent of an individual to formulate an image of the future" by seeking out opportunities that have been previously overlooked or undetected

(Minniti & Lévesque, 2010). While many individuals' actions may be characterized by high levels of awareness, only some of them recognise these as potential entrepreneurial opportunities.

Secondly, opportunity recognition occurs when two or more known knowledge sets or experiences identified are realised, thereby highlighting a new collection of opportunities and ideas that enable an individual to fill a perceived or identified market gap (Corbett, 2007).

As such, the relationship between awareness and opportunity recognition is a function of both the knowledge and past experience of the individual who is then able to skilfully leverage this knowledge to develop the opportunity further (McGee *et. al.,* 2009).

Upon acknowledgement of an opportunity, the individual may then make a conscious decision to exploit the opportunity. The third stage, opportunity exploitation refers to the set of new venture activities through which the individual acquires, bundles, and leverages resources to create the value perceived in the opportunity (Sirmon, Hitt, & Ireland, 2007).

Figure 2: Entrepreneurship process
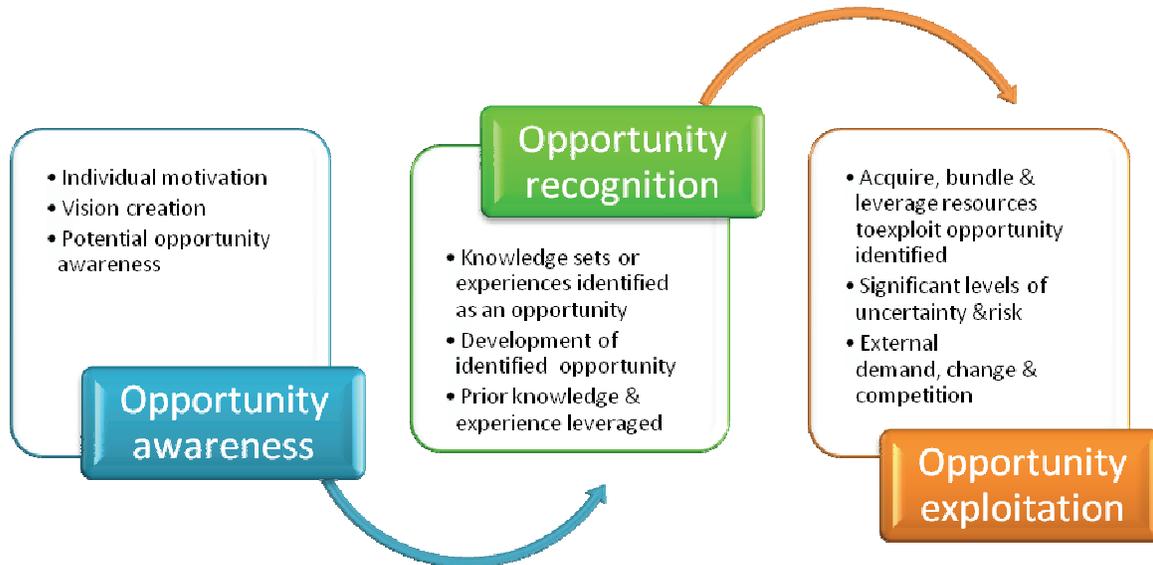
This stage of the entrepreneurship process is characterised by significant uncertainty and risk. Uncertainty stems from the inability to accurately predict market demand, changes in key segments of the external environment (i.e., technological, socio-cultural, economic trends, etc.), or competitor actions (Webb *et. al.,* 2010).

To the extent that predictions are inaccurate, risks of financial loss exist due to irreversible investments in specialized assets made to support exploitation (Choi *et. al.,* 2008). The entrepreneurship process discussed above is summarised in Figure 2 above.

Growth results from effective exploitation of available resources. In an entrepreneurial sense, growth refers to the activities through which one recognises and exploits opportunities in broader markets (Alvarez & Barney, 2007). In essence, growth is an extension of both the recognition and exploitation stages in that the individual must recognise these opportunities and then acquire, bundle, and leverage resources to exploit them effectively (Choi *et. al.,* 2007). While the individual may have some level of experience during the growth stage (i.e., based on their initial recognition and exploitation), additional complexity in new markets and/or opportunities introduce new and different sources of uncertainty into the mix (McGee *et. al.,* 2009).

The strategy followed by the entrepreneurial individual in terms of the decision-making process followed in initiating an entrepreneurial venture forms part of entrepreneurial orientation (EO), while, factors found at individual level contribute and interact to affect the degree of entrepreneurial intent (EI).

2.3   Understanding entrepreneurial orientation and intent

In order to define Entrepreneurial intention clearly, a distinction must be made between Entrepreneurial orientation (EO) and Entrepreneurial intention (EI).

2.3.1 Entrepreneurial orientation (EO)

Entrepreneurial orientation (EO) refers to "the processes, practices, and decision-making activities that lead to new entry into a market" (Wang, 2008). It is therefore reasonable to consider the process undertaken in reaching such a decision can occur over an undefined time period.

Mueller and Thomas (2000), describe entrepreneurial orientation as using operational-level characteristics where an entrepreneurial venture, driven by an entrepreneur, is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with 'proactive' innovations, beats competitors to market and constantly seeks competitive advantage. Entrepreneurial orientation refers to the strategy-creation process that provides organizations with a basis for entrepreneurial decision-making and propensity to act (Westhead, Ucbasaran, & Wright, 2005).

A large amount of research has been conducted on entrepreneurial orientation (EO). As such, entrepreneurial orientation has become a central concept in the study of entrepreneurship, receiving both theoretical and empirical attention (Covin, Green, & Slevin, 2006). Drawing on existing strategy-making processes and entrepreneurship research, measurement scales of entrepreneurial orientation have been developed and widely used.

2.3.2 Entrepreneurial intention (EI)

Entrepreneurial intention can be seen as one of the first steps in the process of venture creation over a period of time (Lee, Wong, Foo, & Leung, 2009). Starting a business is an intentional act that holds substantial implications for research (Liñan *et. al.* 2005). This study focuses on entrepreneurial intentions since intentions toward a planned behaviour can be a crucial antecedent of that behaviour.

Understanding the factors influencing entrepreneurial intent is thus a central component of understanding the new venture creation intention by the entrepreneur (Acs Z. , 2008). This involves an examination of how individual- and organizational-level factors (such as individual innovation and creativity, organisational innovative climate and technical exposure and availability) interact to affect the degree of entrepreneurial intent (Gird & Bagraim, 2008).

One recent study by Ismail, Khalid, Othman, Jusoff, Abdul Rahman, Mohammed & Shekh (2009) examined the link between demographic profile and entrepreneurial intent. Building on Ismail *et al*.'s (2009) research, which focused primarily on personality and economic traits as drivers of entrepreneurial intent, this study attempts to identify the possible factors that contribute to or influence the development of entrepreneurial intent amongst individuals from the X or Y generation cohorts within the South African context.

In a world of dwindling resources and increasing competition, an individual's intent to initiate an entrepreneurial venture can be driven either through necessity or opportunity (Small Enterprise Development Association (SEDA), 2000-2008). Necessity or factor-driven entrepreneurship is defined as entrepreneurial activity, where the entrepreneur through poor economic living standards is forced to seek out a means for generating income for survival (Van Stel, Carree, & Thurik, 2005).

This type of entrepreneurial venture initiation is primarily found in populations of low to middle income individuals, whereas opportunity-driven entrepreneurial venture initiation tends to originate in high income countries where the entrepreneur has the resources, both financial and physical, at his or her disposal to innovate and create income-generating new businesses without the driving motivation for creating the business venture being mere survival (Mair & Marti, 2009). Subsequently, whether entrepreneurial activity within a country is necessity or opportunity driven, it still contributes both in productivity and profitability to the economy as a whole (Henley, 2007).

The dual nature of the South African economy and the complexities within its composition,   (Kingdon & Knight, 2004) has resulted in this research not specifically focusing on either necessity-driven or opportunity-driven entrepreneurial intent, but rather focusing on the result of greater entrepreneurial intent contributing to economic growth in South Africa as a whole.

2.4   Linking entrepreneurship and economic growth

Entrepreneurs are known to create economic growth and prosperity in their communities through the initiation of business ventures. These ventures subsequently contribute to economic growth and wealth creation through the outsourcing of non-core activities and operations to smaller enterprises, and funding and networking with emerging ventures, both on a national and/or local level (Low, Henderson, & Weiler, 2005).

At national level, entrepreneurial activity contributes directly to increasing Gross Domestic Product (GDP), while on a localised level, entrepreneurs create new jobs, increase incomes and wealth and serve to connect the local community in which they operate to the broader economy. These entrepreneurs also serve as role models with their actions, inspiring other potential entrepreneurs into initiating innovation and change (Scheepers, Solomon, & de Vries, 2009)

Economic development in a country can be directly related to the level of entrepreneurial activity (Low *et. al.,* 2005). Notwithstanding the relationship between entrepreneurial activity and economic growth being evident, the exact nature of such a relationship and the channels that allow entrepreneurial activity to directly influence growth within a country, are still unknown. Technology however, plays a significant channel-influencer role in the rise of entrepreneurial activity

world-wide, primarily due to the invention of the personal computer, the Internet and the mobile telephone (Woolridge, 2009).

Research concluded by Baker & Nelson (2005) substantially contributes to a more recent understanding of entrepreneurial activity. They suggest that it is the "resources in use" that determines the value creation potential and not the type or quantity of resources per se. Numerous studies indicate that the presence of entrepreneurs is a necessary condition for economic growth but that entrepreneurship may take a variety of forms depending on the competitive characteristics of each country (Mair & Marti, 2009).

Minniti and Lèvesque (2010) challenged the existing paradigm regarding the relationship between entrepreneurial activity and economic growth by suggesting what some of the linkages between them may be by providing a model that accommodates observations about all economies, from the poorest to the most developed.

In their findings, Minniti and Lèvesque (2010) question the existing belief that innovation is a necessary condition for economic growth with the claim that different countries may exploit a variety of entrepreneurial comparative advantages depending on their availability of resources.

Their findings further support that in an environment where resources cannot be acquired to match a business requirement directly inherent flexibility of the entrepreneur allows the business opportunity itself to adapt to the available resources.

Knowledge and capability are also fundamental resources that are often overlooked in favour of the more obvious human and physical resources. These resources are in short supply especially within developing countries, and underpin the drive for education promoted vigorously by the United Nations and all governments (Kodithuwakkua & Rosa, 2002). The past racial divisions in South Africa have contributed directly to some communities having received sub-standard education, limited training opportunities and a distinct lack of support both financially and experientially regarding entrepreneurial activity.

The direct nature and impact of the entrepreneurial process on economic growth is difficult to research due to the dynamic environment in which the entrepreneurial process often unfolds. The process is complex, ongoing and evolutionary in nature, which in essence can only be fully understood in the context of the wider socioeconomic environment (Webb, *et. al.* 2010). This aspect is particularly relevant to this South African study as the external environment and its dynamic nature plays a major role in the influence of entrepreneurial development.

The complexities within the South African context have further heightened the concerns around economic growth and development while policy makers are beginning to awaken to the new economic value that entrepreneurs can generate for their communities and country as a whole. It is therefore clear that through these pioneering actions by entrepreneurs jobs are created, incomes are raised, wealth is created, and the quality of life of citizens is improved (Acs & Virgill, 2009).

In addition, rural communities become empowered sufficiently to take an active part in the global economy (Netshitenzhe & Chikane, 2006). In order to understand this contribution to economic growth comprehensively, one needs to study the individuals and their individual drivers, influences and/or origins to draw conclusions of to what degree or inclination these affect their entrepreneurial intentions.

2.5   Defining the generations and generational theory

The field of generational theory is not without controversy and debate, especially with regard to the validity of generational categorisation and the prediction of cohort belief and behaviour. Many demographic and generational theorists, including, (Sessa, Kabacoff, Deal, & Brown, 2007); (Joshi *et. al.,* 2010); and (Kowske, Rasch, & Wiley, 2010) have expressed their concern over changes in the

values and behaviours of recent generations, while others believe these changes to be grounds for optimism (Strauss & Howe, 1991).

The precise demarcation of each generation is contentious. In particular, how the generations are differentiated depends on which historical events researchers believe are most consequential. Accordingly, the precise demarcation will also vary across nations and cultures, primarily as distinct regions are exposed to different events at varied times (Edmunds & Turner, 2005). The demarcations have also not been studied or documented in detail for each global region so an African specific definition was not available.

As such a review of the available American and European definitions will be used as a reference herein. For example, D'Amato and Herzfeldt (2008) differentiated four distinct generations, born in Europe, between 1946 and 1971. Specifically, Early Baby Boomers were born from 1946 to 1951.

This generation was characterized by a negligible increase in birth-rate across the region primarily due to post World War II (WWII) hardships suffered by their parents, the Silent Generation. In comparison while characterised by a steadier increase in birth-rate during this period, and increasing economic prosperity, Late Baby Boomers were born from 1952 to 1959.

Early Generation X was defined as individuals born between 1960 and 1970 that is the first generation exposed significantly to the global community and characterised by an increase in birth-rate in Western but not Eastern Europe.

Finally, Late Generation X was defined as individuals born between 1971 and 1980, characterised by an increase in birth-rate in the lagging Eastern Europe (D'Amato & Herzfeldt, 2008).

The dates that distinguish the generations in America differ marginally from the dates that distinguish generations in Europe. Americans born between 1909 and 1933 are sometimes referred to as WWIIers (Mitchell, 1998; cited in Sessa *et. al.*, 2007). The inclinations and values of these individuals were shaped by the Great Depression and then by President Franklin P. Roosevelt.

Americans born between 1934 and 1945 are sometimes called Swingers or the Silent Generation (Sessa *et. al.*, 2007). These individuals matured during a period of prosperity primarily; because the population was smaller (during the World War II period), consequently competition to secure employment was fierce and progress to a management role was limited and took many years to achieve.

These individuals tended to be practical, loyal, diligent, and compliant in nature (e.g., Patterson, 2005, cited in Sessa, *et. al.,* 2007). Kupperschmidt (2000) goes as far as to elude to the term "Traditionalists" to represent both WWIIers and Swingers. Furthermore, many researchers, including Smola and Sutton (2002) and

Strauss and Howe, (1991) define Baby Boomers as individuals born between 1946 and 1964; although some earlier dates are sometimes proposed (Sessa *et. al.,* 2007).

The inclinations and orientations of these individuals were primarily shaped by the Vietnam War and civil rights movements, Watergate, the space race, the sexual revolution, and Woodstock.

This generation was to became independent, striving to control their destiny and constantly challenging authority (Davis, Pawlowski, & Houston, 2006) They also felt a degree of entitlement expecting future rewards (Smola & Sutton, 2002). Nevertheless, they espoused to teamwork, optimism, ambition, and diligence in everything they did (Patterson, 2005, cited in Sessa *et. al.,* 2007).

Similarly, researchers also define Generation X in America as individuals born between 1965 and 1980 (Smola & Sutton, 2002). Music television, better known as 'MTV', human-immuno deficiency virus (HIV/AIDS), global competition, and the collapse of Communism significantly shaped their perceptions.

Generation X individuals were reared during a time of insecurity and change, in both financial and family domains. With diversity flourishing, traditions were less important to the fabric of society and subsequently began to diminish (Smola & Sutton, 2002). The ambition and diligence that had characterised their parents

waned because of the increasing instability of jobs, uncertainty and change which elicited an emerging cynicism (Kupperschmidt, 2000).

Finally, researchers define Generation Y as individuals roughly born between 1981 and perhaps 1998 (Sessa *et. al.,* 2007). These individuals are sometimes referred to as the net generation (Martin, 2005). Nevertheless, the precise dates vary across researchers. The perspectives of these individuals are significantly shaped by terrorism and 24 hour access to information (Patota, Schwartz, & Schwartz, 2007). For the purposes of this study, the dates as defined in American research above will be used as a basis for the sample frame selection.

It has been widely postulated that generational cohorts develop similarities in their attitudes and beliefs based on shared life experiences (Joshi *et. al.,* 2010). As a result, generational cohorts have clearly identifiable characteristics on which they differ (Meriac, Woehr, & Bannister, 2010).

Several authors (Sluss & Ashforth, 2007); (Dries *et al*. 2008); (Wong, Gardiner, Lang, & Coulon, 2008) have provided extensive detail regarding how different cohorts' shared life experiences have impacted their attitudes toward work and entrepreneurship. Dries *et. al.* (2008) discuss how the Baby Boomers, those born anywhere from 1946–1964 (Cennamo & Gardner, 2008), have experienced an era of economic prosperity specifically due to the timing of their birth.

Baby Boomers' belief system is based on achievement of growth and prosperity while experiencing lifetime employment and company loyalty (Twenge & Campbell, 2008). Baby Boomers believe that they have sacrificed for the benefit of their organisation and believe that time and paying one's dues are rewarded with respect and seniority (Glass, 2007).

In addition, Baby Boomers also tend to measure success materially and work long hours to achieve their goals (Simoneaux & Stroud, 2009). Baby Boomers may be less technologically competent than any subsequent generations, tend to be social in nature, and attribute networking as a major key to career enhancement (Westerman & Yamamura, 2007). Research has shown, however, that Baby Boomers may not welcome training and are resistant to change (Nicholas, 2008).

In comparison, Generation Xers, born from 1965–1980 (Severt *et. al.*, 2009; Dries *et. al.,* 2008; Eisner 2005), have distinct variations to their behaviours, patterns, and perceptions. Hill (2002) found that Generation Xers place a strong emphasis on their own professional development. Contrary to Baby Boomers, Generation Xers have not demonstrated company loyalty but tend to be strong with technology.

Generation Xers believe their job security stems from their ability to transfer job skills to future employment opportunities (Bell & Narz, 2007).

Seaton and Boyd (2007) found that Generation Xers seek praise and immediate gratification for their accomplishments but are unwilling to sacrifice their personal lives for a career. Wong *et. al. (*2008) found that Generation X individuals showed trends toward entrepreneurship, self-employment, and capitalizing on future job opportunities.

Members of Generation Y, or Generation "Yers", born after 1981 but before 1989 (Simoneaux & Stroud, 2009) have also been referred to as the Millennials or the Internet Generation. Generation Yers show tendencies similar to the Baby Boomers— including patriotism, loyalty, disciplined hard work, sociable behaviour, and the prioritisation of home and family (Eisner, 2005). Generation Yers are the most technically literate of the four generations, desire intellectual challenge, seek professional development, and strive to make a difference in society (Kowske, Rasch, & Wiley, 2010).

In addition, Millennials also exhibit a low tolerance for boredom (Goman, 2006). In a study by Sayers (2007), it was found that Millennials need personal flexibility, professional satisfaction, and immediate job satisfaction. Glass (2007) further found that Millennials thrive on new challenges and expect responsibility early in their careers.

Views toward life activities, particularly vocational-related activities, are shaped by the social context in which people develop (Meriac, Woehr, & Bannister, 2010). The influences that impact a person's development include peers, parents, and popular culture, as well as prominent events of the time (Twenge & Campbell, 2008).

As generational cohorts experience different events in the formation of attitudes and beliefs, they come to exhibit distinct group differences across cohorts with time. In addition, studies have demonstrated that various traits, such as loyalty to organizations, creativity and risk aversion vary across the generations (Wong *et. al.* 2008).

The limitation of some of these studies is that they were conducted on a cross-sectional, basis at a point in time examining two different generations. The lack of research in terms of trend analysis over an extended period of time further complicates the results of some of the existing generational cohort-based research findings. Consequently in some cases, the differences and similarities between the generational cohorts identified could possibly only be ascribed to age instead of a specific relation to generational cohort behaviour (Meriac *et. al.* 2010).

Generational cohort theory diverges from this perspective, arguing that changes across generations are primarily a function of social events rather than that of biological processes (Sessa *et al.*, 2007). According to this theory, important

historical events and societal changes affect the values, attitudes, beliefs, and inclinations of individuals. These events might include traumatic episodes like wars, sizeable shifts in the distribution of resources, heroic figures such as Martin Luther King, or experiences like Woodstock that symbolize an ideology thus shaping a generation (Patota, Schwartz, & Schwartz, 2007).

In a study by Thomas (1996) on South African education across generations, it was established that the attainment of education is influenced by both public and private interventions with parental resources being key determinants of child education.

Among adults aged 20 – 70 in the 1991/1993 in the South African Social Stratification Survey, one third of the variation of education of Asians is explained by parental education alone. The effect of paternal schooling is smaller for whites, but essentially the same for the other race groups which is due to the effect of the Apartheid legacy (Thomas, 1996).

Thus the influence of home schooling and parental participation in the educational process has been shown to have the greatest impact among Blacks and Asian communities due to the Apartheid restrictions on them both from an educational and access to resources point of view (Connell, 2007).

Reviewing the educational changes across generational cohorts, the study revealed that for those individuals born before 1950, intergenerational mobility has

been constant, however, for the subsequent cohorts mobility has been steadily increasing for all, except Whites. This suggests a relaxation in the rigidity of society and reflects the positive influence on education of the dissolution of Apartheid (Thomas, 1996).

Despite the parental influence on individuals during the formative years, events that unfold during the formative rather than later years are especially consequential. Therefore, individuals born during a particular time, and thus corresponding to the same cohort, will often share specific inclinations and cognitive styles and these have been found to persist over time (Jurkiewicz & Brown, 1998).

The main alternative to generational cohort theory is the assumption that values, attitudes, beliefs, and inclinations are primarily a function of age and maturity rather than the generational cohort itself (Meriac *et.al*. 2010).

A summary of the pertinent differences between Generation X and Generation Y are summarised in Table 2 below:

Table 2: Generation X and Generation Y differences (Simoneaux & Stroud 2008)

Also known as…	Gen X; latch key kids and busters	Gen Y; Nexters, Millennials or Eco-Boomers
Shaped their beliefs…	Television, world events, Views of parents, family Respected mentors	Television, world events Views of parents and grand parents Values held in community
Life mantra	Be cautious out there	Protect the environment
Core values	Scepticism, diversity, pragmatism and informality	Optimism, diversity, achievement, global awareness, sociability, civic duty, fun and volunteering
Views on authority	Distrusts/ignores authority	Respects authority and expects mutual trust from authority
Family	Latch-key kids, career working mom's, single parents	Split families, stay-at-home-dads, soccer moms, helicopter parents
Money	Conservative, save now for the future	Earn enough to buy what you want, save later
Education	Means to an end and personal growth	A huge expense and lifelong learning
Telephones	Cell phones	Smart phones
Exposure to technology	Nintendo, PC, MTV and learned technology in school	Internet, X Box, Wii and learned technology while learning to walk and talk
Music	Rap	Pop, rock and techno
Work and family life	Work/life balance	Life/work balance
Icon influencers	Jeff Bezos (Amazon.com) and Tiger Woods	Mark Zuckerberg (Facebook) and Kelly Clarkson
Historical influences/events	Challenger explosion; Hiv/AIDS; parents laid off work; recession; dot.com crash; CNN and the Internet	Columbine school attack; 9/11 terrorism; parents laid off work; difficulty finding work; recession of global economy and social networking and blogging

In conclusion the understanding of the underlying driving forces and influences of individuals as defined by generational cohort will allow us to test their degree of intent toward entrepreneurial activity. The sample is expected to include any members of the X or Y generational cohort regardless of all other variables.

This will ensure a larger number of sample units being available to test the degree of entrepreneurial intent, which could ultimately result in greater significance of the test result.

The findings are hoped to contribute substantially to the existing body of entrepreneurial knowledge, in particularly in terms of the entrepreneurial intent of individuals of the X and Y generational cohort, in South Africa. The in depth understanding of the generations and the differences and similarities between them in terms of entrepreneurial propensity to act and initiate entrepreneurial activity will assist in gaining a deeper understanding of how to approach the present below average entrepreneurial activity figures in South Africa.

2.6   Entrepreneurship and economic growth in South Africa

South African society is faced with a myriad of inherited political and social challenges in its new democracy. According to the Department of Trade and Industry (Dti) a number of terms are used interchangeably to describe entrepreneurship or entrepreneurial activities (Acs & Virgill, 2009). For example, entrepreneurship and small and medium enterprises (SMEs) have been used synonymously even though the defining characteristics of each differ.

The dual economy nature of the South African economy also includes a large informal sector whose actual contribution to gross domestic product (GDP) is still unknown (Netshitenzhe & Chikane, 2006). In 2003, the World Bank released a database on the global SME sector. It identified that, when both the SME and the informal sectors where considered, "the joint contribution…to GDP remains approximately constant across income groups at around 65-70 percent in developing economies" (http://worldbank.com/econometrix, 2000-2008).

In addition, it was reported that as income increases, there is a marked shift from the informal to the SME sector. This finding indicated that the informal sector in developing countries, such as South Africa, is an important source of economic activity (Carree, van Stel, Thurik, & Wennekers, 2002).

Africa's population of young people is growing exponentially. According to a World Bank report on youth and unemployment in Africa (World Bank, 2008 cited in GEM Report 2009 Herrington *et al.,* 2009), the youth currently comprise 37 percent of the continent's working age population, however they account for 60 percent of the total figure of unemployed individuals. Statistics South Africa estimates that about 40 percent of the South African population is below the age of 20 and a further 19 percent between the ages of 20 and 30 (Mid-year population estimates, 2008 cited in GEM Report 2009, Herrington *et al.,* 2010).

In March 2007, 51 percent of respondents between the ages of 15 and 24 were unemployed (Labour Force Survey, March 2007). This is significantly higher than the country's general unemployment rate reported quarterly at around 25,2 percent. (Quarterly Labour Force Survey, 2010). The inconsistencies in the figures reported further highlights the crisis in this area.

Given the scarcity of jobs and high unemployment levels, the youth (comprising predominantly Generation Y individuals), are forced to create their own opportunities and to attempt to provide their own form of employment in order to survive (McDade & Spring, 2005). Plagued by complex difficulties, such as a lack of financial or business resources, many of the emerging youth are unable to find any form of viable or legal employment (Bell & Narz, 2007).

The growing body of unemployed and increasingly unemployable youth is therefore placing an additional burden on an already limited government budget. In particular, the South African government has realised that it needs to prioritise its spending on critical areas such as infrastructure and education to ensure sustainability of the economy (Netshitenzhe & Chikane, 2006).

Historical racially-based inequality, ongoing lack of opportunities and limited access to resources further exacerbates South Africa's issues. As a result, some communities have been marginalised with marked income disparity evident

between groups (Herrington *et al.*, 2010). In addition, the vast diversity of cultures, traditions, languages and generations, working side-by-side, makes the development of an economically sound nation challenging (Mueller & Thomas, 2000).

With South Africa being characterised as functioning under a dual economy – a formal and an informal economy (Netshitenzhe & Chikane, 2006) – it would be expected that the resultant TEA index rate would align with other developing or emergent economies with comparable Gross Domestic Product (GDP) per capita, such as Argentina, Chile, Brazil and Peru (Herrington *et al.*, 2010). The 2009 GEM report however indicates that these countries achieved TEA rates that are three to four times higher than that achieved by South Africa over the same time period (see Table 3).

Table 3: Relative TEA rankings from 2001 to 2006 (Herrington, Kew & Kew 2010)

	9.4	6.3	4.3	5.4	5.15	5.29
	14	19	16	17	17	21
	0	1	6	3	8	9

The research also exhibits a consistent relation between the specific stage of economic development of a country and its entrepreneurial activity levels (Acs & Virgill, 2009).

South Africa's TEA rate of 5.9 percent is significantly lower than the average for all efficiency-driven economies (11.2 percent) as well as the average for all middle to low income countries (14.8 percent).

These findings are cause for serious concern, particularly as they again confirm the trend of below-average entrepreneurial activity demonstrated in previous GEM surveys (Herrington *et al.* 2009). A comparison can be made of South Africa relative to other efficiency-driven economies in the southern hemisphere such as Argentina, Ecuador, Brazil and Uruguay where South Africa features lower on all aspects measured in Table 4.

Despite the resources available and South Africa's strategic position, the ranking is still lower in terms of entrepreneurial attitude and perception than even Tunisia another African efficiency-driven economy.

Table 4: Entrepreneurial Attitudes and Perceptions in the 54 GEM Countries in 2009

	Perceived opportunities	Perceived capabilities	Fear of failure *	Entrepreneurial intentions **	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention for entrepreneurship
Factor-Driven Economies							
Algeria	48	52	31	22	57	58	39
Guatemala	57	64	24	18	77	69	68
Jamaica	42	77	24	29	76	77	74
Lebanon	54	77	21	22	85	79	65
Morocco	53	78	24	27	82	86	74
Saudi Arabia	69	73	49	34	80	89	78
Syria	54	62	18	54	89	89	55
Kingdom of Tonga	56	53	65	6	91	52	80
Uganda	74	85	29	58	81	85	74
Venezuela	48	59	26	29	76	69	49
West Bank and Gaza Strip	50	56	36	24	88	78	52
Yemen	14	64	65	9	95	97	96
average (unweighted)	52	67	34	28	81	77	67
Efficiency-Driven Economies							
Argentina	44	65	37	14	68	*76*	80
Bosnia and Herzegovina	35	57	32	17	73	57	51
Brazil	47	53	31	21	81	80	77
Chile	52	66	23	35	66	77	79
China	25	35	32	23	66	77	79
Colombia	50	64	29	57	90	74	82
Croatia	37	59	35	8	68	49	53
Dominican Republic	50	78	27	25	92	88	61
Ecuador	44	73	35	31	78	73	55
Hungary	3	41	33	13	42	72	32
Iran	31	58	32	22	56	78	61
Jordan	44	57	39	25	81	84	70
Latvia	18	50	40	10	59	66	51
Malaysia	45	62	26	11	74	67	50
Panama	45	62	26	11	74	67	50
Peru	61	74	32	32	88	75	85
Romania	14	27	53	6	58	67	47

	Perceived opportunities	Perceived capabilities	Fear of failure *	Entrepreneurial intentions **	Entrepreneurship as a good career choice	High status to successful entrepreneurs	Media attention for entrepreneurship
Russia	17	24	52	2	60	63	42
Serbia	29	72	28	22	69	56	56
South Africa	35	35	31	11	64	64	64
Tunisia	15	40	34	54	87	94	70
Uruguay	46	68	29	21	65	72	62
average (unweighted)	36	54	35	21	71	71	62

Innovation-Driven Economies							
Belgium	15	37	28	5	46	49	33
Denmark	34	35	37	3	47	75	25
Finland	40	35	26	4	45	88	68
France	24	27	47	16	65	70	50
Germany	22	40	37	5	54	75	50
Greece	26	58	45	15	66	68	32
Hong Kong	14	19	37	7	45	55	66
Iceland	44	50	36	15	51	62	72
Israel	29	38	37	14	61	73	50
Italy	25	41	39	4	72	69	44
Japan	8	14	50	3	28	50	61
Republic of Korea	13	53	23	11	65	65	53
Netherlands	36	47	29	5	84	67	64
Norway	49	44	25	8	63	69	67
Slovenia	29	52	30	10	56	78	57
Spain	16	48	45	4	63	55	37
Switzerland	35	49	29	7	66	84	57
United Arab Emirates	45	68	26	36	70	*75*	69
United Kingdom	24	47	32	4	48	73	44
United States	28	56	27	7	66	75	67
average (unweighted)	28	43	34	9	58	*69*	53

* Denominator: Population aged between 18-64 perceiving good opportunities to start a business
**Denominator: Population aged between 18-64 that is not involved in entrepreneurial activity

2.7 Entrepreneurship across the generations

2.7.1 Age and its relationship to entrepreneurship

The ability to think with an entrepreneurial mindset historically has been a driving force of the business environment. Through the decades, a steady progression is evident where individuals who once survived solely on the fruits of the earth, moved to an increasingly industrialized state in alignment with the advancement of technology (Goman, 2006). With technology still revolutionizing business as we know it, entrepreneurship and the ability to innovate and adapt has become an imperative to keep abreast of the rapidly changing business environment.

Erikson (2002) established that knowledge and resources acquired over time can lead to increased competence as individuals' age. Similarly, it was found that commitment tends to decrease with age as individuals become relatively less interested in the pursuit of independence. From these findings, Erikson (2002) was able to deduce that younger individuals often lacked the required level of competence, however still show great commitment. Commitment has been identified within entrepreneurial individuals to include a demonstration of willingness to provide the required resources but also possessing the necessary confidence to see things through. Individual confidence also improves with maturity of the individual over time (Wu, Cheng, Ip, & McBride-Chang, 2005).

Further studies, by Bluedorn and Martin (2008), show that the entrepreneur's age is indicative of the depth of experience and ability to choose the timing of associated entrepreneurial actions. The study compared these factors to the levels of life stress evident in the individuals tested. Life stress is defined as a measure of anxiety levels evident within an individual (Begley & Boyd, 1986).

In their study, Bluedorn and Martin (2006) found that the older the entrepreneur, the less life stress was reported and the greater the experiential base and capacity for work flexibility. Flexibility and the ability to adapt to changing circumstances are therefore critical to the engagement in entrepreneurial activity (Haber & Reichel, 2007).

Age also appears to have a bearing on entrepreneurial growth aspirations as reported in the GEM Report 2009 (Herrington, Kew, & Kew, 2010). There age and gender were statistically significantly associated with high-growth aspirations, where in particular younger individuals and men showed higher growth aspirations than older individuals and women.

A study by Autio and Acs (2009) further reinforces the GEM Report 2009 results in that while this was one of the first studies to examine the effect of national moderators, for example culture and education, on individual growth-aspirations

toward entrepreneurial intention, the direct effect of individual-level moderation was still noted as a greater predictor of entrepreneurial growth aspiration. Individual-level moderators include the ability to adapt, an individual's motivation and their propensity to innovate among other individual drivers (Sluss & Ashforth, 2007).

This reveals that age, gender, fear of failure, education and household income each exhibit strong and direct influences on entrepreneurial growth aspirations. It must be noted however, that although the contextual influences cannot be ignored, the direct influences on growth aspirations of the individual and their particular circumstance at the time remain the central drivers behind entrepreneurial intent (Autio & Acs, 2009).

Figure 3: Early stage entrepreneurial activity for separate age groups (GEM 2009)
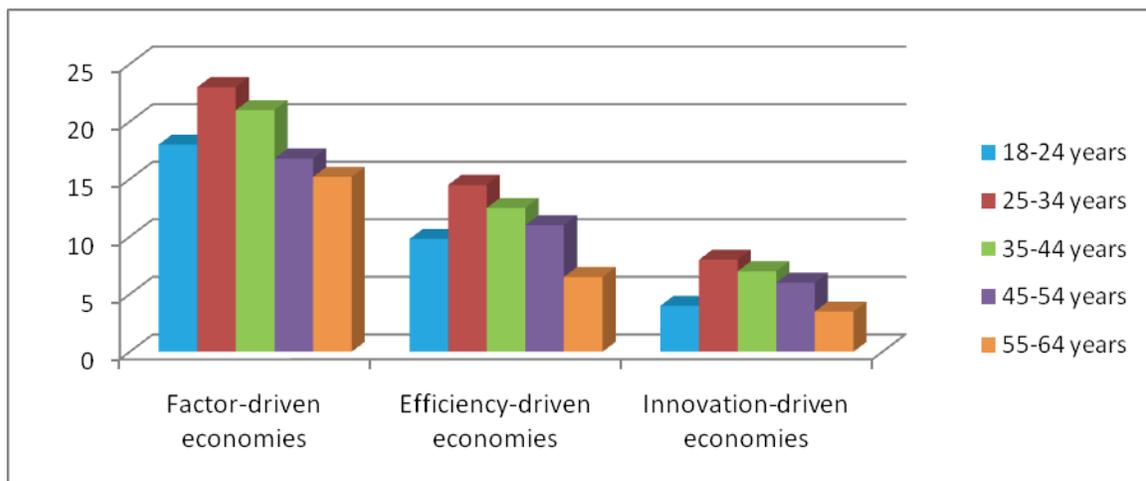
Figure 3 above demonstrates that in each phase of economic development, prevalence rates of early-stage entrepreneurial activity differ across age groups for 54 different countries that were tested.

The shapes of the age distributions are very similar across country groups. The 25-34 age-group has the highest prevalence rate in every phase of economic development. This age group does not match the classifications used for this study, however, it shows an overall global trend which can be used for comparative purposes. From the age of 35 the prevalence rates appear to decrease as age increases. This inverted U-shape pattern reflects the interaction between entrepreneurial intent, which tends to reduce with age, and perceived skills, which tends to increase with age. (Herrington, Kew, & Kew, 2010).

2.7.2 The influence of generation on entrepreneurship

In addition to age, mass events such as World War II, the Vietnam War and the Persian Gulf Conflict have had a lasting impact on all individuals' lives. Yet, depending on an individual's age in 1941, in 1965 or in 1991, one would have a vastly different encounter associated with a history defining event such as these wars (Wyld, 1996).

Globally, it was after the advent of World War II that technological advancement and the movement toward women working in industry and manufacturing proliferated (Wu *et. al.* 2005). This was primarily due to the effort to produce armaments and military goods and also where manufacturing and scientific research began in earnest.

The prevailing and post war mentality and culture was one of service to one's country and self sacrifice and especially important was the emphasis on discipline and obedience borne out of inherent military discipline management style (Simoneaux & Stroud, 2009).

In South Africa, the one such history defining event and indeed policy was that of Apartheid. In terms of Apartheid, the South African State, through a range of institutional and extra-institutional practices, introduced and applied a range of systematic practices that deprived the Black majority (including Asian and Coloured classifications) of their basic rights (Williams, 2006).

In 1994 when the African National Congress (ANC) won the first universal-franchise election and set up a coalition government to steer the transition from Apartheid, things were about to change dramatically. Established institutions, from corporations and business peak organizations to universities and government departments, were already de-segregating (Netshitenzhe & Chikane, 2006).

New opportunities suddenly existed for intellectual workers of the subordinated ethnic groups, and educational, healthcare and societal changes began in ernest. From the point of view of business, there was a skills deficit on the part of the newly powerful ANC government.

Business was tasked through legislation over time to rectify the educational inequalities of the past and to undergo transformation of the previous management and organisational structures. Entrepreneurship, however within the Baby Boomer Generation, in South Africa remained slow due to marginalisation of the masses and access to resource restrictions through the enforcement of Apartheid and racially based prohibitive legislation, particularly in South Africa, also contributed to low growth and development of entrepreneurship (Takti-Asiedu, 1993).

Just like others elsewhere in the world, South African Baby Boomer values greatly contrast to those of Generation X. Members of Generation X are often seen to be more sceptical, less loyal, and fiercely independent (Blackman, 2009). Generation X individuals believe that if the work is done, it does not matter how it was done or where as it is the outcome on which they are focused, not the process in getting there. Being efficient at what they do, and getting things done is key to the Generation X individual (Simoneaux & Stroud, 2009).

The most important thing to Generation X is a work/life balance – something they believe Baby Boomers did not have. Generation X, due to the prevalence of smart phones and wireless technologies, can and are expected to work everywhere and continuously and are thus focused on functioning in a more flexible working environment.

It is this drive for flexibility that leads many Generation X individuals into entrepreneurship due to its tendencies towards increased independence and flexibility (Seaton & Boyd, 2007). Currently with increasing competition, affirmative action (AA) policies as implemented by the South African Government and ongoing scarcity of jobs, the Generation X parents are faced with finding their own means of survival.

Many have either left South Africa for foreign shores if they had adequate funding to do so, or they have had to diversify their skills base so as to identify a means to provide their families with an income as the emerging political environment, adds additional pressures to their daily activities (Kingdon & Knight, 2004).

Millennials (Generation Y'ers) are viewed as the most confident generation as they grew up in an openly democratic and equal school system post 1994 in South Africa. The new system catered for diversity, individuality and people's freedom. Members of Generation Y are perceived as the 'most wanted' generation because they were conceived at a time when birth control was widely available and their families chose to have them (Nicholas, 2008).

Millennials are the product of either later or more mature Baby Boomers or Generation X individuals. This generational time frame established the term "helicopter parents."

Millennials' parents were very involved in their activities, controlled their schedules, oversaw their schoolwork and, in essence, "hovered" over every aspect of their lives (Davis, Pawlowski, & Houston, 2006). Millennials were groomed to learn and achieve, and they were frequently rewarded (i.e., gold stars, participation awards) for their endeavours. Growing up, their mouse and computer represented what pencils were to Baby Boomers, and the Internet became their virtual library (Cennamo & Gardner 2008).

They learned about technology and the underlying logic of how it works in the same "native" way that they learned to speak a language (Bell & Narz, 2007). Technology is integral to the way they live, think, communicate, and the way they work. They are very social, collaborative, and the ultimate multi-taskers (Loughlin & Barling, 2001). They see themselves as part of a global community where diversity is an advantage, and their work should make a difference in the world. They are energetic and like to participate in activities inside and outside of work. They were heavily influenced by terrorism, which reinvigorated new respect for family and community, the Internet, and environmental issues.

Being born within a specific time frame thus gives individuals a common frame of reference in the sense that they encounter history from a unique perspective in time (Nicholas, 2008). A comparison of X Generation and Y Generation determinant characteristic by example point can be seen in Table 5.

Table 5: Example Generational comparative table

Point A	—		
Point B	87	—	
Point C	64	56	—
Point D	37	32	91
Point E	93	35	54

Entrepreneurship in South Africa has numerous unique and limiting characteristics. These various characteristics currently contribute directly to the slow economic growth of entrepreneurial activity in the country and therefore strengthen the perceived negative perceptions towards entrepreneurial venture creation. One of the primary areas of concern is the role of education and training regarding the generation of entrepreneurial activity in the country. These concerns are echoed in the GEM Report for 2009 (Antonites & van Vuuren, 2005).

2.8   The value of education

Training and education can be defined as the intentional effort to teach specific abilities which are, knowledge bearing, to complete a specific task or project better (Antonites & van Vuuren, 2005). Informal education results from the constant effect of environment and its strength in shaping values and habits cannot be overestimated.

Formal education is a conscious effort by human society to impart the skills and modes of thought considered essential for social functioning (Audretsch, Bönte, & Keilbach, 2008).

Entrepreneurial intentionality has been suggested as an indicator of the effectiveness of entrepreneurship education programs (Barbosa, Kickul, & Smith, 2008). Research regarding entrepreneurial specific education and training particularly in the South African business environment is limited and can be ascribed to the newness of entrepreneurial science. A primary focus therefore should be on creativity, innovation and opportunity finding (Antonites & van Vuuren, 2005).

Past research has focused on assessing the impact of entrepreneurship education on the intentions of students to initiate a business venture and on the more traditional antecedents of intent including: attitude, perceptions of control and self-efficacy (Barbosa, Kickul, & Smith, 2008).

Individuals process information and manage risk differently such that these two factors affect the development of entrepreneurial type intentions and behaviours. For example, risk can be analysed cognitively or experienced as a feeling, both of which occur frequently in our daily lives.

Understanding the specific impact of these different ways of thinking in the development of entrepreneurial behaviours is crucial for the creation of effective education and training in entrepreneurship (D'Amato & Herzfeldt, 2008). In the quest to enhance entrepreneurship education, the programs should be focused not only on the perceptions of self-efficacy but also on the achievement of actual self-efficacy and entrepreneurial performance.

In addition, the importance of analysis and planning as part of the process should not be overlooked (Kumar, 2007). While analysis can potentially increase the possible success of a new business venture it can also highlight a myriad of risks and pitfalls which might discourage an individual from initiating an entrepreneurial venture altogether (Crane & Crane, 2007).

The issues discussed above are directly related to risk in that some individuals may tend to become averse to action due to the perceived risk of failure. In contrast however, some individuals may perceive the risk of missing an opportunity more critical thus prompting urgent action on their part (Townsend, Busenitz, & Arthurs, 2010).

As such, entrepreneurship educational programs should emphasise the risk of failure and the risk of missing an opportunity while stimulating the motivation to analyse and plan effectively in the individual.

The design of a comprehensive, tailored programme that can both give a realistic sense of what takes to start a successful business and the necessary skills, within the South African context should be a top priority for educational institutions and government alike (Barbosa *et. al*, 2008).

Although the South African educational system appears to be on par with that of other developing countries in terms of promoting entrepreneurship, research shows that South African learners consistently perform poorly in areas such as comprehension, mathematics and science (Scheepers, Solomon, & de Vries, 2009), entrepreneurship specific education is somewhat lacking.

The 2001 GEM report showed that only 26 percent of South African adults believed that they had the knowledge, skills and experience required to start a business (cited by Herrington *et. al,* 2010*)*. The report showed that black South Africans and women were the least likely to believe they had the skills necessary to start a business, but the most dramatic differences were by educational level.

Results from the 2001 GEM report clearly showed that people with matric (7,8 percent) and those with tertiary education (12,3 percent) were significantly more likely to own and manage a start-up than those without matric (4,3 percent).

The 2008 GEM report (Herrington, Kew, & Kew, 2008) consistently confirms that those individuals with grade twelve and tertiary education (according to the educational system used in South Africa) are significantly more likely to own and manage a start-up than those individuals lacking these educational levels. These findings suggest two things: firstly, that a grade twelve qualification increases one's capacity to pursue entrepreneurial activities; and secondly, that tertiary qualification education increases the durability of entrepreneurial activity (Netshitenzhe & Chikane, 2006).

Research by Acs and Virgill (2009) has shown that adults with tertiary level education were more than twice as likely to believe that they had the ability to start a business, compared to those without a secondary level education. Individuals with a secondary level of education were also more likely to believe they had the ability to start a business, but the difference was less significant. Further data around education reported in the GEM report suggests that current entrepreneurs with higher education seem to be more inclined to get involved in higher-growth businesses also (Herrington *et, al* 2010).

It therefore appears that education is one of the critical requirements for an individual to show greater propensity towards entrepreneurial behaviour. In other words, the higher the level of education, the higher the provision of increasing employment levels, in comparison to those entrepreneurs with secondary and

lower levels of education (Scheepers, Solomon, & de Vries, 2009). These results therefore indicate that education could be an important predictor of individuals who believe they have the skills to start a business, the possibility that the business will survive beyond start-up phase and the likelihood that the business will be an opportunity-driven business has been consistently shown in all the GEM reports (Herrington, Kew, & Kew, 2010).

2.9   Training and skills development

It is often argued far beyond the context of developing countries that entrepreneurs, because they appear ignorant or untrained at the adoption of more efficient production and management techniques, would best improve their businesses through training and skills development, particularly management training (Crane & Crane, 2007).

Entrepreneurial intentionality has been suggested as an indicator of the effectiveness of entrepreneurship education programs (Barbosa *et. al.*, 2008). Research regarding education and training particularly in the South African business environment is limited and can be ascribed to the newness of entrepreneurial science.

A primary focus therefore should be on creativity, innovation and opportunity finding (Antonites & van Vuuren, 2005). Entrepreneurial training acts as a facilitator of entrepreneurial activity, primarily being responsible for stimulating and inspiring new and innovative entrepreneurial activity and performance (Antonites & van Vuuren, 2005).

As discussed earlier, in the value of education, the necessity of developing both the individual's analytic and intuitive skill sets is critical. In order to ensure this is achieved during training, opportunities for interaction with individuals both from the academic and business world must be leveraged. This process will allow individuals undergoing training to test their ideas and behaviours in a variety of practical situations, thereby enhancing their ability to analyse their own entrepreneurial ideas and to reformulate them to be more robust (Audretsch *et. al.*, 2008).

The current state of entrepreneurial education and training in South Africa include formal training programmes given by registered institutions, informal on-the-job training or mentoring and coaching where knowledge sharing is more prominent. From a practical perspective, most training intervention programs for entrepreneurship available in South Africa have been developed to encourage entrepreneurship in the community instead of entrepreneurship on a large scale that influences economic prosperity of a country (Kropp, *et. al.* 2006).

The existing teaching materials have however been adapted from traditional American training programmes. This has resulted in the practicality of some of these programmes being questioned as the cultural diversity and idiosyncrasies associated with South African context have been erroneously omitted from the teachings. As such attempts to implement intervention programs into the South African context, "as they stand", without recognising the validity and effectiveness of existing social and organizational structures, have been known to fail (Nabi & Holden, 2008).

To train people, it is necessary first to understand their cultural values, history, and way of thinking. Cultural values and practices need to be reflected in the content, delivery, and marketing of such programs. It cannot be assumed that similar entrepreneurship levels can be achieved in various cultural environments; thus, alternate methodologies may be required to ensure program effectiveness in different environments (Wilson & Gerber, 2008).

In essence, it is hoped that a more interactive process to training and learning about entrepreneurship will assist individuals to develop more accurate perceptions regarding the risks and benefits associated with entrepreneurial ventures.

Gaining the knowledge of what training is required coupled with scientific and managerial efficiency, would ultimately lead to raised productivity levels, in turn leading to more profits, investment, capital accumulation and wealth for the nation in the long term.

In addition, entrepreneurs are required to think creatively to remain one step ahead of the competition thus ensuring their sustainability (Baker & Nelson, 2005). The exact format and content of this training however, is undecided at present and it is hoped that the findings of this study might put a more pointed focus on these requirements for the future.

2.10   Learning orientation

Learning orientation is defined as; the aptitude and ability towards the development of new knowledge or insights that can potentially influence behaviour. Entrepreneurs are predisposed to have differing degrees of learning orientation ability (Kropp, *et. al.* 2006).

Leveraging this learning orientation, organisational learning takes place within the entrepreneurial context and facilitates the development and enhancement of the entrepreneur's skills base and that of their employees regardless of scale (Haber & Reichel, 2007).

A learning organisation is one "skilled in creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights" (D'Amato & Herzfeldt, 2008). The process of learning is critical to entrepreneurial growth. In the entrepreneurial context, organisational learning occurs where individual learning is facilitated and encouraged with an added emphasis on sharing the learning across different functional units (Wang, 2008). This results in a variety of benefits both to the entrepreneur and their employees.

Firstly, learning gained through organisational learning can play a role in strategic renewal (Martinez, Mora, & Vila, 2007). Secondly, it serves as a buffer between firms and the environments in which they operate, which is especially important for entrepreneurial organisations (Kropp, *et. al.* 2006). Third, learning is forward-looking; it reduces the impact of major environmental changes and risks associated with entrepreneurial activities (Liang & Dunn, 2008). Fourth, learning organizations maintain close contacts with stakeholders including customers, suppliers, and support networks enhancing their ability to deal with unexpected environmental changes (Liang & Dunn, 2008). Finally, organizational learning can play a major role in opportunity recognition (Wang, 2008) which is fundamental to the establishment and growth of entrepreneurial ventures.

With the increasing requirement to embrace change and to develop the skills of their employees, employers more now than ever rely on those individuals willing to work flexible hours, in a technologically-driven environment, characterized by an Internet-oriented, non-stop marketplace (Nicholas, 2008). Entrepreneurs never really worked to set office hours historically nor will they ever into the future (Iversen, Jorgensen, & Malchow-Moller, 2008).

The existing and future workplace will continue to be one of constant change, where innovation and ability to adapt, seize new opportunities, and upgrade and develop new skills will become more and more important (Kodithuwakkua & Rosa, 2002). The current demographical profile in South Africa is diverse in terms of culture, ethnicity, language and generational cohorts resulting in many challenges but opportunities to leverage competencies and uniqueness too.

From the current working generations, organizational managers and leaders will expect to identify individuals who understand human behaviour, can engender co-operation, have skills that can be transferred to others, have innovation and creativity at their core and can bring out the best in workers to continue their role into the future (Blackman, 2009).

Work projects and business ideas will begin with one set of goals, and will reinvent themselves over and over again, in order that society becomes conditioned to think increasingly dynamically. Workers at all levels of the organization will be responsible for devising creative strategies, collaboration will become common practice and cross-functional teams will be assigned for individual projects to gain increased resource, intellectual capital and skill sets (Crane & Crane, 2007).

The role of the emerging Generation X and Y individuals as entrepreneurs is becoming prominent where both within organizations (referred to as intrapreneurs) and outside of the organisational structure (referred to as entrepreneurs) they are actively breaking ground and growing the economy of South Africa. Entrepreneurship is emerging as a particularly strong engine for regional growth where the long-term employment creation potential is beneficial in that not only do entrepreneurs create jobs, but they also create new wealth and new growth within the economy. Their ability to use resources creatively assures that they are an important contributor to the economy, both in new ideas and innovations (Low, Henderson, & Weiler, 2005).

It must be noted that while the different perceptions of entrepreneurship may all be important in one way or another to the economy, each may have entirely different consequences and outcomes.

As a result, a balance between the types of entrepreneurs is needed for the functioning of the economy, primarily as they each perform different value adding roles (Dew & Sarasvathy, 2007). A discussion of the constructs identified as being influential in the measurement of entrepreneurial intent for this study follows.

2.11   Foundational constructs

Demographic characteristics such as gender, ethnicity, family composition, education, location and type of business are not incorporated as predictors within this study but purely serve as a means of gathering statistical generic information about the units of analysis from the sample framework. Age, another demographic characteristic, is utilized as a predictor in terms of the identification from which generational cohort a specific respondent has come.

Initial entrepreneurial studies focused on traits and demographic variables that contributed to the identification of the differentiating factors between entrepreneurs and non-entrepreneurs (Westhead, Ucbasaran, & Wright, 2005).

The decision to become an entrepreneur may be plausibly considered as voluntary and conscious and concluded at different times and stages of the decision-making process depending on the specific decision-makers circumstances (Bergmann & Sternberg, 2007).

In regard to the voluntary decision-making process to become an entrepreneur, existing methodologies are dynamic and have changed over time (Beugelsdijk & Noorderhaven, 2005). The intention of carrying out a given behaviour will depend on the individual's specific attitude towards that behaviour in question (Acs Z. , 2008).

It is therefore plausible that, the greater the favourability of the predisposed attitude toward entrepreneurship, the more feasible the intent (Choi *et. al.*, 2008). In this sense, this approach of inquiry utilising attitude would be preferable to those used traditionally in the analysis of the entrepreneur, such as the traits or the demographic approaches (Baum & Locke, 2004). Thus, attitudes would measure the extent to which an individual values positively or negatively some behaviour (Lee *et. al.,* 2009).

In reviewing Ajzen's (1987 and 1991) model of planned behaviour (Figure 4) (Krueger, Reilly, & Carsrud, 2000)the interrelated factors of entrepreneurial intent become apparent. The Theory of Planned Behaviour infers that an individual's intentions are determined by three elements: his attitude concerning a given behaviour, his perception of subjective norms and the level of perceived control over the situation (Krueger *et. al.*, 2000). In the model, the first two elements are related to the attractiveness of the behaviour and can be linked to Shapero's notion of desirability in entrepreneurship.

The third element, perceived control of the behaviour, touches on Shapero's concept of feasibility, and Bandura's (1977) concept of personal effectiveness, making reference to individual beliefs concerning one's ability to complete a given task (Krueger *et. al.*, 2000).

Figure 4: Theory of planned behaviour (adapted from Ajzen 1987and 1991)
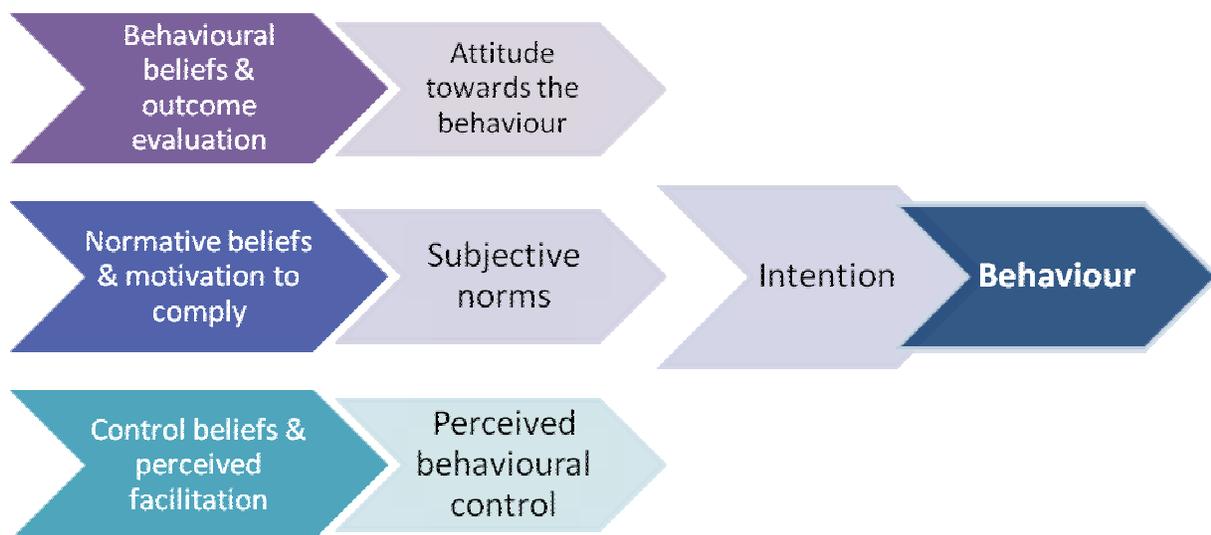
Ajzen's theory of the entrepreneurial event considers firm creation as a result of the interaction among contextual factors, which would act through their influence on the individual's perceptions. It is therefore assumed that an individual would only consider making the decision to take up an entrepreneurial activity or develop the intent to take up an entrepreneurial venture as a direct consequence of some external change – a push- or pull- type event (Choi *et. al.*, 2008).

In querying an individual's response to that specific external event, their response will depend on their perceptions at the time of questioning and the availability of resources. As such, according to Shapero there are two basic kinds of perceptions involved in entrepreneurial intent decision-making: these are perceived desirability and perceived feasibility.

Perceived desirability can be described as the degree to which an individual is aware of an attraction to a given behaviour or intent to become an entrepreneur (Ismail, *et al*., 2009) (Shapero, 1982). In contrast, perceived feasibility is defined as the degree to which an individual may consider themselves, personally able to carry out certain behaviour (Lee *et. al.*, 2009).

The importance of the contribution from support associations and networks as well as the presence of role models, mentors or partners cannot be overlooked. These elements are pivotal in establishing the individual's personal entrepreneurial feasibility level (McGee *et. al.*, 2009). Furthermore, both types of perceptions are determined by existing cultural and social factors through their influence on the individual's inherent values system (Zain, Akram, & Ghani, 2010).

The initiation of an entrepreneurial venture is as a result of the conscious or unconscious analysis carried out by the individual about the desirability and feasibility of the different possible alternatives and opportunity cost of each

particular situation arising. In an adaptation of Ajzen's model (1987 and 1991) by Krueger *et. al.* (2000), see Figure 5 below, it is assumed that inertia guides human behaviour until something interrupts or "displaces" that inertia. Push- and pull-factors arise from positive or negative emotions that an individual experiences (Beugelsdijk & Noorderhaven, 2005).

Figure 5: Krueger's model of entrepreneurial intent (2003)
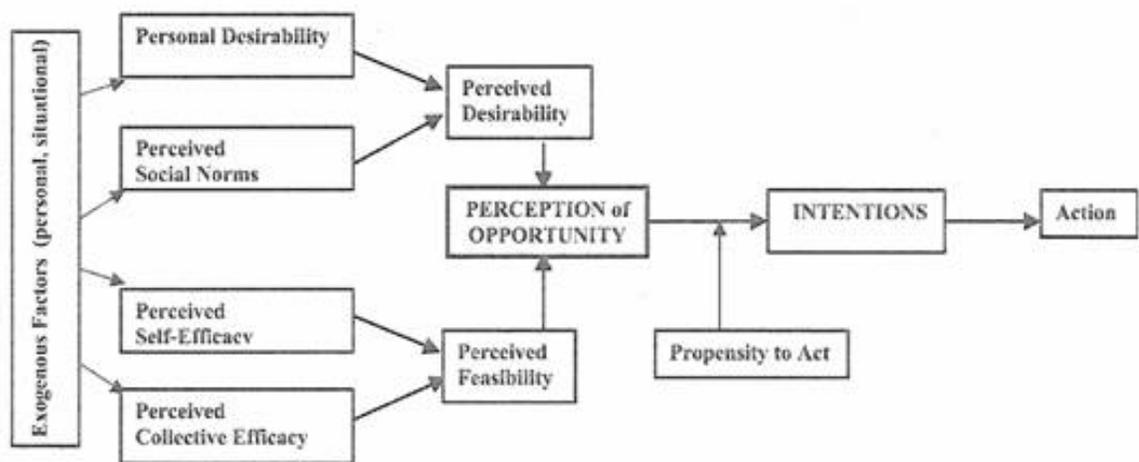
A push-factor is negative emotion that forces an individual to leave the status quo whereas a pull-factor is a positive force that attracts person towards new path which can be enterprise formation. In other words, an individual may find his current occupational status to be unsatisfactory and therefore, alternatives like enterprise formation become attractive (Kumar, 2007).

This interruption or displacement initiates a willingness to change driven by either pull-factors or push-factors that an individual faces while starting an enterprise

(Mueller & Thomas, 2000). Pull-factors include drivers such as the desire for independence and control, family traditional values, improved social status, receipt of a financial windfall or the motivation to innovate and create new products.

In addition to these pull-factors, there are also considerations that push many people toward self-employment. Push factors include variables such as job loss or loss of income however this can also be seen as positive. Push-factors most often precipitate a drastic change in existing behaviour where the individual is forced through necessity to seek the best opportunity from a given set of alternatives (Mueller & Thomas, 2000).

The choice of changed new behaviour depends on the relative "credibility" of alternative behaviours (relative to this situation and decision-maker) along with some degree of "propensity to act" (without which significant action may not be taken) (Liñan *et. al.*, 2005).

"Credibility" requires that a behaviour, be seen as both desirable and feasible given the current set of circumstances at hand. Entrepreneurial events thus require the potential to start a business (credibility and propensity to act) to exist before the displacement and a propensity to act afterwards (Krueger *et. al.*, 2000).

In a recent study perceived feasibility, perceived desirability, and the propensity to initiate entrepreneurial activity explain well over half the variance in intentions toward entrepreneurship identified, with feasibility perceptions showing the greatest variances (Krueger *et. al.*, 2000). In the study, Shapero was cited to have offered evidence on how critical perceptions are to the entrepreneurial intent process.

The key a themes of entrepreneurial intent as established by the study are summarised in Figure 6 below. A discussion of each of these themes and their associated aspects follows.

Figure 6: Model for Entrepreneurial Intent
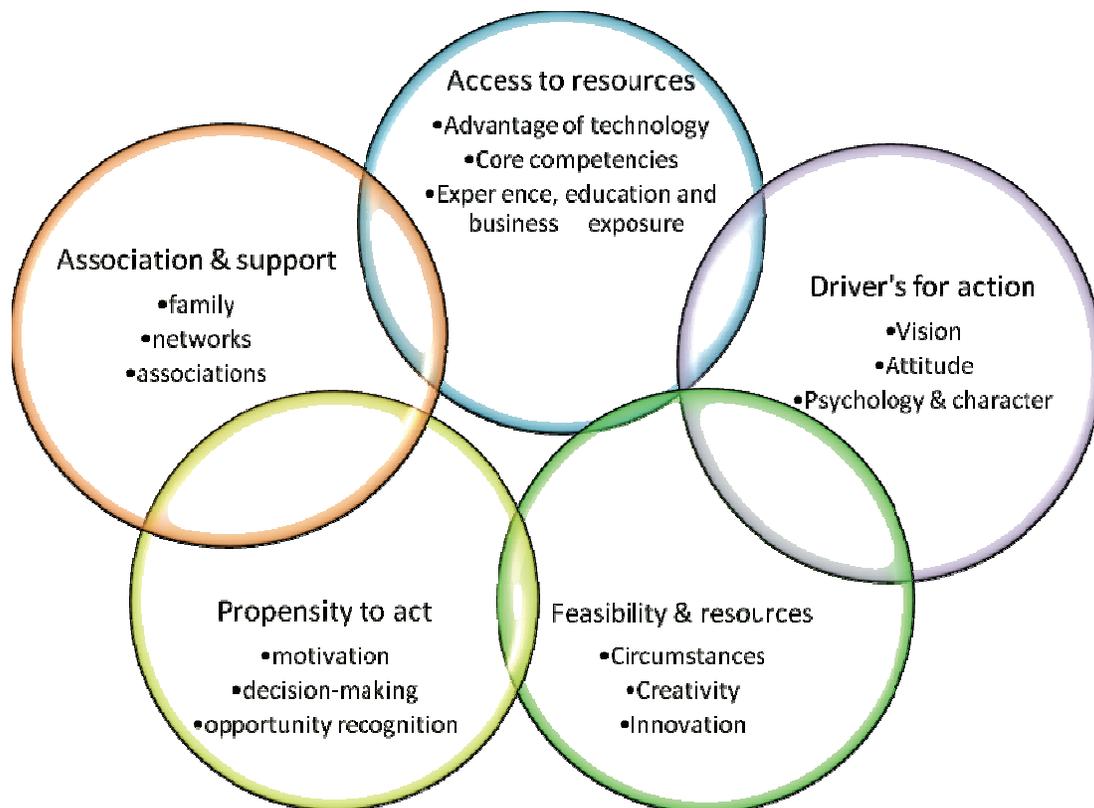
Significant life events as experienced by individuals such as job loss, divorce, marriage or death can also precipitate sizable increases in entrepreneurial activity. The individuals who precipitate this increased activity have not themselves fundamentally changed, but their perceptions of the "new" circumstances have (Baum & Locke, 2004). Pre the life-changing event, their entrepreneurial potential clearly existed, but the potential required displacement to become active.

2.11.1 Availability and access to resources

Access to resources in terms of entrepreneurial intent (Figure 7) will now be discussed from the viewpoints of core competencies, the advantage of technology, experience, education and business skills.

Figure 7: Entrepreneurial intent - access to resources
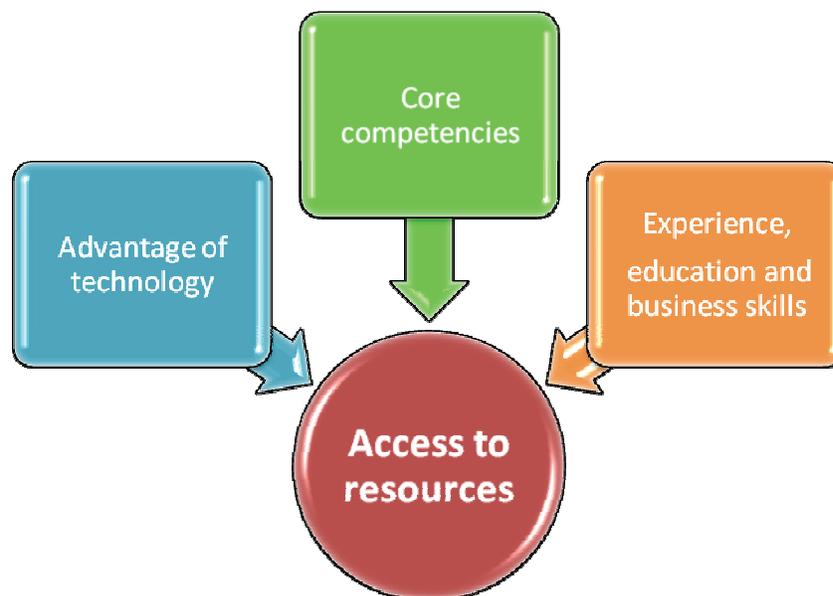
2.11.1.1.   The advantage of existing core competencies

The core competencies that supersede the entrepreneurial individual's personal skill set include knowing the market dynamics, knowing the customer, avoiding mature or monopoly driven markets, understanding of the underlying economic currents and how these change, and remembering that discretionary cash flow creates wealth.

Market growth is a key factor of successful entrepreneurship, especially if supported by public policy, a regulatory environment, and societal and technological trends. Thus entrepreneurs that chose markets that are growing in excess of Gross Domestic Product (GDP) increase their chances of sustained success (Crane & Crane, 2007).

The GEM Report 2009 (Herrington *et. al.,* 2010) claims; citing Argenti's (1976) argument; that most problems affecting SME's, relate to the lack of managerial capacity of the individual owner or manager of the SME business itself. Although it is not possible to agree the sum total of what individual core competencies where lacking result in poor management, and to what extent this has a negative influence on the business, it is essentially correct to include marketing, operational, financial, personnel and distribution issues within this grouping due to the

integrated nature of business management within a small business environment (Pansiri & Temtime, 2008).

In addition, managerial intervention and effectiveness are critical to business survival today. The owners or managers require basic skills interspersed with core competencies to be able to set goals and to visualise the various strategies required to achieve their vision.

The survival of SME's in the turbulent changing markets of today is largely dependent on the ability or the owner or manager's ability to engage in environmental scanning activities for the purpose of understanding the behaviour and influence of trends in the market (Townsend *et. al.*, 2010). Once scanned, the processing, collating and analysis of the inter-operating environmental data is conducted through the application of a degree of managerial skill and competence (Pansiri & Temtime, 2008).

Regarding core competencies, a study by Chandler and Jansen (1992) (as cited by Athayde, 2009)identified and tested five competencies pertaining to entrepreneurial intent using a sample of established entrepreneurs. They found that these selected entrepreneurs placed a certain degree of significance on specific competencies that were evaluated in their study.

The core competencies studied included: leading and organisational skills; opportunity recognition skills; personal drive or motivation; technical and/or functional expertise including aptitude, behaviour and finally political competence in terms of stakeholder engagement. The study revealed that while individuals with strong entrepreneurial intentions are not necessarily actual entrepreneurs, it is likely that they might view these listed competencies similarly.

It is therefore possible to conclude from these findings that intent is a dependable predictor of human behaviour regardless of the circumstances and has further been deemed by many to represent an accurate precursor of individual attitudes and propensity to take action (Brice Jr. & Spencer, 2007; Krueger *et. al.* 2000).

2.11.1.2. *The advantage of access to technology*

Technology is pervasive, constantly evolving and changing the way we connect with our co-workers and our customers. For all Millennials and most Generation X individuals even a fairly high-tech workplace is a step backward from what they are accustomed to in their personal lives.

The technology gap between subsequent generations remains one of the most challenging to bridge, and it will continue to widen with the speed and frequency at which technological innovations currently occur. Generation Y individuals depend on technology to make them more productive (Cennamo & Gardner, 2008).

Generation Y tends to want total flexibility in how they operate in their work. This techno-literate group requires flexibility and freedom of choice while multi-tasking, running multiple projects or programs concurrently, and working with a number of diverse people (Nicholas, 2008). Their preferred learning style is interactive or via multimedia presentations (Loughlin & Barling, 2001).

As a daily ritual they download podcasts and music, take pictures with their mobile phones, and text one another in their self created text messaging language (Elfring & Hulsink, 2003). They are accustomed to relating and interacting with others using collaborative technology and tend to be rather intolerant of those who are challenged by the swift pace of technology (Nicholas, 2008). In essence, Millennials especially rely on modern technology to fill in their experience and knowledge gaps, to problem solve, to interact, and to stay fully engaged in their work.

The primary role of technology in an entrepreneurial venture is to automate processes and to serve as a point of collection of business related information. It is also limitless when used as a marketing and promotional tool in terms of communicating the business's unique offering to the selected target market (Nicholas 2008).

2.11.1.3. *The advantage of experience, education and business skills*

Business literature on entrepreneurship stresses the importance of prior experience with a foundation organisation or established company that the entrepreneur left in order to pursue their own entrepreneurial interests (Merrett & Gruidl 2000).

These foundation organisations empower the future entrepreneurs with technical and market knowledge while motivating them to confront the challenges of initiating a new business venture. The foundation organisation may also function as a source of financing leverage or partner. In terms of experience being an advantage in initiating an entrepreneurial venture, entrepreneurs who are launching a new business venture must cope with what is known as "liabilities of newness" (Shepherd, Douglas, & Shanley, 2000).

Existing business experience is often considered to provide valuable knowledge that can help an entrepreneur to overcome the traditional problems, "liabilities of newness" and obstacles that a new venture faces. Mostly experience in gaining the correct information and effective decision-making can only be gained through trial and error while undertaking certain entrepreneurial activities (Caliendo & Kritikos, 2008; Shepherd *et al*., 2000).

A business skill that is often overlooked is communication. Communication refers to the ability to empathise and communicate with others such as employees, customers, and suppliers. Open communication, particularly among team members, is important so that they can work together on complex innovative tasks (Goman, 2006). The environment of entrepreneurship is often hostile and always dynamic. This dramatically increases the need for good communication in order to leverage networks, support communities and employees.

Other research also supports an association between communication and performance. Having well-developed social networks improves the ability to access information and obtain assistance to grow the business (Manev *et. al.,* 2005). Strong communication skills, greater self-confidence and resourcefulness play a crucial role in this regard (Mair & Marti, 2009).

It is important for an entrepreneurial individual to develop open communication channels with customers, suppliers and the team. In addition, the team's enhanced ability to communicate on a proficient level will enable it to obtain and avoid squandering the necessary resources (Kropp *et. al.,* 2006). It should also be mentioned that there are institutions (such as the chambers of commerce) that put strong emphasis on the accumulation of entrepreneurial knowledge.

These institutions tend to advise nascent entrepreneurs to better search for other job opportunities if the person has an insufficient knowledge base, and to encourage persons to start right away with their own business if the person has gathered sufficient entrepreneurial knowledge (Caliendo & Kritikos, 2008). This is further discussed under the support and association section that follows.

2.11.2 Drivers for entrepreneurial action

In Figure 8 below, three themes have to be brought together: vision, attitude and suitable psychology and character.

Figure 8: Entrepreneurial intent - driver's for action
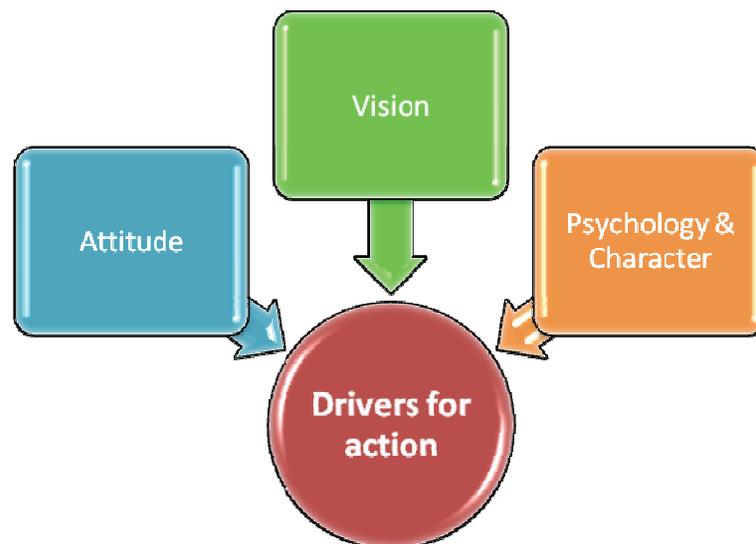
2.11.2.1.   *Entrepreneurial vision*

In order to focus on vision, one needs to understand the reasoning behind the willingness of an individual to start a business venture.

In terms of entrepreneurial vision, people need to be encouraged to look at things around them in a more critical way, observing events and incidents more closely and questioning how things might be done differently and thereby improved for greater commercial, social or aesthetic benefit (Xiao, Marino, & Zhuang, 2010). It must be noted that this line of thought overlooks one key element, that is, that many people already have great ideas and a vision, but they have neither the will nor the confidence to pursue them (Acs Z. , 2008).

Generalising, many (but not all) of the people skills identified as being involved in entrepreneurship are consistent with those which are often recognised as leadership skills (Gill, 2009). In order to compliment the entrepreneurial vision of the individual, the leadership skills and technical skills would need to be incorporated to achieve the vision through the leveraging of willingness of the individual (McGuire, By, & Hutchings, 2007).

According to Clark and Drinkwater (2001) as cited by (Kumar, 2007) this willingness is determined by the pulls and pushes that an individual faces during the initiation of an enterprise. Push-factors and pull-factors arise from negative or positive emotions that an individual experiences while comprehending opportunities or a vision. In theory, a push-factor is perceived as a negative emotion that forces an individual to leave the status quo whereas a pull-factor is a

positive force that attracts an individual towards a new vision, which can be the intent to initiate an entrepreneurial venture (Choi *et. al.*, 2008).

This vision and subsequent action include the willingness to assume calculated degrees of risk. This risk is all inclusive and incorporates personal, social, environmental and financial risks as perceived and experienced by the visionary entrepreneur (Antonites & van Vuuren, 2005). Every effort is therefore made by that individual to keep the actionable state of the vision as real and as close to that vision and end goal as conceived throughout the process (Acs Z. , 2008).

2.11.2.2.   The influence of attitude

Developments in the field of social psychology have led to a definition of "attitude" as a predisposition toward a particular object. The concept of "attitude" is more dynamic than that of "trait" as attitudes are responsive to external objects, and are capable of change (Athayde, 2009). An "attitude" is also a much richer concept by being manifest in three ways: cognitive (beliefs), affective (emotions), and behavioural (actions) (Barron, 2004).

Research by Robinson, Stimpson, Huefner and Hunt (1991) resulted in a model called the EAO (entrepreneurial attitude orientation) instrument that was based on a tripartite model of entrepreneurial attitudes. Robinson *et. al.* (1991) further noted that "attitudes do not exist in isolation," but rather that an individual develops an attitude toward an object. In their study, the EAO scale was developed to measure

attitudes toward four dimensions associated with entrepreneurship: achievement in business; self-esteem in business; personal control of business outcomes; and innovation in business.

In this context, it is essential not to ignore the reality that environmental factors either help or hinder the individual's attitude and the ability to exploit their potential. Certainly if the people with entrepreneurial attitude could be identified, they could be provided with suitable training and development opportunities boosting their entrepreneurial potential and success (Read, Song, & Smit, 2009).

The concept of attitude is complex and includes vision (as discussed above), emotional connotations regarding professional lives, perspectives on business enablers and constraints and on the economic prospects of the chosen economic region, in this case South Africa (McDade & Spring, 2005). In addition, despite the importance of entrepreneurial attitude, there are still many un-clarified issues regarding the effects of psychological traits and individual personality that have a bearing on entrepreneurial action (Shane & Venkateraman, 2000).

2.11.2.3. *Psychological traits and characteristics of personality of the individual*

Early studies based on the expectation of the work by McClelland (1961) proposed that there must be some significant psychological difference between individuals that are entrepreneurial in nature and the general populous (Read *et. al.*, 2009).

Other entrepreneurship research focused on identifying the psychological traits of entrepreneurs but this research specifically utilises the traits of existing entrepreneurs rather than those of potential entrepreneurs in the measure of entrepreneurial intent between two generational cohorts (Beugelsdijk & Noorderhaven, 2005).

Profiles of entrepreneurs have been proven to include optimism and other entrepreneurial characteristics such as self confidence, high expectations, willingness to accept risks, etcetera (Beugelsdijk & Noorderhaven, 2005). Some empirical studies have further examined the extent to which entrepreneurial characteristics impact on certain entrepreneurial decisions in investment, new venture creation, work/life choices, or success/failure of entrepreneurial actions (Kumar, 2007).

Researchers in psychology have investigated optimism (often contrasted to pessimism) as an attribute of individuals who link positive thinking, better outcomes, personal control, personal well-being, coping strategy, self-esteem, or interactions between individuals in different cultures and environments (Miao & Liu, 2010).

Optimism is often listed among the other characteristics of entrepreneurs such as high achievement drive, action oriented, internal locus of control, tolerance for ambiguity, moderate risk taking, commitment, opportunistic, initiative, independence and commitment/tenacity (Liang & Dunn, 2008). Most researchers who have studied entrepreneurs' characteristics or traits seem to agree that optimism is a distinct characteristic of entrepreneurs (Crane & Crane, 2007).

According to Caliendo and Kritikos (2008), however, the characteristics of personality have been identified as being fundamental not to the entrepreneurs intent to initiate an entrepreneurial venture, but rather to entrepreneurial success.

Their study defined the following traits as useful both in the explanation of past success and in predicting the future development of a start-up businesses; motivational traits, such as 'need for achievement', 'internal locus of control', 'need for autonomy', cognitive skills such as 'problem-solving orientation', 'tolerance of ambiguity', 'risk-taking intent', social skills such as 'interpersonal reactivity' and 'assertiveness' (Caliendo & Kritikos, 2008).

Attempts to predict entrepreneurial activity using trait (and personality characteristic) approaches have yielded disappointingly poor results (Krueger *et. al.*, 2000) and researchers have therefore started to develop integrated explanatory

models that include situational variables, demographics, personal background and domain-specific attitudes (Ahmad & Hoffmann, 2008).

2.11.3 Perceived feasibility and resource advantage

While motivation (discussed in the next section) and vision may drive individuals to engage in the behaviour necessary to start a business, entrepreneurship research demonstrates that available resources are important determinant of entrepreneurial longevity and success (Kodithuwakkua & Rosa, 2002).

Figure 9 below summarises the section to be discussed next.

Figure 9: Entrepreneurial intent - feasibility and resources
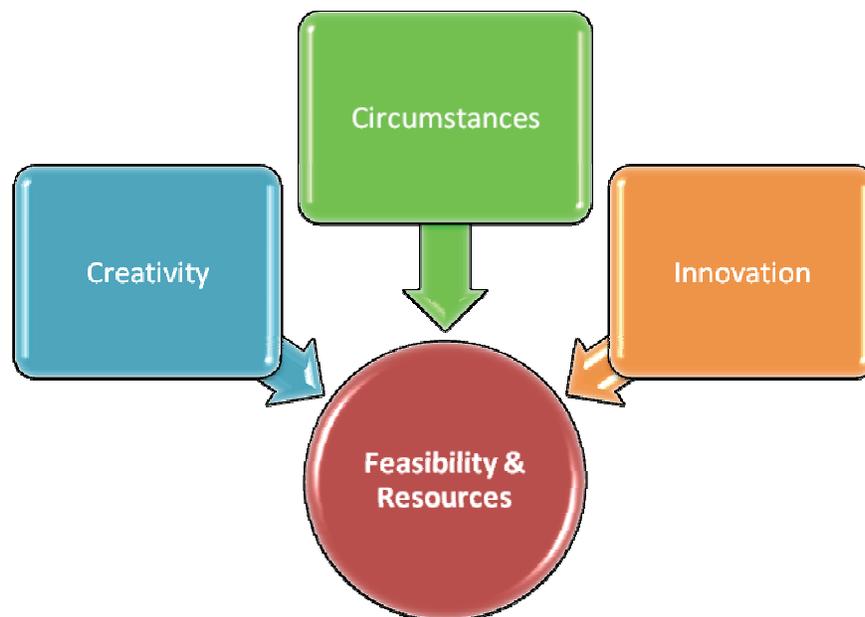
2.11.3.1.   Circumstances

Demographic factors or circumstances such as age, gender, race and other factors including professional background, work experience, and educational and psychological profiles have been frequently analysed. In general, the results indicate that being a man or woman aged between 25 and 40 with self-employed parents, a higher education degree, need for achievement, risk-taking intent, and preference for innovation are the factors that favour the decision to undertake entrepreneurial activities (Zain, Akram, & Ghani, 2010).

Further to this, perceived feasibility is the degree to which one feels personally capable of starting a business depending on circumstances (Baker & Nelson, 2005). It involves the physical circumstances and resources available at a specific point in time conducive toward entrepreneurial intent. As such, the social circumstance in which an individual is immersed; is one such enhancer or limitation of feasibility especially in terms of the past and present social challenges within South Africa (Netshitenzhe & Chikane, 2006).

Research shows that social circumstances influence the development of an entrepreneurial individual's high abilities. Shavinina (2006) identifies certain micro-social factors in the development of entrepreneurial giftedness. These include specifically, the family environment, 'significant others' and great contemporaries

as identified in her study of Sir Richard Branson, the most successful entrepreneur in the UK this Century.

2.11.3.2.   Creativity and innovation

Innovation and creativity have also been identified as critical resource advantages especially regarding entrepreneurship. The absence of resources should not be a finite limitation to the feasibility of embarking on an entrepreneurial venture but rather a challenge in terms of forcing the individual to think beyond the obvious to create value by some other means (Alvarez & Barney, 2007). A discussion of these two aspects follows.

A greater emphasis on creativity by society in general would help individuals to visualize problems differently, resulting in them finding ways to overcome existing barriers. Creativity is an essential element in innovation, which is at the heart of entrepreneurship (Mueller & Thomas, 2000). Simultaneously, ways also need to be found for building people's confidence, providing opportunities for them to discover their true talent, and ensuring at the same time that any idea someone might have is not extinguished by discouraging their individuality and uniqueness.

Baron (2004) argues that creativity is related to opportunity identification. He discusses the possibility that entrepreneurs use a different, integrated knowledge

structure. Creativity leads to better identification of opportunities through process of conceptual combination, analogical reasoning and abstraction.

In a study by Xiao, Marino and Zhuang (2010) it was suggested that environmental uncertainty, has an important bearing on shaping and embedding exploratory entrepreneurial learning and that the scope of entrepreneurial learning will then impact entrepreneurs' propensity toward innovation. These abilities are developed from childhood and are established through exposure to knowledge, experiences, learning and environment. Innovation and creativity are nothing but the ability to create new and additional constructs, different from existing constructs (Xiao, Marino, & Zhuang, 2010).

The focus for any business venture, in environments characterised by rapid change, is to gain and sustain competitive advantage that cannot be imitated by competitors. The focus is often on innovation as a differentiator to obtain these advantages particularly when initiating an entrepreneurial venture. Creativity as a facet of innovation is the basis of sustainable competitive advantage and is a distinctive competency that should be developed in order to improve the strategic functioning of an organisation (Wu *et. al.*, 2005).

Gaining a competitive advantage based on distinctive competencies is the ultimate objective of any business venture initiator (Thompson, 2000). Joseph Schumpeter,

one of the foundational authors on entrepreneurship presented his ideas on the subject where he opposed the existing views of the entrepreneur as a risk bearer and a manager of a company (Shane & Venkateraman, 2000).

Instead, Schumpeter argued that an entrepreneur is an innovator, an individual who carries out one of the following five tasks: (i) the creation of a new commodity or a new quality; (ii) the creation of a new method of production; (iii) the opening of a new market; (iv) the capture of a new source of supply; or (v) the creation of a new organisation or industry (Minniti & Lévesque, 2008).

The primary task of the entrepreneur is thus to identify new combinations of the discussed factors, in order to profit from them. The entrepreneur is not necessarily the one who specifically invents new combinations of resources at his disposal but the one who identifies how these newly found combinations can be applied in the context of sustainable business production (Sarasvathy, 2001).

Innovative firms are often found to be the first-to-market with new product offerings (Covin *et. al.*, 2006). Along with new product innovation, entry into new markets or countries is also described as innovation. This can involve combining different objects in different ways to produce new products and discovering new purposes for products or better ways to solve customer problems. Innovativeness in itself spans a continuum; from making marginal improvement to technological leadership to revolutionalising a product or process (Choi *et. al.,*2008).

It is therefore plausible to integrate creativity and innovation where innovation is in essence applied creativity in the business context (Wu *et. al.*, 2005). The harnessing of creativity leads to innovation. As such, many entrepreneurs tend to be non-conventional, creative, lateral thinkers, who can think outside the box, identify innovative business opportunities, and be adept at adapting to changing and uncertain environments (Dew & Sarasvathy, 2007).

More creative and innovative firms tend to outperform other firm types in more volatile situations (Shepherd D. , 2003). Innovativeness, therefore, is essential to overcome the obstacles that threaten emerging entrepreneurial business venture's existence. Entrepreneurial business ventures that are more innovative will outperform those with lower levels of innovativeness (Kropp *et. al*., 2006).

2.11.4 Propensity to act/intent to act

Ajzen conceptualized the "propensity to act" as the personal disposition to act on one's decisions, thus reflecting volitional aspects of intentions ("I will do it"). As such, it is hard to envision well-formed intentions without some degree of propensity to act. Conceptually, propensity to act on an opportunity depends on control perceptions; that is, the desire to gain control by taking action. This is determined by personal motivation, circumstance and a degree of creativity (Alvarez & Barney, 2007), see Figure 10 below.

Figure 10: Entrepreneurial intent - propensity to act
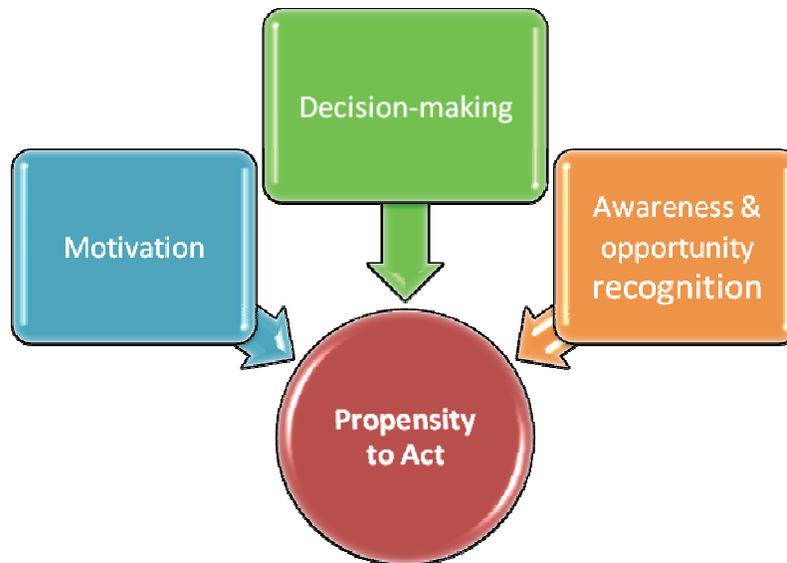
2.11.4.1. Motivation

Action or the propensity to act is the precursor of entrepreneurial decision making. It refers to the drivers responsible for the propensity to act such as motivational, drive and will power which are leveraged to enable choices made by entrepreneurs at the point in time when they are faced with an entrepreneurial opportunity.

The propensity to act includes the attributes of conventional decision-making, such as the assessment of risk, process, and irreversibility (included under social circumstances) (Autio & Acs, 2009). It has been found that, personal and situational variables typically have an indirect influence on entrepreneurship activity through the influence of key attitudes and general motivation to act.

For instance, role models like parents, mentors or public figures, may affect entrepreneurial intentions largely because they affect attitudes and beliefs such as perceived self-efficacy (Shavinina, 2006). Intention-based models offer mechanisms to assess relative impacts of exogenous influences (for example, perceptions of resource availability) on intentions and, ultimately, venture creation (Krueger *et. al.*, 2000).

In particular, drive and personal motivation, defined as intention in Chandler and Jansen's (1992) study attempted to capture the essence of stimulating factors that influence behaviour. They found that the intentions are indicative of the degree of intensity to which individuals are prepared to perform and precisely how much effort they are prepared to commit to carry out the expected behaviour in their quest to achieve their goal. In essence, the more robust the intent, the more probable it is to be able to foretell the anticipated behaviour otherwise known as motivation of the individual going forward (Acs Z. , 2008).

2.11.4.3. *Awareness and opportunity recognition*

Research by Alvarez and Barney (2007) deemed opportunity recognition to be the chief factor influencing entrepreneurial decision making. In the model of opportunity identification and development it is contended that after opportunity recognition

comes the investment stage, with opportunity recognition being a sufficient condition for business operation (Ardichvili, Cardozo, & Ray, 2003).

From a cognitive viewpoint, Baron (2004) has concluded that opportunity recognition in the entrepreneurial decision-making process usually consists of two dimensions: profitability recognition and feasibility recognition.

Previous researchers (Choi *et. al.*, 2008) have asserted that opportunity recognition depends on entrepreneurial capability. Opportunity recognition is understood as an awareness and comprehension of business information and identified opportunity, expressed as careful evaluation, market inspiration, and insightful rapid judgment and decision-making.

Prior knowledge has been considered the cognitive basis of opportunity recognition (Ardichvili *et. al., 2003*). Entrepreneurs' existing stocks of information have an impact on how they seek customers and markets, search for suppliers, seize capital, and engage in other venture actions.

In a study conducted by Miao and Liu (2010), first the cognitive characteristics of entrepreneurs (entrepreneurial alertness and prior knowledge) were identified as having key roles in impacting opportunity recognition and propensity to act. Then the impact of opportunity recognition on entrepreneurial decision making was

analysed. Ultimately cognitive characteristics and opportunity recognition were linked to entrepreneurial decision making, forming a causal model to illustrate the micro-mechanism of entrepreneurial decision making.(Miao & Liu, 2010)

2.11.5 Association and support

The factors that are included under association and support that are discussed next can be seen in Figure 11 below.

Figure 11: Entrepreneurial intent - association and support
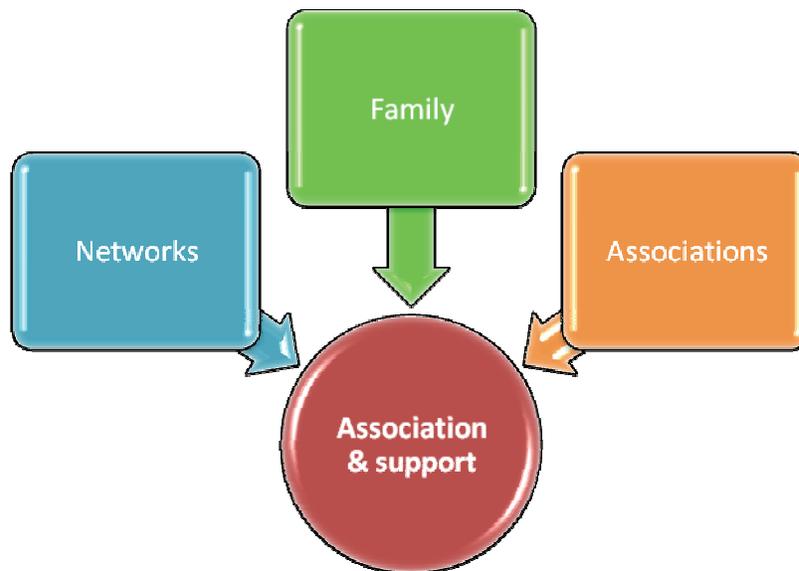
2.11.5.1. *Family*

The support of family is important to an individual who has the intent to embark on an entrepreneurial venture (Dries *et. al.*, 2008). The family's support also provides a psychological boost in terms of the individual's self-belief and confidence levels that are required to make entrepreneurial ventures successful (Begley & Boyd, 1986).

2.11.5.2. Networks

Social and organizational networks can provide many of the resources that new start-ups seek often more immediately and effectively than government-sponsored programs. Since social networks are usually an outgrowth of long-standing human social relationships they are a significant portion of an entrepreneur's social capital and also serve to enhance the return on human capital such as intellect and education (Burt, 1997).

The importance of these network ties is underscored by findings that in many countries human and social capital have been shown to impact small business performance. These networks are particularly significant in the early stages of a start-up where internal resources are frequently very limited.

Studies have also shown that social networks can provide competitive advantage for ethnic entrepreneurs in all these critical resource areas (van Delft, Gorter, & Nijkamp, 2000). Social networks are multi-faceted; they may serve as a source of labour by providing a low cost and highly committed workforce, a source of capital by facilitating informal borrowing within the ethnic networks, and a source of information among community members. Moreover, they facilitate mutual trust within the network; hence, members of the group are more willing to do business with each other and to exchange critical information (Kloosterman, Van der Leun, & Rath, 1998).

As a consequence of the friendship and trust engendered by social networks resources can often be acquired at below market costs (Elfring & Hulsink, 2003). Empirical research further provides support for the notion that social networks give access to resources that entrepreneurs need (Jenssen & Koenig, 2002) and suggest that entrepreneurs seek resources through their social networks regardless as to whether the ties are weak (acquaintances) or strong (close friends).

2.11.5.3. Organisations and associations

In contexts where certain size and skills are essential in order to be competitive, such as global and knowledge-based entrepreneurship, small start-ups can often acquire their necessary components via alliances, joint ventures and other forms of cooperation such as agreements with suppliers, customers and competitors (Callaway, 2004).

Organizational networks allow access to global markets, distribution channels and financial and managerial resources that smaller new ventures may not themselves possess. As discussed earlier, these networks may also be a source of informal finance.

Many of the newly established support networks and associations for entrepreneurs are concerned about the evident lack of high-level skills. With most of the new entrepreneurs being young, they tend to be more educated, especially in tertiary and post graduate levels, however, the applicability and practicality of implementing this largely academic knowledge into the South African context is questionable. A far more plausible support mechanism for new and nascent entrepreneurs would be a robust mentorship and coaching infrastructure (Barbosa *et. al.*, 2008).

2.12   Conclusion: the contribution of existing literature

The proposed research is deemed to be academic in nature as the results are not expected to present a solution to the business problem of a lack of entrepreneurial activity proliferation in South Africa but rather to highlight aspects that have a greater likelihood to predispose an individual from one or another generational cohort towards entrepreneurial venture creation in order that the knowledge base regarding generations and entrepreneurship in South Africa is enhanced and can be used to facilitate the support of entrepreneurial development in identified individuals.

As such, the intended readership includes academics other MBA students, entrepreneurial support entities, venture capitalists, funding organisations and individuals interested in the concept of entrepreneurial intent or proliferation of entrepreneurship between generations. It is hoped that the outcome and findings will identify factors critical to further developing entrepreneurial activity in South Africa.

The appropriateness of this study as it relates primarily to entrepreneurship and generational differences in start-up ventures and is not relevant within global or local significantly large corporate organisations as it purposefully excludes the aspects of corporate intrapreneurship.

The academic nature of the study further precludes the research from offering a global organisation any meaningful or executable business solutions. Considerations, of how the constructs identified are related to one another and in what way they ultimately influence the intent of an X or Y generational individual to initiate entrepreneurial undertakings is the purpose of this academic study.

CHAPTER 3: RESEARCH QUESTION & PROPOSITIONS

This study continues the current research exploration around entrepreneurial intent and in particular with regard to specified generational cohorts within the context of South Africa. The report will attempt to answer the research question below.

This chapter draws on the preceding issues highlighted in the literature review in Chapter 2.

3.1 Research question

Of individuals from the X Generation and the Y Generation in South Africa, is there a statistically significant difference in terms of their propensity towards entrepreneurial intent?

The concept of differences in the personal, environmental and situational independent variables between generations leads to a general expectation that Generation X and Generation Y individuals may differ in their intent to initiate entrepreneurial ventures (dependent variable).

This study will attempt to answer the research question outlined above and translate and capture the findings in order to expand the knowledge base on possible entrepreneurial intent differences across generations. This chapter draws on the preceding issues and theoretical underpinnings highlighted in the literature review.

3.2   Propositions

The following propositions will be used to test the degree of entrepreneurial intent of the individuals sampled:

3.2.1.   Proposition 1:

There are no significant differences in formal education or entrepreneurial training that serve as a foundation for business understanding that underpins entrepreneurial intent between X generation and Y generation individuals.

3.2.2. Proposition 2:

There are no significant differences in exposure to information technology (IT) and the realisation of its importance in entrepreneurial activity in increasing the propensity towards entrepreneurial intent between X generation and Y generation individuals.

3.2.3. Proposition 3:

There are no significant differences in the extent of entrepreneurial aptitude, as measured by ability, skill sets or problem solving ability as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

3.2.4. Proposition 4:

There are no significant differences in operational leadership orientation as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

3.2.5. Proposition 5:

There are no significant differences in short- or long-term visionary perspective as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

3.2.6. Proposition 6:

There are no significant differences in influences from family or support organisations or networks regarding motivation and decision-making as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

3.2.7. Proposition 7:

There are no significant differences in the creative or innovative behaviours as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

3.2.8.   Proposition 8:

There are no significant differences in the propensity to act in an entrepreneurial manner in terms of attitude towards risk-taking, and self-confidence factors as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

3.3   Conclusion

This chapter presents the research question and the eight propositions that will be utilised in an attempt to answer the research question.

CHAPTER 4: RESEARCH METHODOLOGY

4.1   Introduction

The tendency in human sciences research projects is to use qualitative research methods, while the natural sciences lend themselves to quantitative research techniques due to their very nature. In order to attempt to answer the research question through the testing of the propositions formulated for the study, the suggested foundational theory behind entrepreneurial intent (EI), established in Chapter 2, was tested in a South African context through the use of qualitative data gathering via survey methodology that permitted quantitative representation of the qualitative data and statistical analysis of the data gathered via the electronic survey method.

4.2   Choice of methodology

The objective of this study was to conclude a descriptive exploratory study to establish whether or not there is a difference in the intent of Generation X and Generation Y individuals to initiate an entrepreneurial venture in the South African context. A descriptive design for this study was appropriate to the research

methodology, as a generational cohort is a pre existing condition and was therefore stipulated as the differentiating factor on which a comparison was to be made.

In order that the researcher could use a statistical test of significance, data collection was carried out using a questionnaire as the research instrument. This will be explained further in section 4.7 below. The specific cohorts for this study were selected according to the generational cohort in which they fell, as defined by age, in order that the two could be compared.

In summary, the questionnaire (see Appendix 2) was divided into five sections and included questions designed to tap areas that included:

i)   Section A: Demographics

  - Experience, education and business training; and

  - Technology

ii) Section B: Drivers for entrepreneurial action

  - Aptitudes;

  - Problem solving;

  - Abilities and skills;

  - Leadership orientation;

  - Vision;

  - Influence of family and networks;

  - Creativity and innovation; and

- Traits.

iii) Section C: Perceived feasibility and resource advantage

- Social circumstance; and

- Experience;

iv) Section D: Propensity to act/intent

- Behavioural aspects – attitude;

v) Section E: Association and support

- Support institution and structures

4.3   Research process

The research process that was planned for this study is shown below in figure 1.

A summary of the research stages included:

(1)   Definition of the problem; statement of the research question and associated propositions;

 (2)   Planning of the research design;

- Planning the two cohort samples and specifying the sample sizes;

- Designing the survey questionnaires to be used;

- Piloting the questionnaire for identifying the key dimensions that may differentiate the two cohorts;

- Reviewing the pilot results and editing of the questionnaire to ensure contaminating variables were adequately addressed, to ensure that the questionnaire was easily understandable, the format user friendly and appropriate, and to check that the coding delivered the required data collation;

- Choosing the appropriate statistical test for testing the null hypothesis; and

- Specifying the significance level of the test to be used.

(3)   Publishing the electronic survey questionnaire and data collection;

(4)   Cleaning, editing and re-coding, analysing and interpreting of the data; and

(5)   Formulating of the findings and conclusions and reporting on the findings (see Figure 12 below).

Figure 12: Research Process (adapted from Zikmund)

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┌─────────────────────────────────────────────┐
│           PROBLEM DEFINITION                  │
│ (Statement of research objectives,            │
│  propositions & research questions)           │
└─────────────────────────────────────────────┘
                      │
                      ▼
            ◇ Selection of:          ◇
              Research objectives;
              research question
                      │
                      ▼
┌─────────────────────────────────────────────┐
│           RESEARCH DESIGN                     │
│ (Choose statistical test, choose              │
│  significance level)                          │
└─────────────────────────────────────────────┘
                      │
                      ▼
            ◇ Selection of          ◇
              SAMPLE DESIGN
                      │
                      ▼
┌─────────────────────────────────────────────┐
│                SURVEY                         │
│            Questionnaire                       │
└─────────────────────────────────────────────┘
                      │
                      ▼
┌─────────────────────────────────────────────┐
│         COLLECTION OF DATA                    │
│            (Fieldwork)                         │
└─────────────────────────────────────────────┘
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                      ▼
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│         EDITING & CODING                      │
│             OF DATA                           │
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│         DATA PROCESSING                       │
│           & ANALYSIS                          │
└─────────────────────────────────────────────┘
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                      ▼
┌─────────────────────────────────────────────┐
│         INTERPRETATION                        │
│          OF FINDINGS                          │
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┌─────────────────────────────────────────────┐
│           RESEARCH                            │
│            REPORT                             │
└─────────────────────────────────────────────┘
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4.4 Population

The population was limited to the geographic borders of South Africa as this study on a global scale would have contained too many contaminant factors including cultural, political, educational and economic differences and would have required extensive resources, both in time and of a financial nature.

4.5 Sampling

The sample was accessed from university students currently registered at The University of Pretoria, and from Anglo American employees and the researcher's social network contacts. In order to obtain the largest possible sample, a strategy of convenience (snowball) sampling was employed due to there being no need for a complete list of the population from which the sample was drawn.

As such, the use of convenience snowball sampling technique, where a respondent is requested to pass the link on to their personal contacts, precludes the possibility of clearly defining the sample frame. Further to this, the extrapolation of conclusions or findings beyond the sample would need to be to have been made with caution as findings might not have been found to extend beyond the specific sample.

In order to have a balanced response, the researcher in addition determined that the sample should at least have had a split differential by generational cohort of by no more than forty five to fifty five percent. A fifty-fifty percentage split differential would have been preferred. In the interests of time the response rate was expected to exceed one hundred responses but not to exceed two hundred in total for the week that the electronic survey was available.

Follow up of the questionnaires distributed was limited, due to anonymity of respondents and the lack of contact details available to the researcher. The electronic nature of the survey also limited the respondent pool's opportunity to complete it as not all possible respondents have access to electronic media.

Further research therefore may be necessary before conclusions may be drawn about the different factors influencing entrepreneurial intent between Generation X and Generation Y individuals.

4.6   Contaminating variables

To ensure the highest probability of statistical significance the sample units needed to be as similar as possible to one another in terms of their exposure to the independent variables that were being tested. Any sample units that had

contaminating variable exposure would invalidate the result of this study and would need to have been taken into account as a control group.

One of the key contaminant variables for this study was if the respondent themselves comes from a family of entrepreneurs or had entrepreneurs in their close network or sphere of influence. Having entrepreneurs in their close sphere of influence or significant network was likely to either negatively or positively bias their responses to the dimensions of entrepreneurial intent depending upon the perceived failure or success of those significant network members.

In order to account for this contaminant, two control groups were formed from respondents who:

i)   either already were entrepreneurs or had been entrepreneurs within the X and Y cohorts; and

ii) those that had had significant exposure to entrepreneurs and fell within the X and Y cohorts.

4.7   Data gathering process and research instrument

An electronic survey was set up, to investigate the intent of Generation X and Generation Y to initiate an entrepreneurial venture based on the constructs

identified. Respondents were sent an e-mail containing an URL to the online survey.

The electronic survey methodology was both economical and extremely versatile as it allowed a large number of items to be used to tap the constructs under investigation and had the potential to reach a large number of respondents.

Respondents would tend to respond more readily when the process of completing a questionnaire is user friendly, quick and simple to complete and ensured anonymity. Survey design is an art in itself. In essence common sense prevailed in the questionnaire design in that caution was taken to exclude poorly phrased questions as well as questions the answers to which would have added little value to the research in the first place.

Despite careful planning, the following needed to be borne in mind when utilising the questionnaire method: firstly, people might have been reluctant to respond to a survey and do not usually consider a survey as important. Secondly, the target audience of a survey usually only gives it one chance. This means that if on the first run, especially when run electronically, the survey fails or stops midway, the chance of that respondent returning to complete the survey is highly unlikely (Albright, Winston, & Zappe, 2009).

4.8   Data collection method

There were four types of data categorisation utilised within this study. They were: nominal scaling, ordinal scaling, Likert Scale or interval scaling and forced choice scaling. Firstly, with regards to ordinal measurement, the numbers assigned not only represented differences among the individuals with respect to the variable being measured, but also serve to rank order the responses. An assumption was made that the higher the assigned number allocated, the greater the degree of the particular attribute than with lower number assignment.

Secondly, the Likert scale was introduced by Likert (1903-1981) and it was selected due to its popularity in terms of scaling within the sphere of the social sciences primarily due to its simplicity in compilation. The Likert scale would be used for this research study as it allowed for measurement of multi-dimensional opinions, not possible with other methods of scaling (Welman & Kruger 2001, p. 150).

The opinion variable is expressed numerically, on a 1-5 Likert scale. These numbers are representative for the choice categories, including: "very little"; "the same as..."; or "higher than..."; "least like me..." to "most like me..."; "minimum attraction..." to "most attraction..."; " not important..." to " extremely important...";

and " total disagreement" to "total agreement" used in the survey. This measure of opinions was designed to allow the respondents to indicate their preference one way or another according to the specified criteria that were being tested. Furthermore, the Likert scale was used in the questionnaire where respondents were asked to what degree they agree or disagree with a certain statement.

Finally, the third categorisation was a specialised form of the behavioural checklist where a series of descriptive statements were used to describe the respondent in question. This technique was specifically developed to reduce leniency errors and to establish objective standards of comparison between individuals being studied. In order to accomplish this, the statements were arranged in groups, from which the respondent had to choose statements that were most or least descriptive of the respondent.

Several scales have been used in the compilation of the questionnaire as follows:

4.8.1.   Nominal scale values

A nominal scale, (is) "…a scale in which the numbers or letters assigned to objects serve as labels for identification or classification; a measurement scale of the simplest type…" (Zikmund, 2003) Nominal scales have been used to categorise respondents into e.g. males/females, ethnic groups, etcetera. Further examples of

simple nominal scales that were used are the dichotomous scales where there was only one of two options in answering the question; that is 'yes' or 'no'.

4.8.2. Ordinal scale values

An Ordinal scale (is) "…a scale that arranges objects or alternatives according to their magnitudes…" (Zikmund, 2003). This type of scale assigns a rating to the possible answer, which is categorised into degrees of assessment. An example of a three-category scale could be "non-existent/average/high", a four-category scale of "direct/partial/vague/not at all" or a five-category scale of " very little aptitude" to "higher aptitude than most people". As this method of scaling is perception-based it has limitations in terms of mathematical analysis.

4.8.3. Interval variable scales

The interval variable scale is: "…a scale that not only arranges objects or alternatives according to their magnitudes but also distinguishes this ordered arrangement in units of equal intervals…" (Zikmund, 2003). This scaling method, as well as the special interval scale, that is the ratio scale, was used significantly within the questionnaire. Examples of such questions include: annual income or the number of members within a household.

4.8.4. Forced choice scales

The forced choice scale is: "…a fixed alternative rating scale that requires respondents to choose one of the fixed alternatives…" (Zikmund, 2003).

If answers are not forced, the midpoint of the scale may be used to indicate unawareness as well as indifference. Forced choice scales also allow the researcher to separate respondents from those that would answer using the midpoint due to their lack of knowledge from those that answer definitively due to the existence of subject matter knowledge. Examples of forced choice used in this research include the degree of influence f information technology (IT) plays in the life of the respondent, their level of computer literacy and their attitude towards working in a leadership role.

Once the questionnaire had been designed it was pre-tested in a pilot with a group of known entrepreneurs and non entrepreneurs. The pre-test was necessary to determine the differentiating strength of the questionnaire that was to be used in the research study. Once the questionnaire had been tested and the questions determined to be effective differentiators, the following procedures were followed in conducting the research:

- The questionnaire was administered to a convenience sample of X and Y generation cohort members within the geographical borders of South Africa.

- Distribution of the survey was planned for late August and early September 2010 to allow for sufficient time to analyse and interpret the primary data collected.

- Distribution method was electronic using both email and social networking Web2.0 technology (e.g. Facebook and LinkedIn).

4.9   Completion of the questionnaire

The questionnaires were distributed randomly through the use of posting a link on an electronic Web 2.0 social networking websites for completion electronically. Due to the nature of social network functionality it was not possible to determine the exact response rate due to not knowing the total population size with which the link was shared within this study.

Members of the social networking sites were also requested for sharing the link with their contacts or friends (snowball effect). Respondents were required to voluntarily and anonymously complete the electronic survey at their own convenience, by following the link. In addition, the researcher sent a further email message to a list of two hundred and seventy two contacts (business network) to request their voluntary participation via the same link.

During this process, it was found that the response rate was approximately thirty to forty responses per day for the first two days of publishing the link, however, responses reduced dramatically (down to three to five responses per day) from day three onwards.

The researcher then republished the link on the social networking (Facebook) website as the initial link had moved downwards on the status page which meant that people utilising the social networking (Facebook) site did not see the link in the first window that opened when they logged on. This may have resulted in a fewer number of respondents completing the questionnaire rendering the sample group from whom data was to be gathered being smaller than optimal and possibly less representative of the population.

4.10   Screening, editing and coding process

The cleaning of data and screening was carried out by the researcher on a daily basis through logging on to a link where the responses had been captured. The responses were then saved in text format for import into an Excel spreadsheet. Prior to import, the data was checked for inconsistencies where questions had been omitted either deliberately or by accident. The responses that contained more than five percent error rate were removed from the data that was to be analysed.

A further screening was completed in terms of applying the control variables (for contaminating variables) or groups; the purpose of these controls having been to ensure that the measurement of entrepreneurial intent (EI) of X and Y generation individuals within South Africa was not biased by those individuals who are already entrepreneurs or who have had significant exposure to entrepreneurs or entrepreneurial behaviour within their immediate family and who would therefore skew the results as they would be likely to have a predetermined predisposition towards entrepreneurial intent.

The two control groups were defined as follows:

i) Respondents who either already are entrepreneurs or have been entrepreneurs within the X and Y cohorts; and

ii) Those respondents that have had significant exposure to entrepreneurs and fall within the X and Y cohorts.

In order to isolate these control groups, the response to two specific questions within the detail of the questionnaire where checked. The first control question is found in the demographical section of the questionnaire where the respondent is asked to state 'yes' or 'no' to the following question:

i) Have you ever been self-employed or the owner of a Small or Medium-sized enterprise (SME)?

The second control question can be identified within the drivers for entrepreneurial intent (EI) section of the questionnaire where the respondent was asked to rank the influence of family and networks on their decision-making and motivation, from 1 meaning not important in motivating me to 5 meaning extremely important in motivating me in terms of:

ii)   An immediate family member is an entrepreneur.

For additional insight into this study, these control factors could be analysed for entrepreneurial intent (EI) with the understanding that their perspective would differ from those individuals that have had no direct exposure to entrepreneurial intent (EI).

4.11   Framework for analysis

Two types of analysis were used in this study. These are discussed below.

4.11.1   Chi-Square test

The Chi-Square test is a statistic that compares the actual cell frequencies to an expected cell frequency. If the p- value is found to be less than 0.05, then the demographic variable at hand is said to be unrepresentative of the population (Norusis, 2005).

For this study, all tables were created to be 2x2 (manipulated as such) and hence the Fisher's Exact test is the most ideal as it is most suitable for small sample sizes.

4.11.2   Independent t-tests

The final technique used in this analysis is the independent t-test. This type of test is utilised to determine whether any of the background variables specified have a statistical relationship with the constructs created.

The independent Samples t-test (also known as the two-tailed sample t-test) compares the means of one variable for two groups of cases (Norusis, 2005). This testing method is commonly used for comparisons between groups of only two categories, such as gender or in this case generational cohort. If the p-value is found to be less than 0.05, then the independent variable in question does have a significant relationship with the factor at hand.

4.12   Potential research limitations

The following aspects are deemed to be potential limitations of this study:

- In light of the demographical profile of the South African population especially regarding gender and ethnicity, the possibility of not attaining

an equal spread sample of respondents, by X generation and Y generation across these classifications may influence the overall findings of this research in its representativeness of the population in its entirety.

- An unintended limitation may exist on the total potential number of respondents (convenience sample) possible for this study due to the questionnaire being electronic and therefore not accessible to all individuals within South Africa within the generational cohorts under review.

- A provincial measure was excluded which could have identified region specific trends.

- The complexity of the survey instrument utilised for this study may lead to response bias and haphazard responses being captured.

- With the survey being electronic and anonymous, there were no means of re-contacting the respondents in order to clarify their responses if the need had arisen.

4.13 Study time frames

Month	Activity
Dec 2009	• Topic screening
Jan/Feb 2010	• Topic short listing • 7th Jan 2-page due • Review of literature • Review supervisors available and their areas of interest
Feb 2010	• Secure a supervisor • Review of literature
Mar/Apr 2010	• Discuss topic with organisations • Collect literature and secondary data sources • Design literature review layout • Complete 20-page submission for 3rd May 2010 • Age first meeting with supervisor.
May 2010	• Submit 20-pager by 5pm 3rd May 2010 • Apply for permission to access the specific organisational data required. • Request the data once permission to access is received. • Review appropriate research methods and strategic approach. • Initiate analysis of secondary data received • Second review meeting with supervisor.
June 2010	• Complete analysis of data and identify further primary research required where necessary. • Start preparing for ethical clearance submission.
July 2010	• Draft primary data collection questionnaire, pilot and revise the questionnaire. • Apply for Ethical Clearance. • Third review meeting with supervisor.
Aug 2010	• Administer the final approved questionnaire.

	• Start collection of questionnaires, data analysis and interpretation of data.
Sept 2010	• Final collection of questionnaires, data analysis and interpretation of data.
	• Fourth review meeting with supervisor (before Global elective).
Oct 2010	• Meet with statistician to clarify Chapter 5 and 6
	• Completion of first draft of research report.
	• Final review meeting with supervisor.
	• Critically review and edit final research report.
	• Print and bind by 8th November 2010.
Nov 2010	• Hand in completed report by due date, 10th November 2010.

4.14   Conclusion

This chapter outlines the research methodology utilised for this study of generational propensity toward entrepreneurial intent. The chapter describes the research process including the population and sampling technique used and follows on to guide the reader through the data collection, editing and coding processes

A framework for the analysis is given and the intended timeframes for this study are put into context. Finally potential research limitations are summarised. In the chapter that follows (Chapter 5), the descriptive and inferential results are presented.

CHAPTER 5: RESULTS - DATA COLLECTION AND ANALYSIS

5.1 Introduction

This section of the research report presents the results gathered from the data collection and analysis phases. Data collection was carried out using a questionnaire as research instrument as outlined in the Chapter 4. The questionnaire was designed around specific constructs pertaining to answering the research question.

The sample used for this research was a non-probability convenience sample of individuals that ranged between 20 and 45 years of age during September and October 2010. A total of 170 responses were returned with the response rate being undeterminable due to the distribution method used (discussed in Chapter 4). The data was then captured into an Excel spreadsheet where it was further classified into two groups namely: X generation and Y generation individuals.

The results of the data collection phase are discussed in detail in the presentation of the results below.

5.2   Data classification

The criteria utilised for the classification of the data collected were individuals identified as originating from either the X generation (Severt *et. al.*, 2009; Dries *et. al.,* 2008; Eisner 2005), or the Y generation (Simoneaux & Stroud, 2009) being between 20 and 45 years of age this year that reside within the borders of South Africa, regardless of their birth nationality. The generational cohorts referred to are further explained in Chapter 2.

In other words, anyone who fitted this prescribed definition, that being of generation X or Y able to access the survey via the web was able to complete the survey voluntarily and anonymously. Due to the distribution of the questionnaire being completed through utilisation of a social networking website called Facebook as well as LinkedIn, the distribution excluded all non-members as an individual is required to be registered on these websites to utilise the Web 2.0 functionality.

Further email messages where sent in addition to utilising these platforms to cater for individuals without access to the social networking sites, however, due to the electronic nature of the survey method, all respondents without access to a computer or the Internet were unavoidably excluded from taking part in this survey. In total 170 responses were received electronically.

5.3   Research instrument

The questionnaire consisted of five information sections, with the following relating question themes (Table 7):

Table 7: Questionnaire sectional description

Section A Demographics	Section B Drivers for Entrepreneurial action	Section C Perceived feasibility & resource advantage	Section D Propensity to act	Section E Support networks
Age	Aptitude	Social circumstance	Attitude	Association and support factors
Gender	Problem solving			
Nationality	Abilities and skills	Business and working experience		
Household members	Leadership orientation			
Ethnicity	Vision			
Current work status	Creativity and innovation			
Prior business ownership				
Education and training				
IT experience				

5.4   Validity

According to Zikmund (2003), validity can be defined as the ability of a measuring instrument to measure what it is intended to measure. Content validity for this study was evaluated through the piloting of the questionnaire with ten individuals to check validity.

A pilot study is described as any small-scale exploratory research technique that uses sampling but does not apply rigorous standards (Zikmund, 2003).

5.5   Reliability

According to Hair, Black, Babin, Anderson and Tatham (2006) reliability is considered an assessment of the degree of consistency between multiple measurements of a variable. It is a measurement concept that represents the consistency with which an instrument measures a given performance or behaviour.

A reliable measurement instrument will provide consistent results when a given individual is measured repeatedly under near-identical conditions. The diagnostic measure used is the reliability coefficient that assesses the consistency of the entire scale, namely Cronbach's Alpha, which is the most widely-used measure. The generally agreed lower limit for Cronbach's Alpha is 0.70 (Hair, Black, Babin, Anderson, & Tatham, 2006).

The Cronbach Alpha's were evaluated for the items in the scale used for questions B1, B2, B5, B6, B7 and D1 which used a five point Likert scale. As the Likert scales differed between questions, each question formed a specific scale of its own. The alpha value was therefore calculated for each scale and then the X generation and the Y generation groups were compared to the alpha.

5.5.1. Cronbach alpha for items in the scale for question B1

The Cronbach alpha for the items in the scale of question B1 which describes the aptitudes required for propensity toward entrepreneurial intent is indicated in Table 8 below.

Table 8: Cronbach alpha for question B1 variables

B1 - Question variables	Cronbach's Alpha if Item Deleted
B1a. Likelihood of recognizing a possible business opportunity	.679
B1b. Ease with which you creatively come up with new ideas and initiatives	.694
B1c. The likelihood that you will be able to solve problems and find solutions	.761
B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	.727
B1e. Building a network of associates and professional contacts for future leveraging	.757
Cronbach Alpha for question B1	**0.768**

A high internal reliability is shown for the variables that describe "how do you rate yourself relative to your peers, colleagues and friends on the following aptitudes."

5.5.2. Cronbach alpha for items in the scale for question B2

The Cronbach alpha for the items in the scale of question B2 which describes how an individual reacts when problem solving with regards to their propensity toward entrepreneurial intent is indicated in Table 9 below.

Table 9: Cronbach alpha for question B2 variables

B2 - Question variables	Cronbach's Alpha if Item Deleted
B2a. I enjoy dealing with difficult problems	.332
B2b. I usually seek the advice of others in solving problems	.484
B2c. Problems slow things down but I usually find a solution	.434
B2d. I see problems as opportunities	.260
Cronbach Alpha for question B2	**.452**

No internal reliability is shown for the variables that describe "when problem solving, I tend to..." The alpha value "Cronbach's alpha if item deleted' indicates the Cronbach's reliability coefficient for internal consistency if an individual item is removed from the scale. The removal of any of the items from the scale above would not be sufficient to increase the alpha value to the acceptable lower limit of 0.7.

5.5.3. Cronbach alpha for items in the scale for question B5

The Cronbach alpha for the items in the scale of question B5 which describes the level of attraction to the statements concerning short- and long-term visionary perception as required for propensity toward entrepreneurial intent is indicated in Table 10 below.

Table 10: Cronbach alpha for question B5 variables

B5 - Question variables	Cronbach's Alpha if Item Deleted
B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve	.735
B5b. I have always known what I want to do with and achieve in my life	.235
B5c. I tend to plan long-term in order to achieve my goals	.383
Cronbach Alpha for question B5a-c (long-term vision)	**.680**
B5d. My goals and plans are practical and apply to my daily life	.452
B5e. I tend to set short-term objectives and goals of things I will achieve in the next few days or weeks	.235
B5f. I tend to focus on the importance of the here and now rather than future possibilities	.383
Cronbach Alpha for question B5d-f (Short-term vision)	**.473**

A high internal reliability is shown for the long-term variables that describe "rate your level of attraction to the statements concerning long-term visionary perception"

There is however no internal reliability for the short-term variables that describe "rate your level of attraction to the statements concerning short-term visionary perception" The alpha value "Cronbach's alpha if item deleted' indicates the Cronbach's reliability coefficient for internal consistency if an individual item is removed from the scale. The removal of any of the items from the scale above would not be sufficient to increase the alpha value to the acceptable lower limit of 0.7.

5.5.4. Cronbach alpha for items in the scale for question B6

The Cronbach alpha for the items in the scale of question B6 which describes to what extent do you consider the following family and network support factors to impact your decision-making and motivation as required for propensity toward entrepreneurial intent is indicated in Table 11 below.

Table 11: Cronbach alpha for question B6 variables

B6 - Question variables	Cronbach's Alpha if Item Deleted
B6a. An immediate family members is an entrepreneur	.569
B6b. I was raised to be self-sufficient and to act without support from others	.587
B6c. My family actively supports my new ideas	.601
B6e. A friend or acquaintance is an entrepreneur	.559
B6f. I was raised to believe in the value of advice and support from others	.591
B6g. I prefer to discuss options with others before deciding	.608
B6h. I am aware of where and who to go to, to ask for help	.574
Cronbach Alpha for question B6	**.655**

No internal reliability is shown for the variables that describe "to what extent do you consider the following family and network support factors to impact your decision-making and motivation" There were originally eight items in the scale for this question, before calculating the alpha value of the item, variable B5d relating to

preference to independently make decisions and B6i relating to despite one's ideas not being supported that one pursues them anyway, were excluded.

5.5.5. Cronbach alpha for items in the scale for question B7

The Cronbach alpha for the items in the scale of question B7 which describes to what extent do you consider the following factors of creativity and innovation to be part of your personality or character as a person as required for propensity toward entrepreneurial intent is indicated in Table 12 below.

Table 12: Cronbach's alpha for question B7 variables

B5 - Question variables	Cronbach's Alpha if Item Deleted
B7a. I have developed new products and/or services during my working career	.640
B7b. I have had ideas about making processes more efficient in my work	.575
B7c. I am comfortable to experiment with untried and untested methods	.556
Cronbach Alpha for question B5d-f (Short-term vision)	**.676**

No reliability is shown for the variables that describe "to what extent do you consider the following factors of creativity and innovation to be part of your personality or character as a person" There were originally four items in the scale

for this question, before calculating the alpha value of the item, variable B7d relating to preference to independent problem solving was excluded.

5.5.6. Cronbach alpha for items in the scale for question D1

The Cronbach alpha for the items in the scale of question D1 which describes to what extent respondents, agree with the statements regarding behavioural aspects of attitude as required for propensity toward entrepreneurial intent is indicated in Table 13 below.

Table 13: Cronbach's alpha for question D1 variables

D1 - Question variables	Cronbach's Alpha if Item Deleted
D1a. Starting a business could be possible for me	.958
D1b. A career as an entrepreneur or business owner is attractive to me	.955
D1c. I believe I would be successful in starting a business	.958
D1d. I have no doubts about starting my own business	.963
D1e. If I had the opportunity and resources, I would love to start a business	.959
D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	.958
D1g. I am determined to create a business venture in the future	.957
D1h. If I tried to start a business, I believe that I would have a high chance of being successful	.960
D1i. Being a business owner or an entrepreneur would give me great satisfaction	.957
D1j. My professional goal is to establish my own business	.956
D1k. Being an entrepreneur implies more advantages than disadvantages to me	.959
Cronbach Alpha for question D1	**.962**

A high internal reliability is shown for the variables that describe "to what extent you agree with the statements regarding behavioural aspects of attitude"

5.5.7. Cronbach alpha for items in the scale for question E1

The Cronbach alpha for the items in the scale of question E1 which describes to what; extent you agree with the statements regarding association and organisational support structures as required for propensity toward entrepreneurial intent is indicated in Table 14 below.

Table 14: Cronbach's alpha for question E1 variables

E1 - Question variables	Cronbach's Alpha if Item Deleted
E1a. Private associations (e.g. Chamber of Commerce)	.805
E1b. Government support bodies (e.g. The DTI, SEDA, Khula, and National Youth Development Agency etc.)	.793
E1c. Loans in specially favourable terms	.784
E1d. Technical aid for business start-ups	.781
E1e. Formal coaching and mentoring	.777
E1f. Business clubs and institutes	.769
E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo	.820
E1h. Internet, own websites or blogs etc.	.805
Cronbach Alpha for question E1	**.813**

A high internal reliability is shown for the variables that describe "you agree with the statements regarding association and organisational support structures"

5.6 Descriptive results analysis

In order to investigate whether the research question could be answered, a questionnaire was utilised to test the identified constructs of entrepreneurial intent

for the purposes of being able to compare the degree of entrepreneurial intent measured between the two generational cohorts of this study. The descriptive results for the sample tested follows. The descriptive results are grouped according to the themes of the questionnaire as discussed earlier.

5.6.1. Summarised descriptive results for the sample

5.6.1.1.   Sample group overall demographics measurement

The first results analysis includes a review of all respondents of the sample group in order to contextualise the profile and distinguishing characteristics identified therein. Figure 13 below shows a skew towards respondents who are classified as belonging to the X Generation at 66 percent compared to the Y generation at 33 percent. The sample consisted of an even split of males to females at 56 to 44 percent for X generation and 39 to 61 percent for Y generation (Figure 14) with all respondent's nationality being South African as per the required context of this study.

Figure 13: Sample split by generational cohort
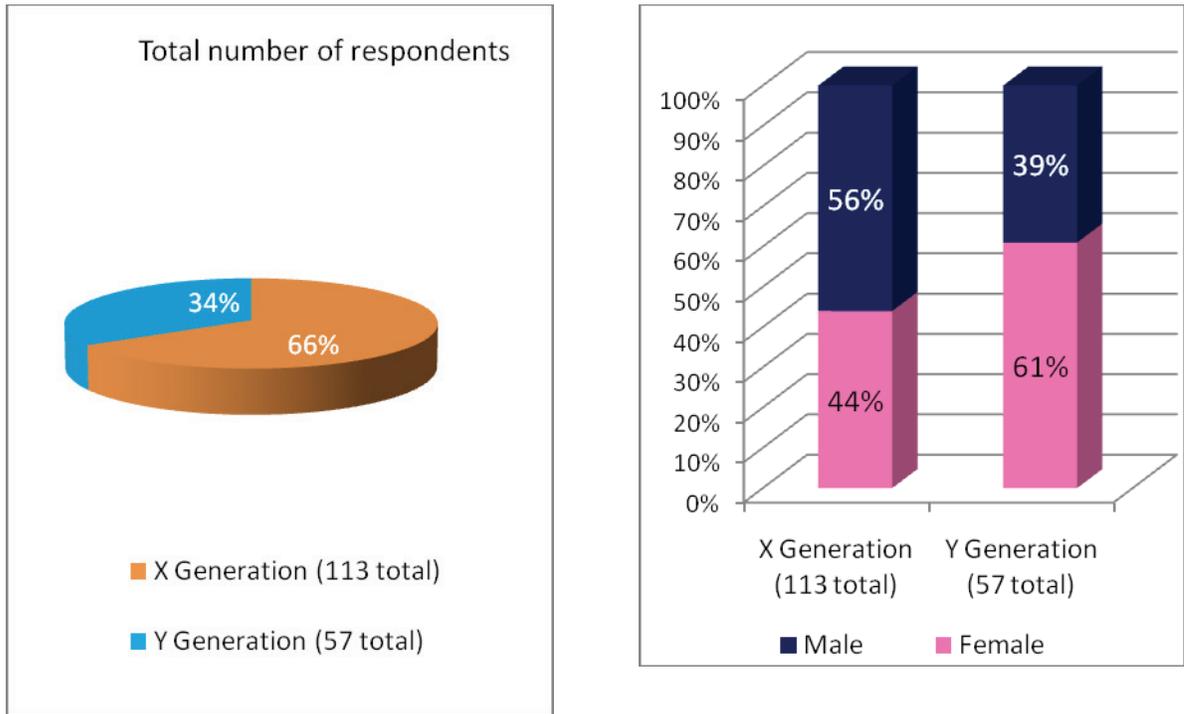
Figure 14: Gender split by generational cohort

5.6.1.2.   Sample group people per household measurement

The majority of respondents were found to come from households with two, three and four members respectively. Households with five or more members were less common as were single member households (see Figure 15 below).

Figure 15: People per household by generational cohort
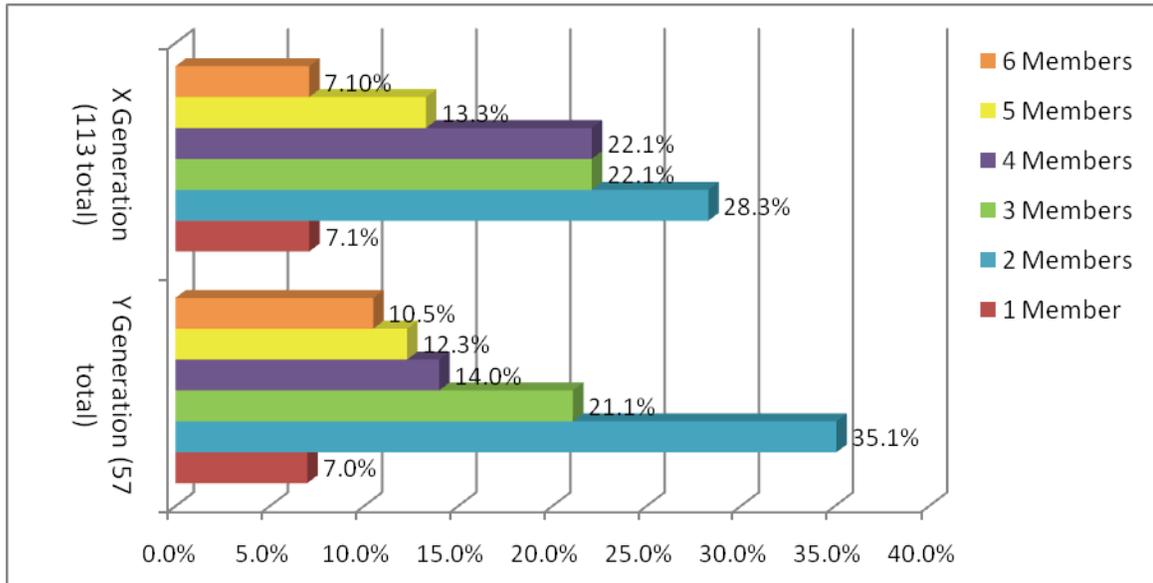
The mean of the X generation respondents was measured at 3.27 while that of the Y generation was 3.21. The quantitative measure of the dispersion or variability around the mean, known as the standard deviation shows a dispersion of 1.377 for the X generation respondents while 1.485 for those belonging to the Y generational group (Table 15).

Table 15: People per household by generational cohort

	People per household		Mean	Std. Dev.
Cohort	X	Valid	3.27	1.377
	Y	Valid	3.21	1.485

5.6.1.3.   Sample group ethnicity measurement

Response measured by ethnicity for the entire sample was dominated by individuals classified as Whites at 63 percent, while Black and Indian or Asian individuals accounted for 14 and 16 percent, respectively.

The minority response group was the Coloured group of individuals at only 6 percent. Results per individual generational cohort can be seen below in Figure 16.

Figure 16: Ethnicity by generational cohort
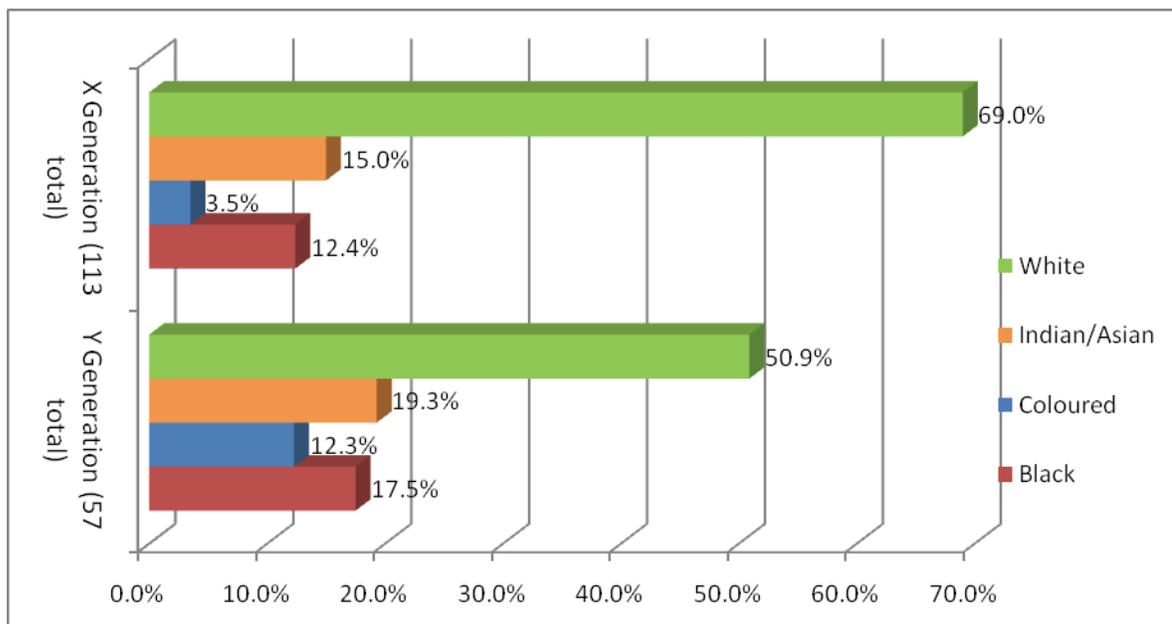
5.6.1.4.   Sample group income level measurement

Total monthly income for the entire sample as measured by household was dominated by the upper income limits, of between R 25 601 and R 51200 and R 51 201 and above parameters with 29 and 51 percent respectively. The third most common income classification was between R 6 401 and R 12 800 at 12 percent,

however all income classifications below R 6 400 were the minority at below 5 percent respectively. Results as per individual generational cohort can be seen below in Figure 17.

Figure 17: Total household income by generational cohort
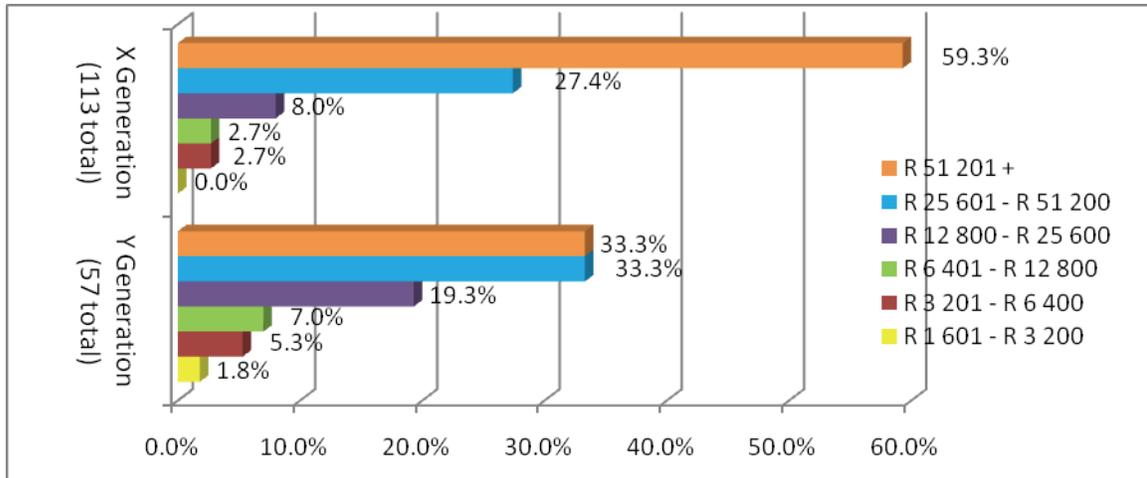
5.6.1.5.   Sample group work status measurement

The respondent's work status at the time of conducting this data collection shows that the majority of respondents across the entire sample, at 82 percent, were currently paid employees (Figure 18).

The second most represented group according to work status classification are those that are self-employed at 11 percent. All other respondents falling outside these two groups lie in other areas of work status at less than 3 percent respectively. Results as per individual generational cohort can be seen below in Figure 18.

Figure 18: Work status split by generational cohort
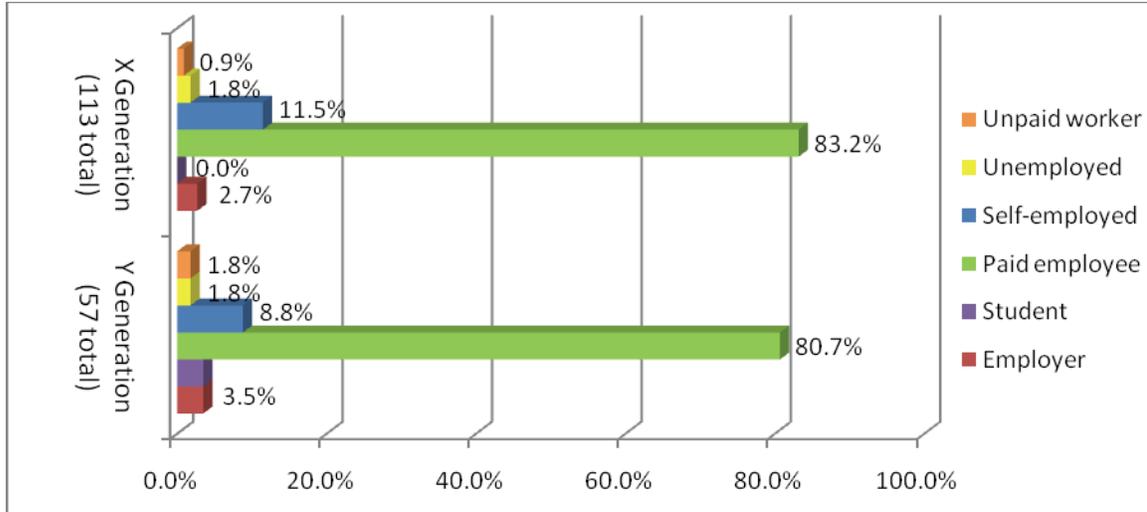
5.6.1.6.   Sample group business ownership measurement

Regarding prior business ownership, the X generation group of respondents show that a greater percentage of the group at 58.4 percent, have not owned a business before, compared to 41.6 percent who have had previous business ownership experience. The Y generation group shows even lower figures for prior business ownership at 66.7 percent with ownership at 33.3 percent. These results can be seen in Figure 19 below.

Figure 19: Prior business ownership by generational cohort
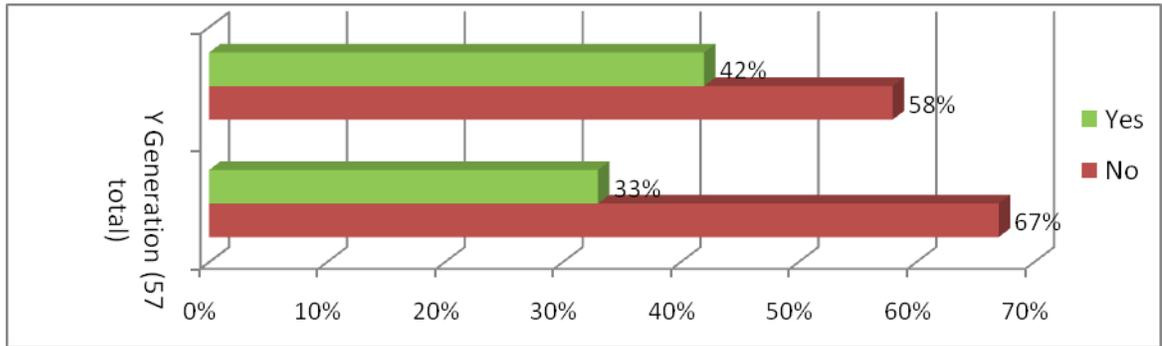
5.6.1.7. Sample group entrepreneurial or business tuition measurement

The test for prior entrepreneurial or business management tuition attendance reveals an almost equivalent participation by the X generation group at 56.6 percent and the Y generation group at 54.4 percent (Figure 20).

Figure 20: Entrepreneurial course attended by generational cohort
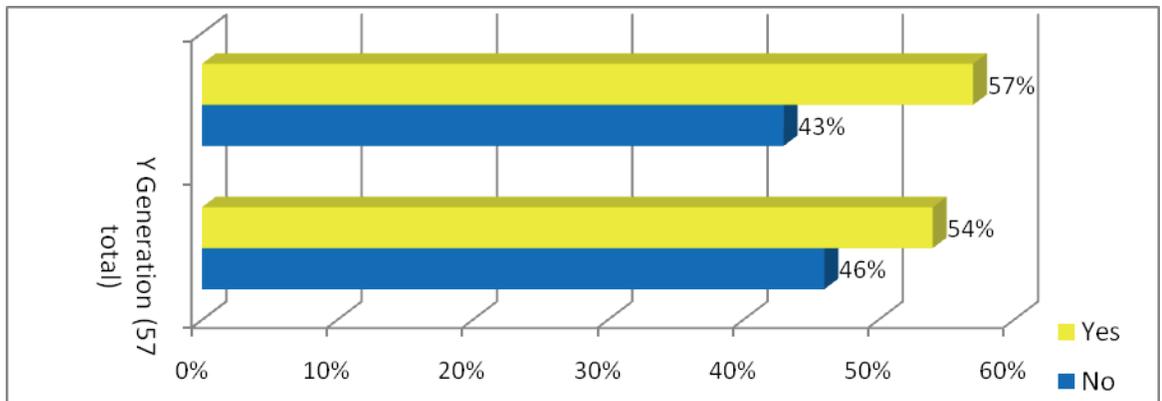
5.6.1.8. Sample group highest education level measurement

The level of education as indicated by the respondents is also interesting in that the majority appear to hold a degree or post graduate qualification with the X

generation group at 31 percent for a basic degree and 39.8 percent with a post graduate qualification.

The Y generation group shows a similar trend however the percentages within these differentiating levels are 29.8 percent with degrees and 26.3 with post-graduate qualifications.

As such, diploma qualifications are indicated by 15.9 percent for the X generation group respondents and 21.1 percent for the Y generation group respondents. Matric or grade 12 is indicated by 7.1 percent for the X generation group and the Y generation group indicating 17.5 percent (Figure 21).

Figure 21: Highest educational level by generational cohort
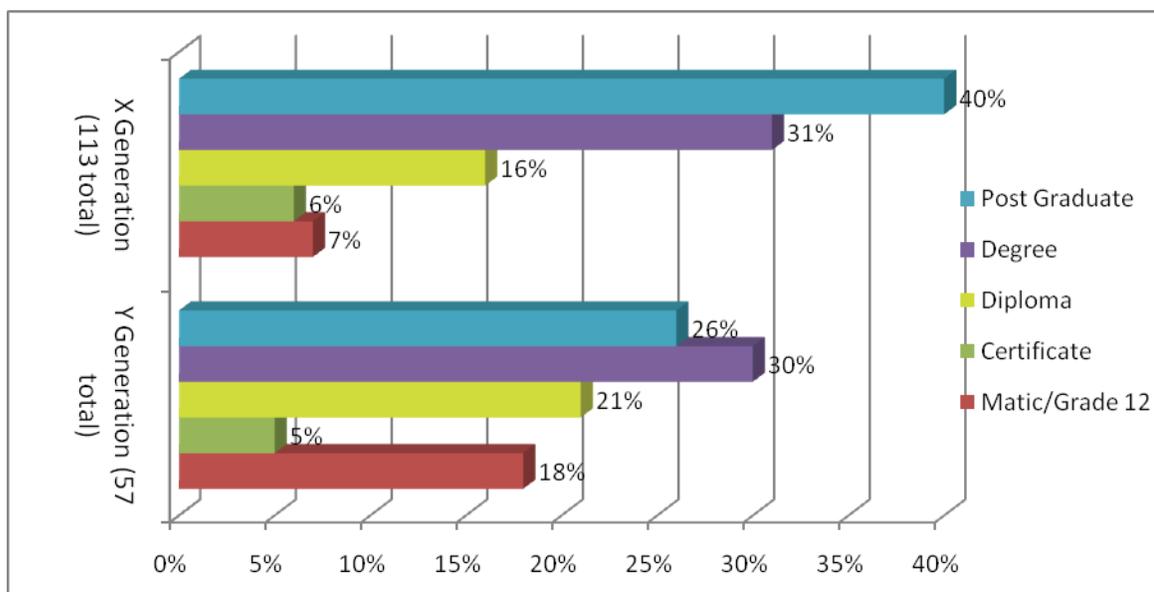
5.6.1.9.   Sample group computer literacy level measurement

The following results apply computer literacy levels of the sample. It was found that of the X generation group, 51.3 percent of the group are advanced users while 27.4 percent are expert users and 20.4 percent only average users. The tendencies of the Y generation group are that 66.7 percent advanced users, 19.3 percent are expert users and 12.3 state their level of computer literacy is average. Only 1.8 percent of the sample responses was noted as missing and could therefore not be classified (Figure 22).

Figure 22: Computer literacy level by generational cohort
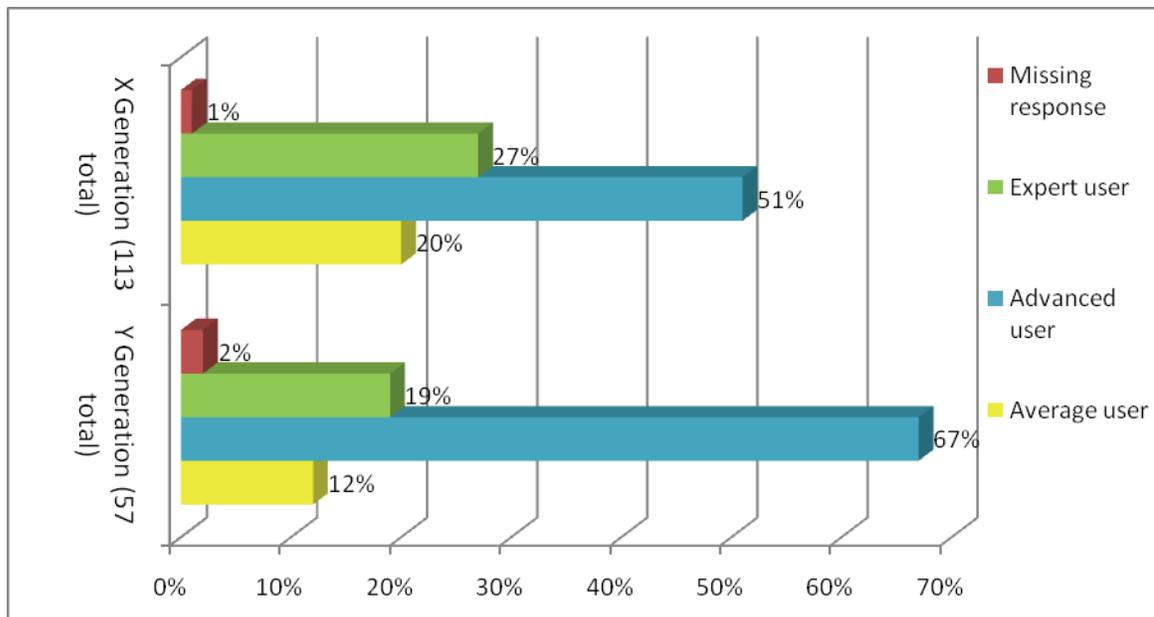
5.6.1.10.   *Sample group information technology (IT) daily role measurement*

In Figure 23, the role of information technology in the daily lives of the sample group was also measured where it was found that 61.9 percent of the X generation group cannot do without the technology and 36.3 percent of the same group agreed that information technology plays a major role in their daily lives. Only 2 responses or 1.8 percent agreed that information technology (IT) plays a minor role in their daily lives for X generation group.

The Y group can be described as 43.9 percent not being able to do without information technology (IT), 42.1 percent agree that information technology (IT) has a major role while only 1.8 percent agree that information technology (IT) has a minimal role in their daily lives with a further 1.8 percent of the sample response being noted as missing (Figure 23).

Figure 23: Information technology (IT) daily role by generational cohort
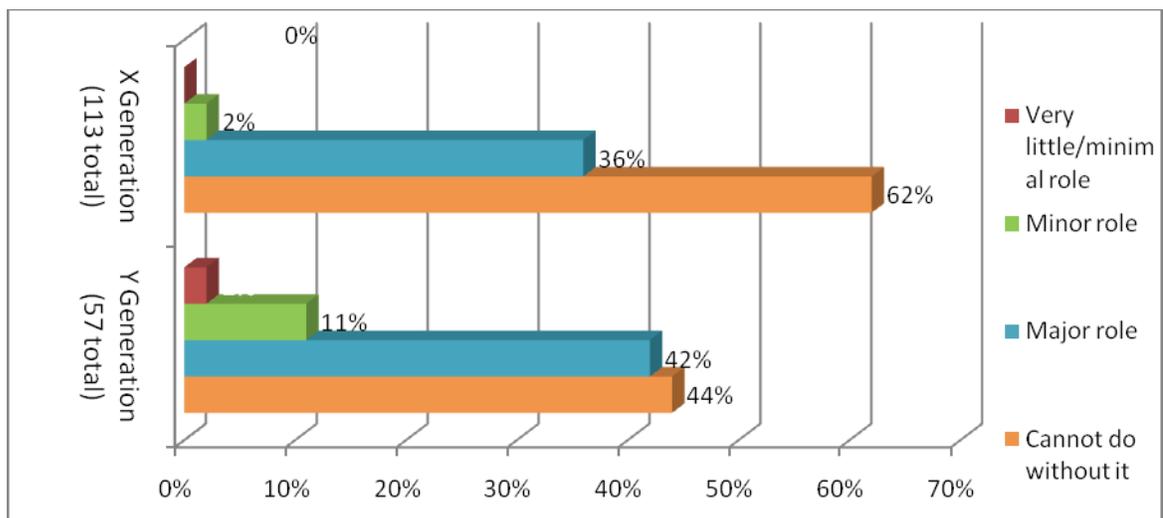
5.6.1.11.   *Sample group information technology (IT) availability and Internet accessibility level measurement*

The final aspect tested relating to information technology (IT) was the time availability of information technology (Figure 24) as well as access to the Internet (Figure 25). Availability of information technology 24/7/365 for X generation group was indicated at 23 percent while the same group agreed that access to the Internet was strongly indicated at 92.9 percent. The Y generation group showed availability of information technology (IT) at levels of 52.6 percent while Internet access was indicated at 84.2 percent (Figure 25).

Figure 24: Information technology (IT) availability by generational cohort
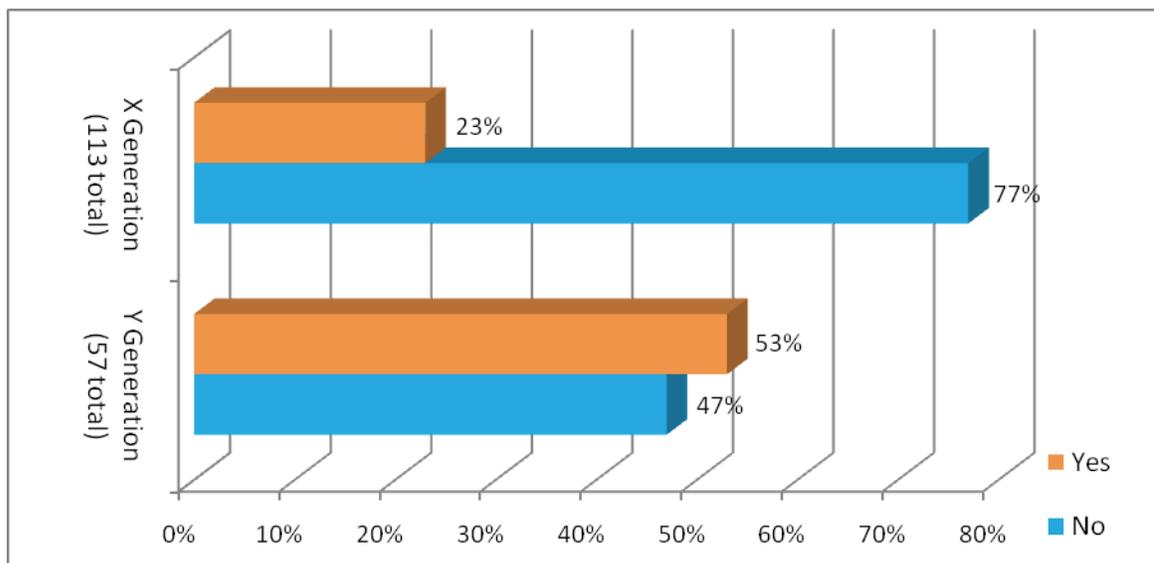
Internet accessibility for the X generation group appears high at 93 percent while the accessibility for the Y generation group is measured at 53 percent (Figure 25).

Figure 25: Internet access 24/7/365 by generational cohort
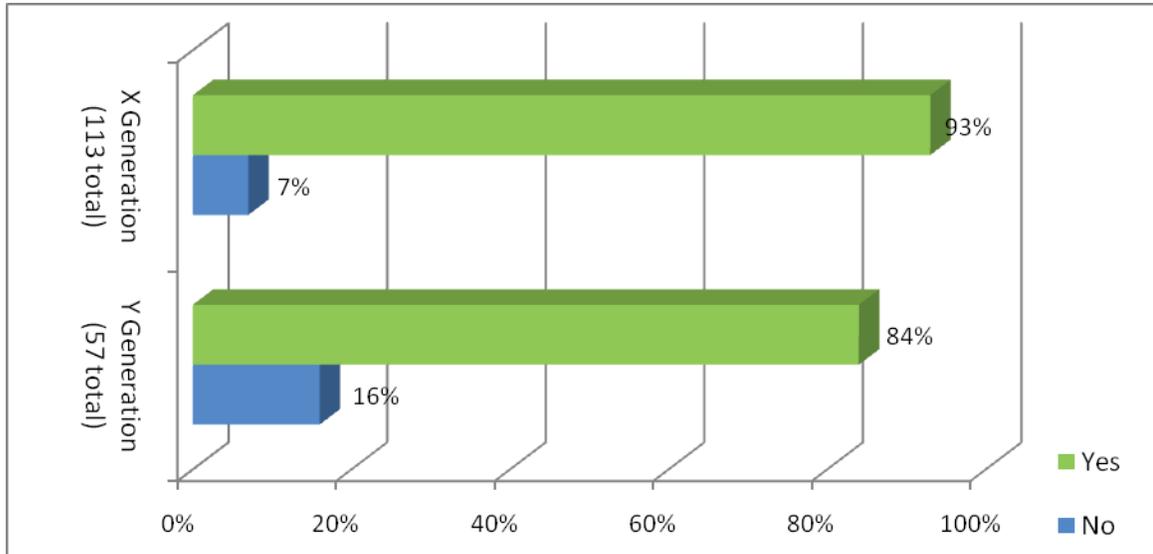
5.6.2. Descriptive results by generation per theme tested

The descriptive result for each of the propositions indicated; in Chapter 3, are presented below. These results take into account the two generational groups as defined by the cohorts of X Generation (X) and Y Generation(Y). Following this section the in depth inferential results can be found under section 5.4.

5.6.2.1. Education and training

Figure 27 below indicates that for both X and Y respondents' higher education at tertiary level is more prevalent than lower levels of education. This is particularly strongly skewed within the X generational cohort (Figure 26).

Figure 26: Highest education level of X Generation
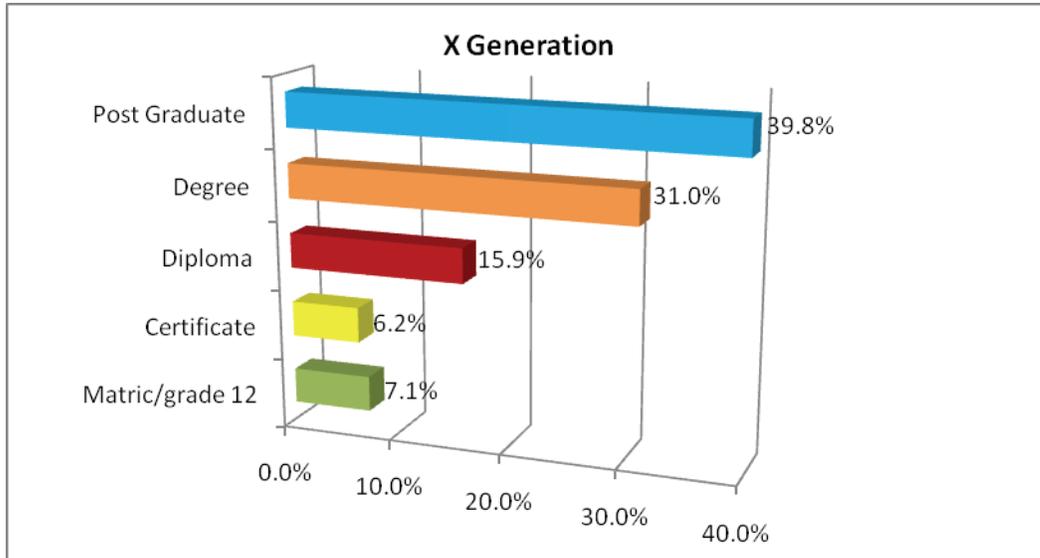
Y generation results are more proportionately balanced across the higher education categories (Figure 27).

Figure 27: Highest education level of Y Generation
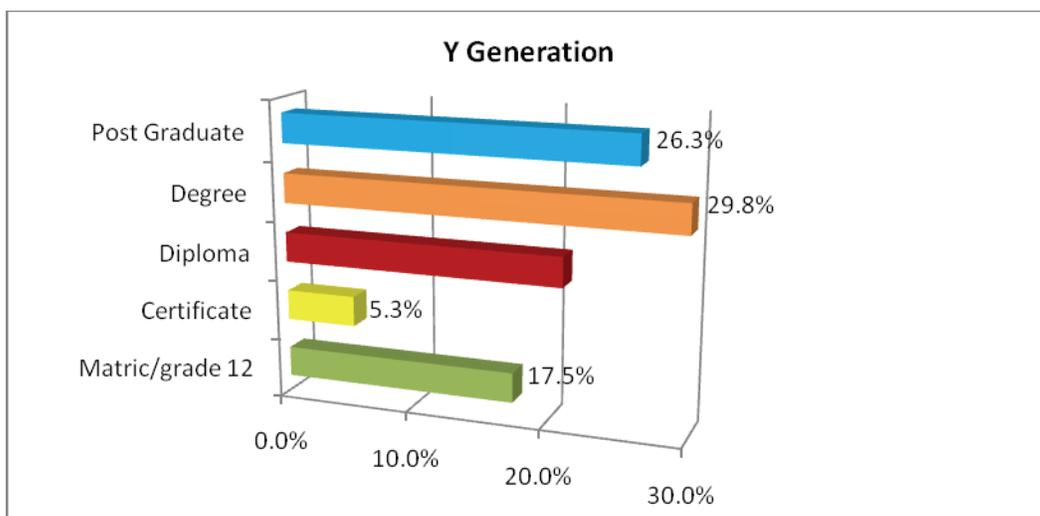
With regard to having attended entrepreneurial courses or training, the X generational group shows a 56.6 percent having attended in Figure 28 below. The Y group shows a 54.4 percent having attended.

Figure 28: Attendance of X and Y Generation at entrepreneurial courses
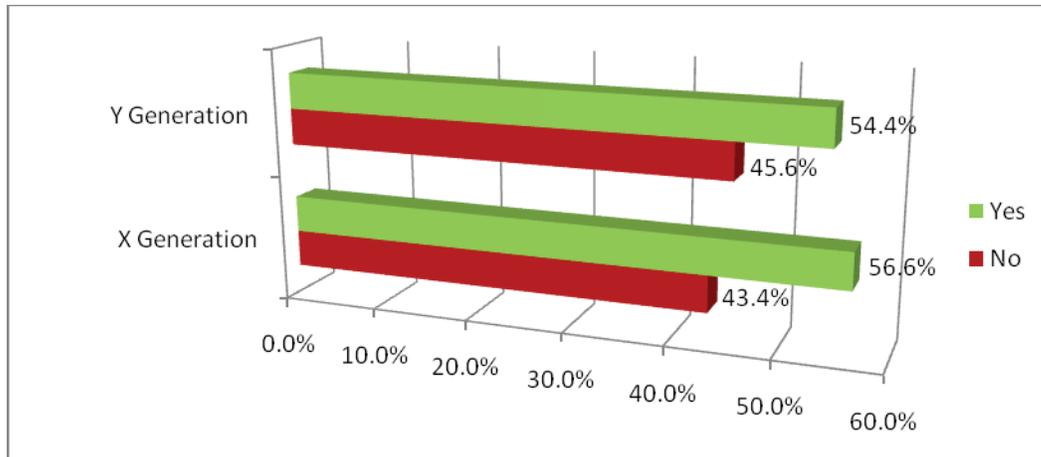
5.6.2.2. Exposure to technology

First, the level of computer literacy was tested in order that each respondent ranked his or her literacy skill in terms of an average, advanced or expert user. All respondents belonging to the X generational group completed the question, however, one response was omitted by a member of the Y generation group but this had no detrimental influence on the final result as seen in Figure 29 below.

Figure 29: Computer literacy of the X and Y Generation
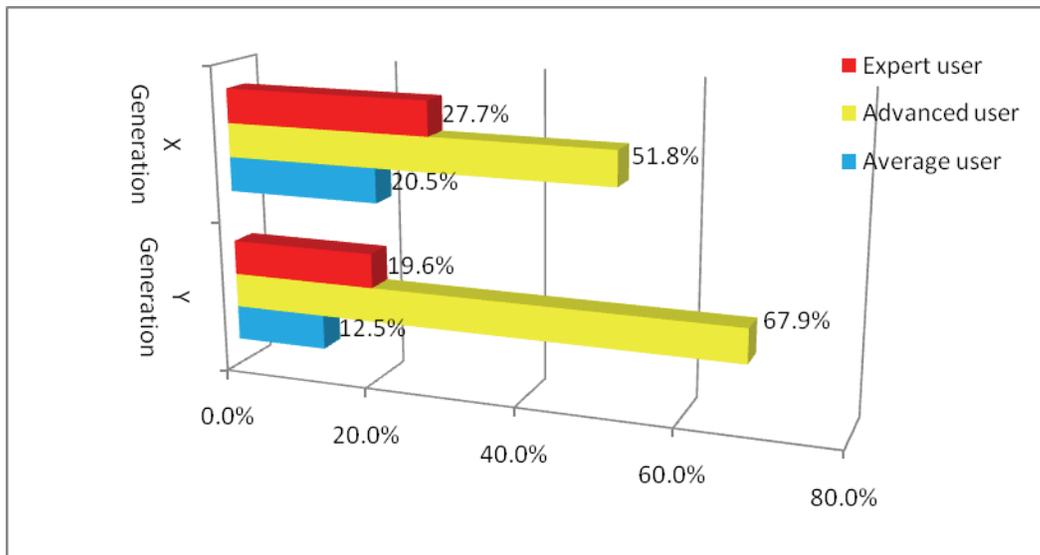
Both the X and Y generational group tested for computer literacy show a tendency towards individuals being advanced users at 51.8 percent and 67.9 percent respectively (Figure 29). Furthermore, 79.5 percent of the respondents in the X generation group fall within the advanced and expert ranking while the Y generation group individuals for the same ranking scored at 87.5 percent.

The role of information technology (IT) in the lives of the respondents was also measured during data collection. The results, in Figure 31 below show that within the X generation group, 61.9 percent of respondents agree that they "cannot do without IT" in their daily lives. An additional 36.3 percent of individuals within this group agreed that IT has a "major role" in their daily lives too (Figure 30).

Figure 30: Information technology (IT) daily role
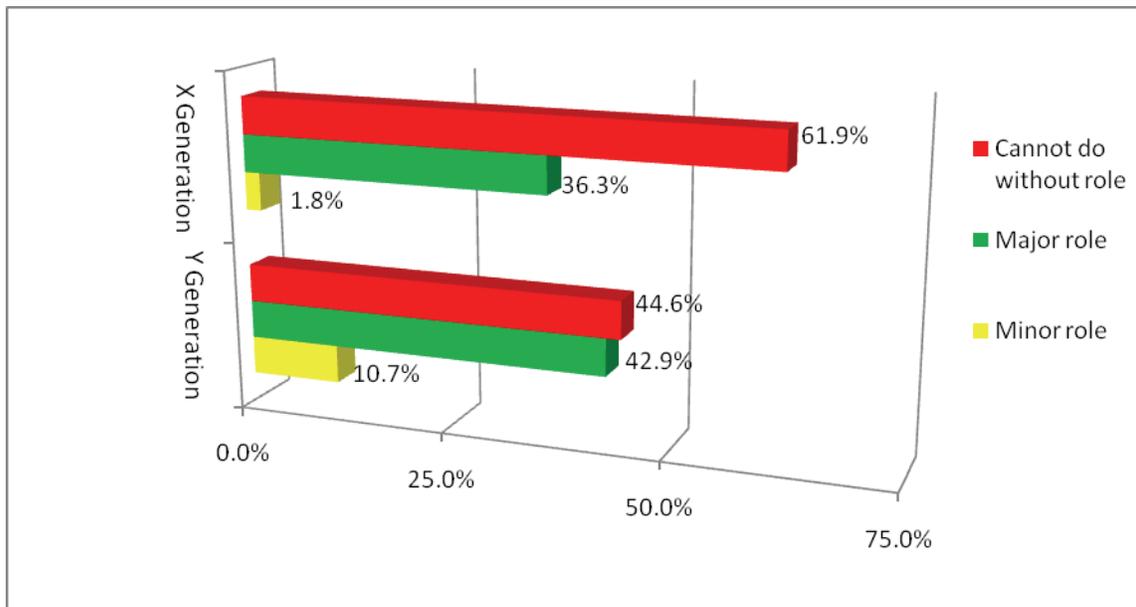
The results for the Y generation group at 44.6 percent for the option "cannot do without IT" while the "major role" of IT also recorded a strong ranking at 42.9 percent. The major ranking for the X generation group was recorded at 36.3 percent and for the Y generation group the major role of information technology was measured at 42.9 percent.

It must be noted that the Y generation group also had one response for very little or minimal usage. This is to be regarded as an outlier and is not to be used in the interpretation of the results.

Following the testing of the role information technology plays in the lives of individuals, it was important next to test the availability of this technology. In

assessing the availability of information technology to the X and Y generational cohorts the following results were obtained as seen in Figure 31 below.

Figure 31: Information technology (IT) availability
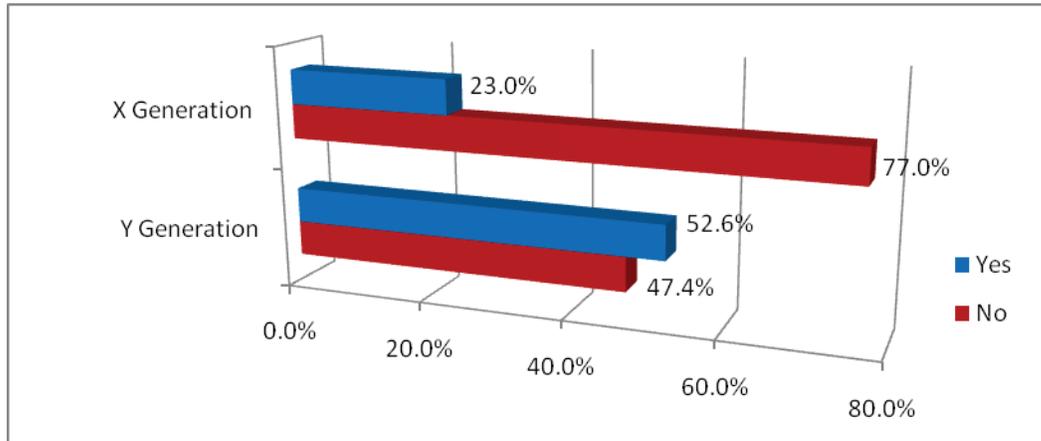
Figure 31 above, shows that only 23 percent of X generation group individuals have adequate availability while 52.6 percent of the Y generation group of individuals have what is perceived as adequate availability. In order to complete the section of questions regarding information technology (IT) the accessibility to the Internet was tested. It is interesting to note however, that when asked to comment on their access to the Internet, both X and Y generational group show high accessibility at 92.9 and 84.2 percent respectively.

Figure 32 below shows, that 92.9 percent of X generation group individuals have Internet availability 24/7/365 while 84.2 percent of Y generation group individuals have 24/7/365 Internet availability.

Figure 32: Internet accessibility 24/7/365
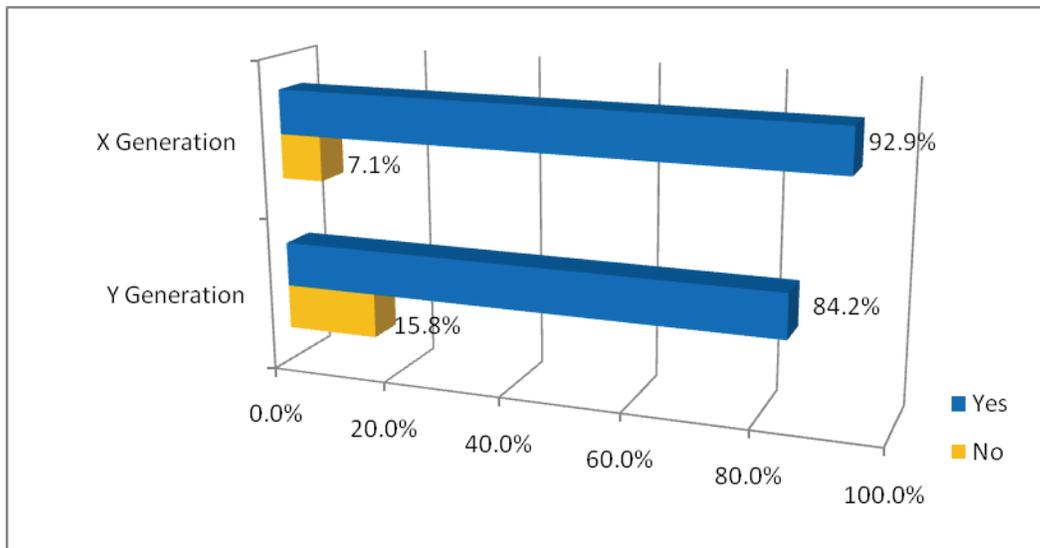
5.6.2.3. *Aptitude and problem solving as a driver for entrepreneurial action*

In Table 16 below, entrepreneurial aptitude as a measure of entrepreneurial intent is measured. The scoring scale for this test is '1' for poor entrepreneurial aptitude, '3' for average entrepreneurial aptitude and '5' for high entrepreneurial aptitude. The results show that the X generation group show a stronger tendency towards strong entrepreneurial aptitude (measured by marking 5) as the majority of the results lie above the mean of 3.72.

The results of the Y generation group for entrepreneurial aptitude also lie above the mean at 3.55. The dispersion around the mean is far greater for the X

generation group with a standard deviation of 0.920 while that of the Y generation group is at 0.210.

Table 16: Aptitude as a driver for entrepreneurial action

		Aptitudinal Characteristic	Mean	Std Dev.
Cohort	**X**	B1a – B1e	3.72	0.920
	Y	B1a – B1e	3.55	0.210

Table 17 below; shows the results following testing of the problem solving ability of the two groups. The scoring scale for this test is '1' for poor problem solving ability, '3' for average problem-solving ability and '5' for high problem solving ability.

The X generation group indicates a strongly positive inclination towards problem solving in that the mean for the X group is high at 3.93. The standard deviation for the X generation group is 0.840 showing medium dispersion. The Y generation group has a just above average response result with the mean measured at 3.62. The dispersion around the mean is more dispersed at 1.060.

Table 17: Problem solving as a driver for entrepreneurial action

		Problem solving	Mean	Std Dev.
Cohort	**X**	B2a – B2d	3.93	0.840
	Y	B2a – B2d	3.62	1.060

5.6.2.4.   Abilities and skill sets for entrepreneurial intent

Two subsets of abilities and skill sets were tested. Firstly, the respondent's individual strength of ability and skill sets relating to people skills; and secondly the respondent's individual strength of ability and skill sets relating to technical skills.

The respondents were asked to score their own strengths based on their individual perception of their abilities and skill sets regarding people skills. The scoring scale for this test was '1' for least like me (abilities and skill sets – people skills), and '4' for most like me (abilities and skill sets – people skills).

The results of the test for these abilities and skill sets for the X and Y generation group follow in Table 18 below.

Table 18: Abilities and skill sets in order of strength - people skills

		Strength of abilities and skill sets (people skills)	Mean	Std Dev.
Cohort	X	B3a – B3d		
			2.36	0.950
	Y	B3a – B3d		
			2.05	0.680

The results shown in Table 18 above; show that the X group is measured in terms of abilities and skill sets regarding people skills at a mean of 2.36. The responses are dispersed as the standard deviation is measured at 0.950.The results for abilities and skill sets - people skills above in Table 18 for the Y generation group

however, show a low mean at 2.05, however, the dispersion of the responses are less at a standard deviation of 0.680.

The respondents were next asked to score their own strengths based on their individual perceptions of their abilities and skill sets regarding technical abilities (Table 19). The scoring scale for this test was '1' for least like me (abilities and skill sets – technical skills), and '4' for most like me (abilities and skill sets –technical skills). The results can be seen in Table 19 below.

Table 19: Abilities and skill sets in order of strength - technical skills

		Strength of abilities and skill sets (technical skills)	Mean	Std. Dev.
Cohort	X	B3e – B3h		
			2.32	0.910
	Y	B3e – B3h		
			2.06	0.680

The results shown in Table 19 above for the X generation group show a mean score of just below average (2.5) at 2.32 in terms of abilities and skills – technical skills. The dispersion for the X generation group is measured as 0.910 (standard deviation) around the mean. In reviewing the result for the Y generation group, the mean is well below the average (2.5) for the group at 2.06 while dispersion is less around the mean at 0.680.

The subsequent results shown In Table 19 above indicate to what degree the individual's abilities contribute to their success. The scale utilised for this test is '1' for least like me, and '4' for most like me.

The X generation group shows a mean just below the average (2.5) of 2.36 and a standard deviation of 0.970. The Y generation group shows that the respondents have a lower perception of the degree to which their abilities contribute to their success with a mean of 2.05 and standard deviation of 0.730.

Table 20: Degree to which individual strengths contribute to success

Abilities and success factors contributing to success			Mean	Std. Dev.
Cohort	X	B3i – B3l		
			2.36	0.970
	Y	B3i – B3l		
			2.05	0.730

The respondents were next asked to score their abilities in terms of what others are most likely to notice about them. The scoring scale for this test was '1' for least like me (noticeable attributes), and '4' for most like me (noticeable attributes). The results can be seen in Table 20 above.

The results below in Table 21 indicate that the X generation group tends towards the middle of the scoring range (2.5) with a mean of 2.35 while the standard deviation is calculated at 0.980. The Y generation group indicates a mean result of 2.05 and a less dispersed grouping around the mean at 0.710 for the same question.

Table 21: Individual skills most noticed by others

Significant traits and abilities			Mean	Std. Dev.
Cohort	X	B3m – B3p		
			2.35	0.980
	Y	B3m – B3p		
			2.05	0.710

5.6.2.5. Key leadership traits, operational leadership orientation and long- and short-term vision for entrepreneurial intent

Leadership as a concept in terms of entrepreneurial intent was tested from two angles, firstly, from a key leadership trait or characteristic perspective and; secondly from the perspective of operational leadership orientation. Following the testing of leadership, short- and long-term vision was examined.

The scoring scale for the first test for key leadership traits was '1' for least like me, and '4' for most like me. In measuring the results from the X generation group in Table 22 below, the mean for this test is scored at 2.33 with a standard deviation of 0.900. This mean therefore lies just below the average which is scored at 2.5.

Table 22: Key leadership trait or quality in an individual

		Key leadership trait/quality	Mean	Std. Dev.
Cohort	X	B3q – B3t		
			2.33	0.900
	Y	B3q – B3t		
			2.05	0.700

The Y generation group has a lower mean at 2.05 and is less dispersed from the mean with the standard deviation calculated at 0.700. The detailed results found in Appendix 1 show that the least favoured characteristic of key leadership traits for both generational groups is toughness and aggressiveness.

As discussed, operational leadership orientation was tested next. In Table 34 below, the operational leadership orientation of the X and Y generational groups was tested. The results show that the X generation group is ranked in terms of

working with a team as a member at 36.3 percent with a slightly higher tendency towards taking the lead in team initiatives at 38.9 percent.

The Y generation group indicates a higher tendency towards working with a team as a member at 42.1 percent while they also show a third of the group at 33.3 percent like to take the lead in team initiatives. Around 10.5 percent have never had exposure to a leadership role.

Figure 33: Leadership orientation
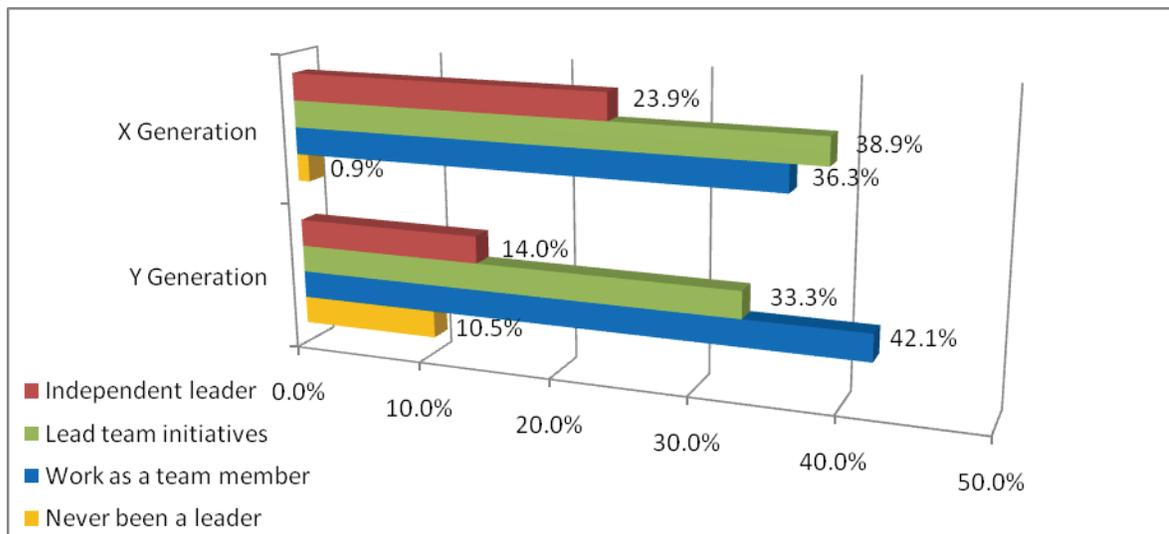
As discussed in the literature review in Chapter 2, vision is an important characteristic of the entrepreneur and is one of the necessary components of entrepreneurial intent. In this test, long-term and short-term vision, were tested separately. The scoring scale for this test was '1' for poor long-term vision, '3' for average long-term vision and '5' for high long-term vision. In Table 23 below, the results for the long-term vision test can be seen.

Table 23: Long-term vision

		Long-term vision	Mean	Std. Dev.
Cohort	X	B5a – B5c		
			3.74	0.910
	Y	B5a – B5c		
			3.93	0.940

The result for the X generation group indicates a strong tendency towards aspects of long-term vision with a mean of 3.74. For all three characteristics of long-term vision measured in the detailed results table in Appendix 1, all three characteristics measured lie in the upper quartiles for the X generation group of respondents. The Y generation group when measured on long-term vision result in a high mean of 3.93 for the group. Both the X and Y generational groups show similar dispersion or variance around the mean at 0.910 and 0.940 respectively.

In contrast to the test for long-term vision, short-term vision is tested in terms of entrepreneurial intent where the individuals are said to be more visionary if they answer the statements with a low ranking indicated by a (1) in Table 24 below. The scoring of the scaling is opposite to the scaling used in the measurement of long-term vision above.

Table 24: Short-term vision

		Long-term vision	Mean	Std. Dev.
Cohort	X	B5d – B5f		
			3.41	0.950
	Y	B5d – B5f		
			3.37	1.110

The result for the X generation group indicates a tendency towards not being visionary with a mean measured at 3.41. The mean for the Y generation group also tends to be lower at a mean of 3.37.

It should be noted that insufficient clarification of how the questions should have been answered may have contributed to this upward skewed result rather than a true reflection of poor short-term vision. This is further supported by the majority of the X group marking that they believe the statements under short-term vision to be ranked at a 4 or 5 with up to 75 percent of the respondents marking towards the non visionary end of the scale. This is further discussed under the research limitations section in Chapter 4.

5.6.2.6. *Influence and family support*

In terms of the support a family and network structure can give to an individual who has the propensity towards entrepreneurial intent, the emotional and motivational support can be critical to the venture getting off the ground. As such, this was tested next. The scoring scale for this test was '1' for poor influence of family and support networks, '3' for average influence of family and support networks and '5' for strong influence of family and support networks.

In Table 25 below, the X group indicates a strong tendency towards family support, self-sufficiency and knowing or having close contact or exposure to an entrepreneur which registered a mean of 3.18 for the group.

Table 25: Influence and family support

Cohort		Influence and family support	Mean	Std. Dev.
	X	B6a – B6i		
			3.18	1.060
	Y	B6a – B6i		
			3.50	1.120

The least favoured characteristic of influence and family support for the X generation group, in Table 25 above, appears to be independent decision-making without the assistance of others, with more than 50 percent of the sample ranking this characteristic a 4 (above average influence) or a 5 (strong influence). Family's active support of the individual's ideas appears to be the primary characteristic that scored the highest above 60 percent. The X generation group shows a mean score of 3.18 with a standard deviation of 1.060. The detailed tables of these results can be viewed in Appendix 1.

In Table 25 above, the Y generation group indicates a strong tendency towards valuing advice from others with a mean of 3.77. This is also supported by the choice to discuss options with others for advice with a mean of 3.65 while the family support of ideas and actions still comes through strongly at 3.70.

The least favoured characteristic of influence and family support for the Y group appears to be independent decision-making without the assistance of others, with 38.6 percent of the sample ranking this characteristic a 4 (above average influence) or a 5 (strong influence).

Support and advice from others in terms of decision-making appears to be the primary characteristic that scored the highest at 61.4 percent. The Y generation group scored a mean of 3.50 and a standard deviation of 1.120. For more details on these results, see Appendix 1.

5.6.2.7.   *Individual creativity and innovation measurement*

As discussed earlier in the literature review (Chapter 2), creativity and innovation are key aspects relating to the identification if entrepreneurial opportunities and the ability of the individual to adapt to changing circumstances.

Regarding creativity and innovation, in Table 26 below, both the X and Y groups tested show a strong tendency towards a focus on improving processes with a mean for the group of 3.95 and 3.68 respectively. For the X group the dispersion of the scores is small with a standard deviation of 0.688 for process reengineering for working efficiencies.

Table 26: Creativity and innovation

Cohort		Creativity and innovation	Mean	Std. Dev.
	X	B7a – B7d		
			3.95	0.980
	Y	B7a – B7d		
			3.68	1.050

For the Y group a strong emphasis was evident on the comfort levels of the individuals regarding experimentation with 42.1 percent agreeing a score of 4 (above average) and a further 24.6 percent at a 5 (strong creativity and innovation). The standard deviation for the X generation group is 0.980 while that of the Y generation group is 1.050.

5.6.2.8.   Characteristics of planning

The importance of core competencies such as aspects of planning, organising and control were discussed in the literature review (Chapter 2) as important aspects of business management. As such these aspects were tested in terms of entrepreneurial intent.

In Figure 34 below, the scale used was the aspects of planning, organising and control were categorical in that respondents were required to answer the statement with either a 'yes' or 'no' answer. The planning aspects that are emphasised for the X generation group are: keenness to experiment at 85.8 percent, the preference for flexibility at 85 percent and the need for immediate reward at 74.3 percent.

Figure 34: Summarised key characteristics of planning
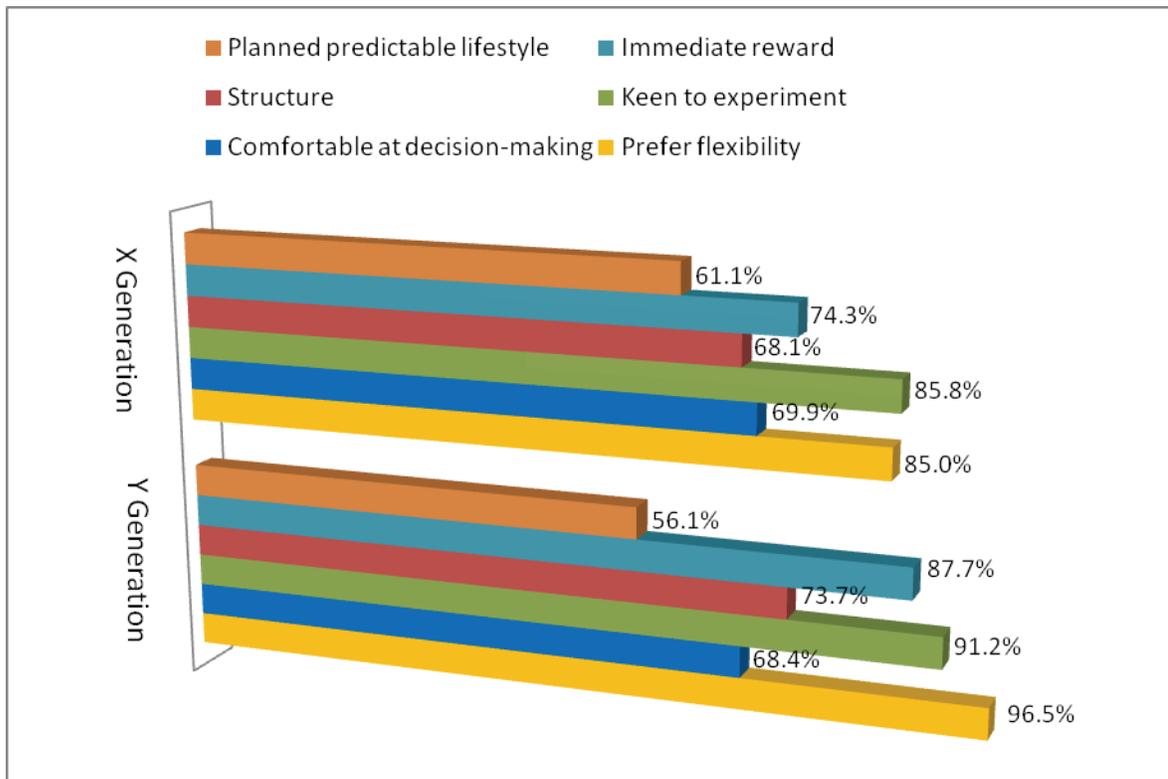
The planning aspects that are emphasised in the results of the Y generation group are: the preference for flexibility at 96.5 percent, keenness to experiment at 91.2 percent and the need for immediate reward at 87.7 percent. Further detailed results for this test can be seen in Appendix 1.

5.6.2.9.   The influence of social circumstance, working experience, job capacity and participation in business activities

The results of the test regarding the influence on entrepreneurial intent of an individual's social circumstances are below in Table 27. The X group indicates that the access to funding is the greatest driver of propensity toward entrepreneurial

intent within social circumstances with a mean of 4.02 for the variable. The Y group indicates that the access to transport 24/7/365 is the greatest driver within social circumstances with a mean of 4.17 for the variable. Further detailed results are available in Appendix 1.

Table 27: Social circumstances

Cohort		Social circumstances	Mean	Std. Dev.
	X	C1a – C1e		
			4.02	1.010
	Y	C1a – C1e		
			4.17	08604

In order to measure the sample group's working experience (in years), both current or in the past, a question was included to test this. Table 28 below shows the results of this test in that 86.7 percent of the X group individuals have in total greater than 4 years working experience. In the Y group it was found that this characteristic was measured at 36.8 percent with working experience above 4 years with the majority of respondents with 1-3 years experience as measured at 52.6 percent.

Table 28: Working experience in years
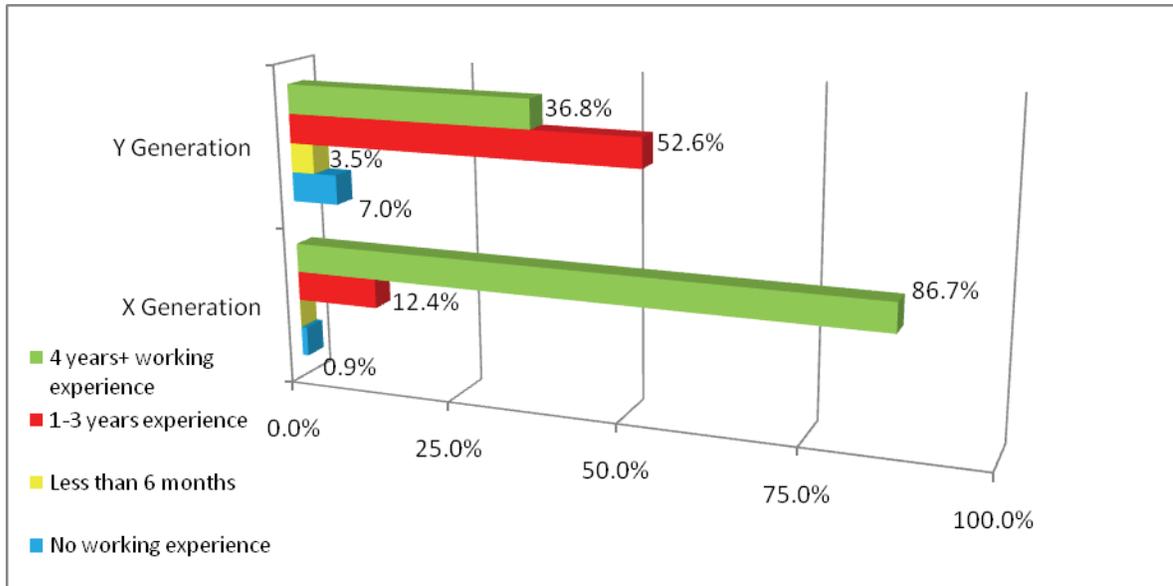
In order to test the sample group's present or past job capacity, a question was included to test this. Figure 35 below, shows that 46 percent of the X generation group individuals are line managers with a further 39.8 percent as employees and a minority of 8.8 percent at executive management level.

Figure 35: Last occupation capacity
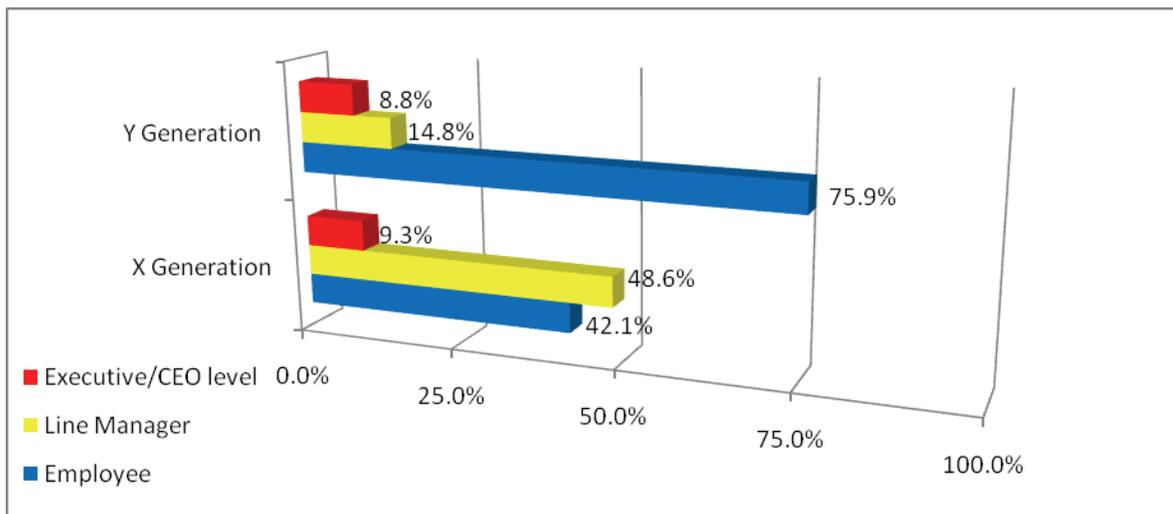
For the Y generation group (tested in Figure 35 above), the majority job capacity is shown as being an employee measured at 71.9 percent while line management of the sample makes up 14 percent of the sample and a further 8.8 percent as executive level management. Both groups had missing responses but these are not deemed to significantly affect any further testing results.

Figure 36: Experience in the management of people
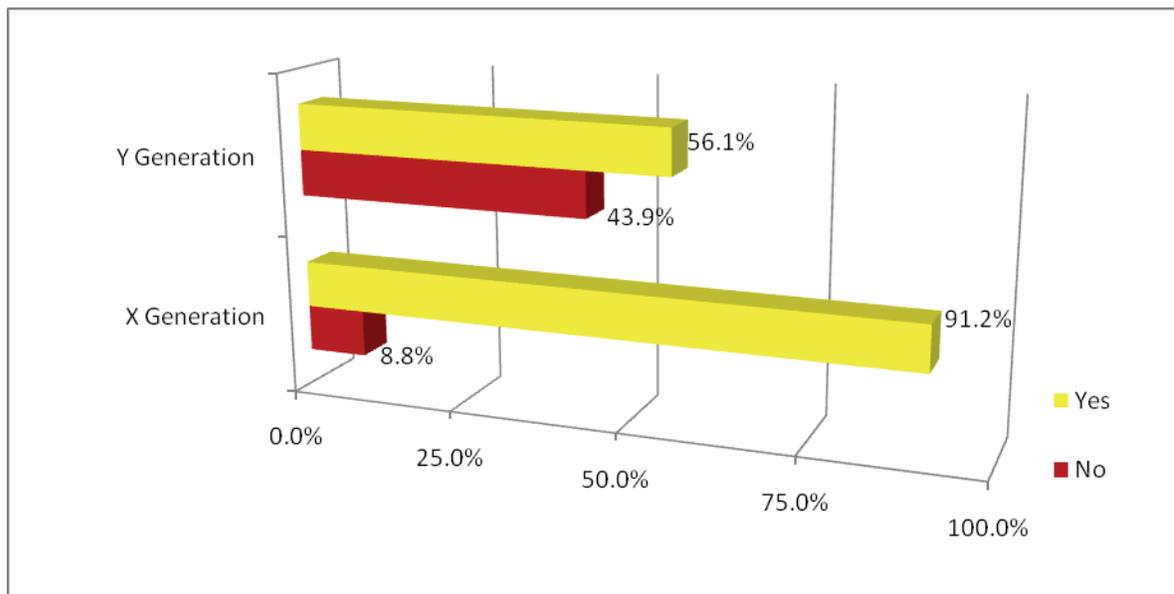
In order to ascertain the experience in management of people, a question was included to test this. Table 36 above shows that 91.2 percent of X group individuals have people management experience that is either past or current. In the Y group it was found that this characteristic was measured at 56.1 percent.

In order to measure the sample group's participation in business activities, both current or in the past, a question was included to test this. Figure 37 above shows that 78.8 percent of X group individuals have participated or are participating in business activities presently. In the Y group it was found that this characteristic was measured at 93 percent.

Figure 37: Participation in business related activities
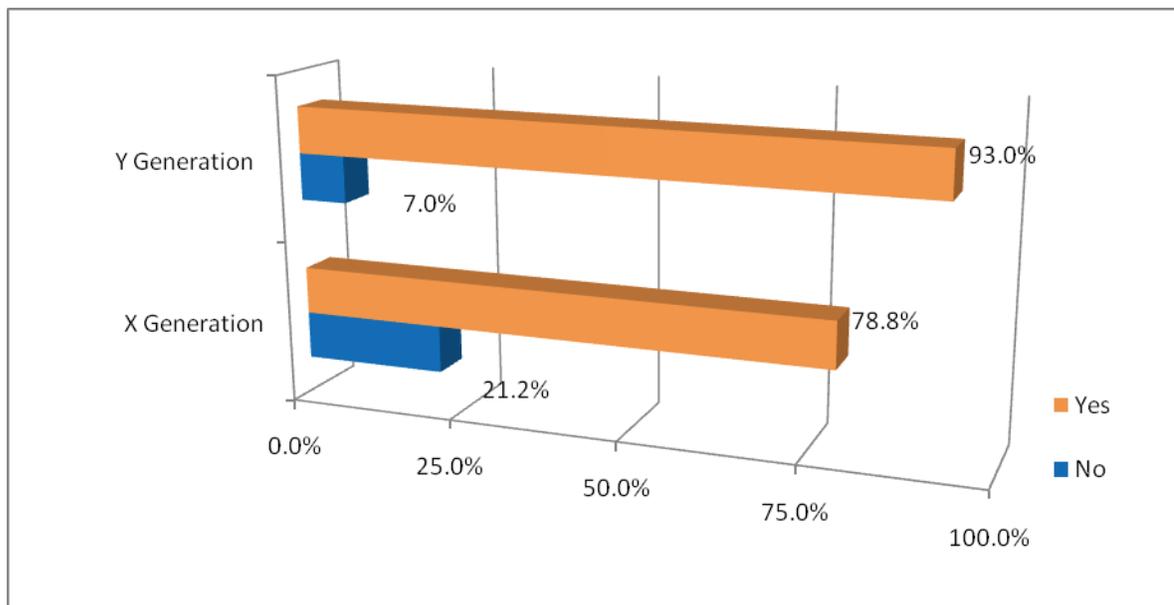
The result, for the test that measures extra-curricular activities by the participating individuals is shown below in Table 29. The X group indicates that in order of preference, participation in church and volunteer youth groups is most supported at 54.9 percent, followed by fundraising activities for the school or church at 44.2

percent and thirdly the making of things to sell personally comes in at 30.1 percent support.

Table 29: Extra-curricular activities

Extra curricular activities				Unmarked	Marked
Cohort	X	Activity: C6a. Making things to sell personally	Count	79	34
			Row N %	69.9%	30.1%
		Activity: C6b. Fundraising activities for your school/church	Count	63	50
			Row N %	55.8%	44.2%
		Activity: C6c. Community fundraising initiatives	Count	113	0
			Row N %	100.0%	.0%
		Activity: C6d. Junior city councils/chambers	Count	106	7
			Row N %	93.8%	6.2%
		Activity: C6e. Church and welfare volunteer/youth groups	Count	51	62
			Row N %	45.1%	54.9%
		Activity: C6f. Student vacation work or part time work	Count	113	0
			Row N %	100.0%	.0%
	Y	Activity: C6a. Making things to sell personally	Count	33	24
			Row N %	57.9%	42.1%
		Activity: C6b. Fundraising activities for your school/church	Count	35	22
			Row N %	61.4%	38.6%
		Activity: C6c. Community fundraising initiatives	Count	57	0
			Row N %	100.0%	.0%
		Activity: C6d. Junior city councils/chambers	Count	51	6
			Row N %	89.5%	10.5%
		Activity: C6e. Church and welfare volunteer/youth groups	Count	25	32
			Row N %	43.9%	56.1%
		Activity: C6f. Student vacation work or part time work	Count	57	0
			Row N %	100.0%	.0%

The Y group indicates that in order of preference, participation in church and volunteer youth groups is most supported at 56.1 percent, followed by making things personally to sell at 42.1 percent and thirdly participation in church and school fundraising activities comes in at 38.6 percent support.

5.6.2.10.   Propensity to act on risk and motivational factors

The results of the test regarding the behavioural aspect - attitude of an individual's are below in Table 30. The X group indicates that having the required resources and opportunity would be a strong driver in terms of the intent to start an entrepreneurial business as indicated by a mean of 4.31. The ownership and management of a business has also been scored as giving great satisfaction at a mean of 4.17. Finally, self-confidence and the attractiveness of entrepreneurial ventures are also scored highly at 4.05 and 4.04 respectively.

Table 30: Behavioural aspects – attitude influencing the propensity to act on intent

			Mean	Std. Dev.
Cohort	X	D1a. Starting a business could be possible for me	4.05	1.093
		D1b. A career as an entrepreneur or business owner is attractive to me	4.04	1.153
		D1c. I believe I would be successful in starting a business	4.01	0.995
		D1d. I have no doubts about starting my own business	3.36	1.247
		D1e. If I had the opportunity and resources, I would love to start a business	4.31	0.983
		D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	3.69	1.188
		D1g. I am determined to create a business venture in the future	3.71	1.258
		D1h. If I tried to start a business, I believe that I would have a high chance of being successful	3.96	0.958
		D1i. Being a business owner or an entrepreneur would give me great satisfaction	4.17	1.051
		D1j. My professional goal is to establish my own business	3.77	1.275
		D1k. Being an entrepreneur implies more advantages than disadvantages to me	3.81	1.082
	Y	D1a. Starting a business could be possible for me	4.16	1.177
		D1b. A career as an entrepreneur or business owner is attractive to me	4.04	1.401
		D1c. I believe I would be successful in starting a business	4.00	1.239

D1d. I have no doubts about starting my own business		
	3.60	1.374
D1e. If I had the opportunity and resources, I would love to start a business		
	4.37	1.011
D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job		
	3.81	1.342
D1g. I am determined to create a business venture in the future		
	3.96	1.267
D1h. If I tried to start a business, I believe that I would have a high chance of being successful	4.14	0.990
D1i. Being a business owner or an entrepreneur would give me great satisfaction	4.14	1.125
D1j. My professional goal is to establish my own business		
	3.91	1.392
D1k. Being an entrepreneur implies more advantages than disadvantages to me	3.95	1.141

5.6.2.11.   Value of organisational support and networks

Regarding supporting organisations and structures designed especially for the entrepreneur as a supporting and mentoring support base the test revealed the following.

In Table 31 below, the X group indicates that in order of preference, the Internet, own websites and blogs at a mean score of 3.84. This is followed by formal coaching and mentoring, with the third most popular support organisation or structure being technical aid for business start-ups measured at a mean of 3.35. The Y group indicates that in order of preference, the Internet, own websites and blogs at a mean score of 3.84.

Table 31: Value of supporting organisations

				Mean	Std. Dev.
Cohort	X	E1a. Private associations (e.g. Chamber of Commerce)			
				3.00	1.035
		E1b. Government support bodies (e.g. The DTI, SEDA, Khula, and National Youth Development Agency etc.)			
				2.92	1.095
		E1c. Loans in specially favourable terms			
				3.10	1.077
		E1d. Technical aid for business start-ups			
				3.35	0.990
		E1e. Formal coaching and mentoring			
				3.48	1.078
		E1f. Business clubs and institutes			
				3.27	0.975
		E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo			
				3.27	1.061
		E1h. Internet, own websites or blogs etc.			
				3.84	0.931
	Y	E1a. Private associations (e.g. Chamber of Commerce)			
				3.09	1.040
		E1b. Government support bodies (e.g. The DTI, SEDA, Khula, and National Youth Development Agency etc.)			
				2.70	1.068
		E1c. Loans in specially favourable terms			
				3.18	1.167
		E1d. Technical aid for business start-ups			
				3.42	0.999
		E1e. Formal coaching and mentoring			
				3.39	1.161
		E1f. Business clubs and institutes			
				3.30	0.981
		E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo			
				3.51	1.182
		E1h. Internet, own websites or blogs etc.			
				3.84	1.066

5.7   Inferential results analysis

5.7.1. Results analysis by proposition

The following propositions were formulated in order to contribute to answering the research question; that being:

Is there a statistically significant difference between X Generation and Y Generation individual's in terms of their propensity towards entrepreneurial intent in South Africa?

5.7.1.1.   Proposition 1:

There are no significant differences in formal education or entrepreneurial training that serve as a foundation for business understanding that underpins entrepreneurial intent between X generation and Y generation individuals.

Question A10 (education level) data results from the questionnaire were utilised for the test that follows. In order to perform cross tabulation tests on the data, the results had to be recoded (as indicated by [R] in the tables below) for simplification of the analysis.

The measurement of educational level was re-coded into two groups; those that have matric/grade 12 education level and those that have a tertiary education level including a certificate, diploma, degree or post graduate degree. The descriptive results of this re-coding can be seen in Figure 38 below.

Figure 38: Re-coded [R] education level of sample
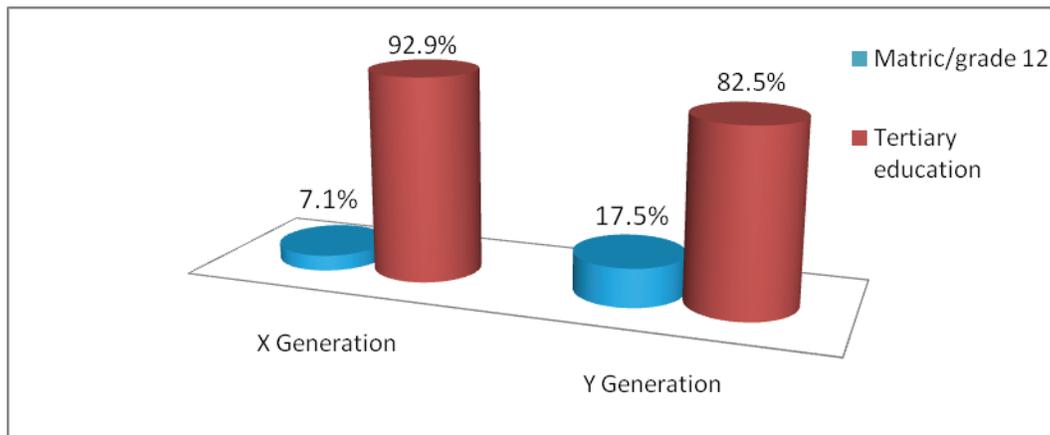
With the recoding of the data [R] cross tabulation could be used for further testing. The results of the cross tabulation can be seen in Table 32 below.

Table 32: Cross tabulation of education level

			[R] A10. Education Level		Total
			Matric / Grade 12	Higher	
A1. Age	X	Count	8	105	113
		% within A1. Age	7.1%	92.9%	100.0%
	Y	Count	10	47	57
		% within A1. Age	17.5%	82.5%	100.0%
Total		Count	18	152	170
		% within A1. Age	10.6%	89.4%	100.0%
Fisher's Exact Test		Exact Sig. (2-sided)	.061		

If the significance of the above test is measured at a confidence level of 95 percent, then the result of the Chi-Square test in order to be statistically significant should be less than 0.05.

Question A9 (entrepreneurial course attendance) data results from the questionnaire were utilised for the testing. No recoding of the data was required as it was categorical in nature and could be cross tabulated immediately. The descriptive results of this variable can be seen in Figure 39 below.

Figure 39: Entrepreneurial course attendance
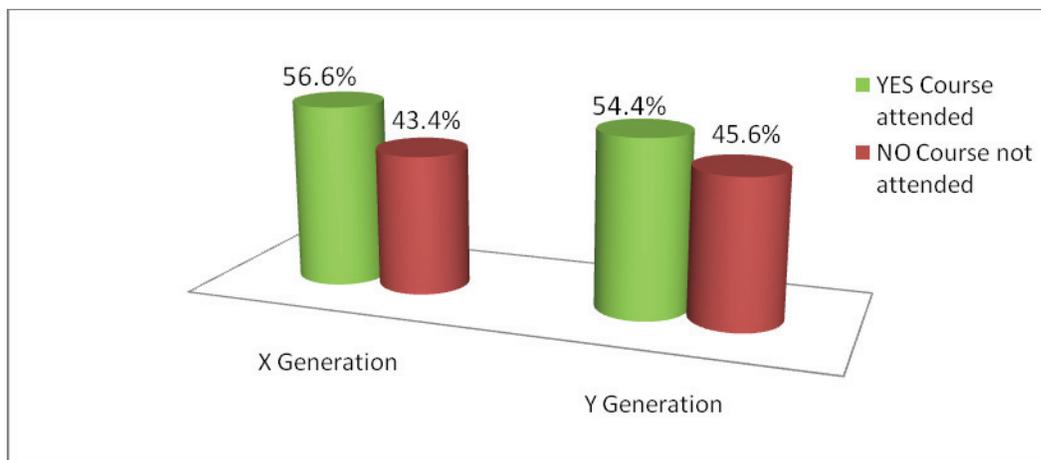
In order to test the significance of the result, a cross tabulation was run. The results of the cross tabulation for entrepreneurial course attendance can be seen in Table 33 below.

Table 33: Cross tabulation of education level

			A9. Entrepreneurial courses attended		Total
			Matric / Grade 12	Higher	
A1. Age	X	Count	49	64	113
		% within A1. Age	43.4%	56.6%	100.0%
	Y	Count	26	31	57
		% within A1. Age	45.6%	54.4%	100.0%
Total		Count	75	95	170
		% within A1. Age	44.1%	55.9%	100.0%
Fisher's Exact Test		Exact Sig. (2-sided)	.870		

If the significance of the above test is measured at a confidence level of 95 percent, then the result of the Chi-Square test in order to be statistically significant should be less than 0.05.

5.7.1.2.   Proposition 2:

There are no significant differences in exposure to information technology (IT) and the realisation of its importance in entrepreneurial activity in increasing the propensity towards entrepreneurial intent between X generation and Y generation individuals.

Question A11_1, A11_2, A12 and A13 were questions utilised in the questionnaire to gauge information technology (IT) exposure, daily role, accessibility, and Internet usage. Due to the subjective nature of the questions utilised for A11_1 and A11_2,

the descriptive results alone were analysed. The descriptive results for both variables are shown below in Figures 40 and 41 respectively.

Figure 40: Re-coded[R] computer literacy
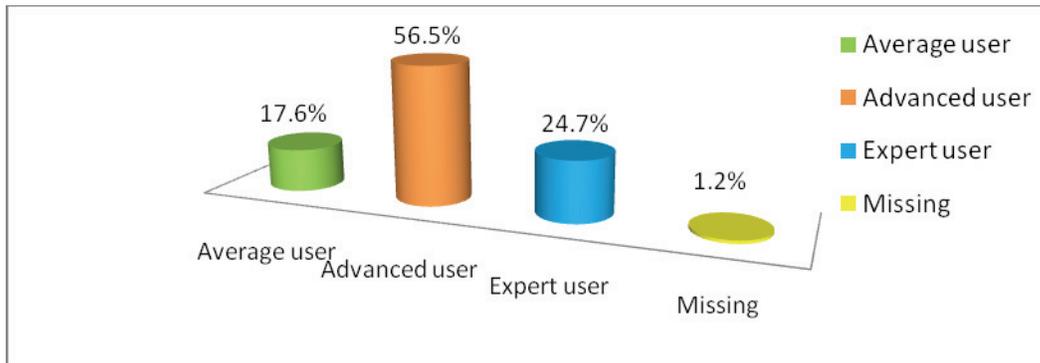
Figure 41: Re-coded [R] Information technology (IT) daily role
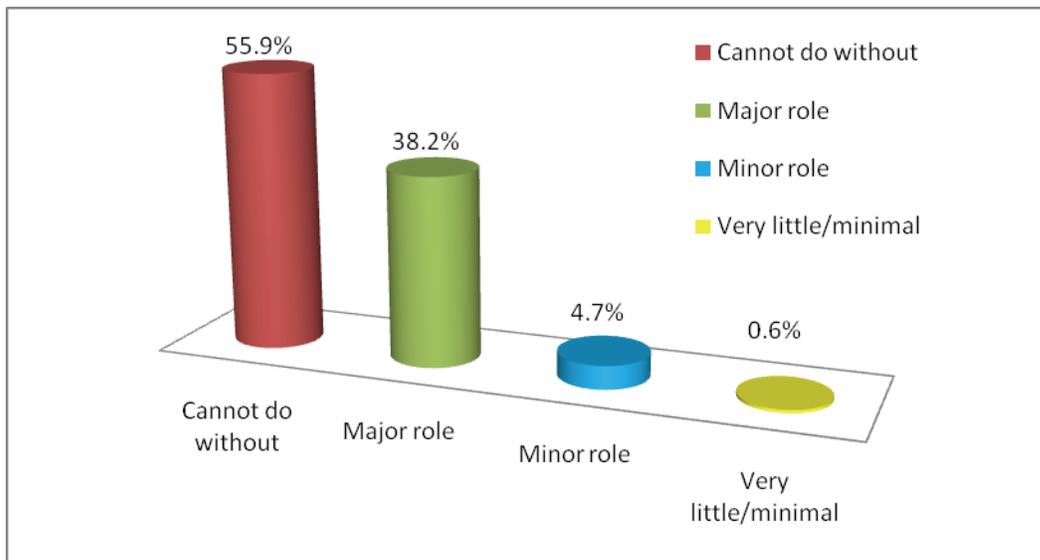
Following the running of the descriptive analysis of these two variables, no further testing was run as the sample size once recoded and grouped in an attempt to cross tabulate was too small to test further.

The variable that measured accessibility of information technology (IT) was analysed next. Question A12 (Information technology (IT) availability) data results from the questionnaire were utilised for the testing. No recoding of the data was required as it was categorical in nature and could be cross tabulated immediately. The descriptive results of this variable can be seen in Figure 42 below.

Figure 42: Information technology (IT) availability
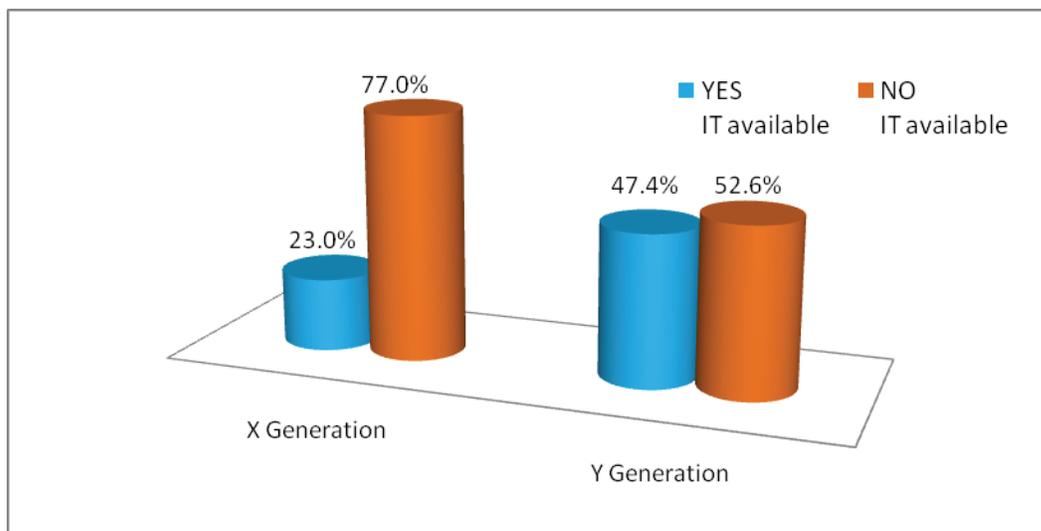
In order to test the significance of the result, a cross tabulation was run. The results of the cross tabulation for entrepreneurial course attendance can be seen in Table 34 below.

Table 34: Cross tabulation of information technology (IT) availability

			A12. IT availability		Total
			No	Yes	
A1. Age	X	Count	87	26	113
		% within A1. Age	77.0%	23.0%	100.0%
	Y	Count	27	30	57
		% within A1. Age	47.4%	52.6%	100.0%
Total		Count	114	56	170
		% within A1. Age	67.1%	32.9%	100.0%

Fisher's Exact Test	Exact Sig. (2-sided)	.000	

If the significance of the above test is measured at a confidence level of 95 percent, then the result of the Chi-Square test in order to be statistically significant should be less than 0.05.

Finally the variable used to measure Internet accessibility 24/7/365 was tested. Question A32 (Internet accessibility 24/7/365) data results from the questionnaire were utilised for the testing. No recoding of the data was required as it was categorical in nature and could be cross tabulated immediately. The descriptive results of this variable can be seen in Figure 43 below.

Figure 43: Internet accessibility 24/7/365
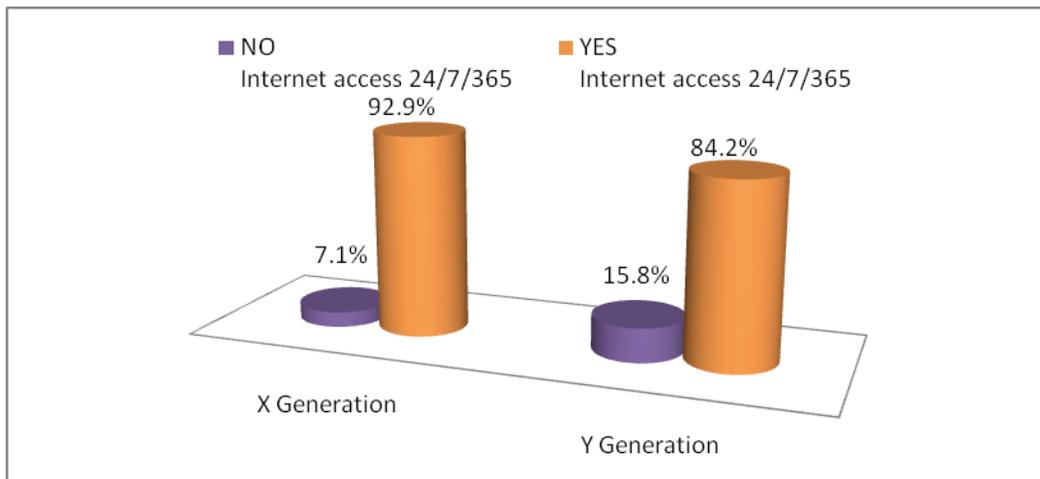
In order to test the significance of the result, a cross tabulation was run. The results of the cross tabulation for entrepreneurial course attendance can be seen in Table 35 below.

Table 35: Cross tabulation of Internet accessibility 24/7/365

			A13. Internet accessibility 24/7/365		Total
			No	Yes	
A1. Age	X	Count	8	105	113
		% within A1. Age	7.1%	92.9%	100.0%
	Y	Count	9	48	57
		% within A1. Age	15.8%	84.2%	100.0%
Total		Count	17	153	170
		% within A1. Age	10.0%	90.0%	100.0%
Fisher's Exact Test		Exact Sig. (2-sided)		.103	

If the significance of the above test is measured at a confidence level of 95 percent, then the result of the Chi-Square test in order to be statistically significant should be less than 0.05.

5.7.1.3. *Proposition 3:*

There are no significant differences in the extent of entrepreneurial aptitude, as measured by ability, skill sets or problem solving ability as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

Question B1 and B2 were utilised in the questionnaire to measure aptitude and problem solving ability as drivers of entrepreneurial intent. Firstly, the

measurement of aptitude (question B1) was re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the aptitudinal variable.

The result of the reliability test for aptitude is seen below in Table 36.

Table 36: Reliability statistics for aptitude – 5 characteristics

Item – Total statistics	Cronbach's Alpha if Item Deleted
B1a. Likelihood of recognizing a possible business opportunity	.679
B1b. Ease with which you creatively come up with new ideas and initiatives	.694
B1c. The likelihood that you will be able to solve problems and find solutions	.761
B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	.727
B1e. Building a network of associates and professional contacts for future leveraging	.757
Reliability Statistics	
Cronbach's Alpha	Number of items
.768	5

In analysing the consistency with which the instrument is measuring the given performance or behaviour, in this case entrepreneurial aptitude, the diagnostic measure used, Cronbach's Alpha, is the reliability coefficient that assesses the consistency of the entire scale of characteristics tested under aptitude. The generally agreed upon lower limit for Cronbach's Alpha is 0.70.

In Table 36 above given the characteristics of aptitude listed, the result is highly reliable as the Cronbach's Alpha is computed at 0.768.

The descriptive statistics applicable following the re-coding [R] of the variable aptitude can now be seen below in Table 37.

Table 37: Re-coded [R] variable for aptitude - descriptive result

Statistics		
Aptitudes		
N	Valid	170
	Missing	0
Mean		3.6624
Std. Deviation		.67491

In order to determine whether any of the variables stipulated above have a statistical relationship with the constructs created, an Independent Samples t-test (also known as the two-sample t-test) will be computed. This test will assist in comparing the means of the two groups created. If the p-value is found to be less than 0.05, then it will mean that the independent variable in question does have a significant relationship with the factor at hand. The results of the testing, is below in Table 38.

Table 38: Independent Samples Test t-test for the variable aptitude

	A1. Age	N	Mean	Std. Deviation
Aptitudes	X	113	3.7221	.63832
	Y	57	3.5439	.73364
Independent Samples Test				
Equal variances assumed				
			t-test for Equality of Means	
	t	df		Sig. (2-tailed)
	1.634	168		.104

The result above in Table 38 shows that at a confidence level of 95 percent, the p-value is greater than the required lower limit of less than 0.05 and therefore the

resulting difference between the means of the two groups, x and y is not significant.

Secondly, the measurement of problem solving (question B2) was re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the problem solving variable. The result of the reliability test for problem solving is seen below in Table 39.

Table 39: Reliability statistics for problem solving – 4 characteristics

Item – Total statistics	Cronbach's Alpha if Item Deleted
B2a.I enjoy dealing with difficult problems	.332
B2b. I usually seek advice of others in solving problems	.484
B2c. Problems slow things down but I usually find a solution	.434
B2d. I see problems as opportunities	.260
Reliability Statistics	
Cronbach's Alpha	Number of items
.452	4

The generally agreed upon lower limit for Cronbach's Alpha is 0.70. In Table 39 above given the characteristics of aptitude listed, the result is not reliable as the Cronbach's Alpha is computed at 0.452

5.7.1.4.   Hypothesis 4:

There are no significant differences in operational leadership orientation as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

Question B4 was utilised in the questionnaire to measure leadership orientation as a driver of entrepreneurial intent. In order to perform cross tabulation tests on the data, the results had to be recoded (as indicated by [R] in the Table 40 below).

Table 40: Descriptive statistics for the variable leadership orientation

Leadership Orientation		Frequency	Percent
Valid	I have never been in a leadership role	7	4.1
	I work with the team as a member	65	38.2
	I usually take the lead in team initiatives	63	37.1
	I tend to be an independent leader of new initiatives	35	20.6
	Total	170	100.0
Leadership Orientation re-coded [R]		Frequency	Percent
Valid	Lacking leadership orientation	135	79.4
	With leadership orientation	35	20.6
	Total	170	100.0

The measurement of leadership orientation was re-coded into two groups; those that have a leadership orientation and those that lack leadership orientation. The recoded data was then used to verify if the p-value was found to be less than 0.05 as this would mean then that the demographic variable at hand is unrepresentative of the population. The result following the re-coding of the variable for leadership orientation for the Chi-Square test was 0.162 which can be seen below in Table 41.

Table 41: Cross tabulation for leadership orientation

			[RB Leadership Orientation		Total
			Lacking leadership orientation	With leadership orientation	
A1. Age	X	Count	86	27	113
		% within A1. Age	76.1%	23.9%	100.0%
	Y	Count	49	8	57
		% within A1. Age	86.0%	14.0%	100.0%
Total		Count	135	35	170
		% within A1. Age	79.4%	20.6%	100.0%
Fisher's Exact Test		Exact Sig. (2-sided)		.162	

If the significance of the above test is measured at a confidence level of 95 percent, then the result of the Chi-Square test in order to be statistically significant should be less than 0.05.

5.7.1.5.   Proposition 5:

There are no significant differences in short- or long-term visionary perspective as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

Questions B5a, B5b and B5c were utilised in the questionnaire to measure long-term perspective in terms of vision as a driver of entrepreneurial intent. Firstly, the measurement of long-term vision (Questions B5a, B5b, B5c) characteristics were re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the long-term visionary variable.

The result of the reliability test for long-term vision is seen below in Table 42.

Table 42: Reliability statistics for long-term vision – 3 characteristics

Item – Total statistics	Cronbach's Alpha if Item Deleted
B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve	.735
B5b. I have always known what I want to do with and achieve in my life	.452
B5c. I tend to plan long term in order to achieve my goals	.488
Reliability Statistics	
Cronbach's Alpha	Number of items
.680	3

In measuring the consistency with which the instrument is measuring the given performance or behaviour, in this case long-term vision, the diagnostic measure used, Cronbach's Alpha, is the reliability coefficient that assesses the consistency of the entire scale of characteristics tested under long-term vision. The generally agreed upon lower limit for Cronbach's Alpha is 0.70.

In Table 42 above given the characteristics of long-term vision listed, the result is reliable as the Cronbach's Alpha is computed at 0.680. The descriptive statistics applicable following the re-coding [R] of the variable long-term vision follow in Table 43.

Table 43: Re-coded [R] variable for long-term vision - descriptive result

Statistics		
Long-term vision		
N	Valid	170
	Missing	0
Mean		3.8039
Std. Deviation		.73029

With the reliability established, the researcher wished to determine whether any of the variables stipulated above have a statistical relationship with the constructs create. As such, an Independent Samples t-test (also known as the two-sample t-test) was computed.

This test will assist in comparing the means of the two groups created. If the p-value is found to be less than 0.05, then it will mean that the independent variable in question does have a significant relationship with the factor at hand. The results of the testing, is below in Table 44.

Table 44: Independent Samples Test t-test for the variable aptitude

	A1. Age	N	Mean	Std. Deviation
Long-term vision	X	113	3.7404	.72338
	Y	57	3.9298	.73392
Independent Samples Test				
Equal variances assumed				
			t-test for Equality of Means	
	t	df		Sig. (2-tailed)
Long-term Vision	-1.604	168		.111

The result above in Table 44 shows that at a confidence level of 95 percent, the p-value is greater than the required lower limit of less than 0.05 at 0.111 and therefore the resulting difference between the means of the two groups, x and y is not significant.

Questions B5d, B5e and B5f were utilised in the questionnaire to measure short-term perspective in terms of vision as a driver of entrepreneurial intent. Firstly, the measurement of short-term vision (Questions B5d, B5e, B5f) was re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the

short-term visionary variable. The result of the reliability test for short-term vision is seen below in Table 45.

Table 45: Reliability statistics for short-term vision – 3 characteristics

B5d.My goals and plans are practical and apply to my daily life	.472
B5e.I tend to set short term objectives and goals of things I will achieve in the next few days or weeks	.235
B5f. I tend to focus on the importance of the here and now rather than future possibilities	.383
Reliability Statistics	
Cronbach's Alpha	Number of items
.473	3

In measuring the consistency with which the instrument is measuring the given performance or behaviour, in this case long-term vision, the diagnostic measure used, Cronbach's Alpha, is the reliability coefficient that assesses the consistency of the entire scale of characteristics tested under aptitude. The generally agreed upon lower limit for Cronbach's Alpha is 0.70.

In Table 45 above given the characteristics of aptitude listed, the result is not reliable as the Cronbach's Alpha is computed at 0.473. No further tests were therefore run for the short-term visionary variable.

5.7.1.6. Proposition 6:

There are no significant differences in influences from family or support organisations or networks regarding motivation and decision-making as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

Question B6 was utilised in the questionnaire to measure family and network influence as drivers of entrepreneurial intent. Firstly, the measurement of the influence of family and support networks (Question B6) was re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the family and network influence variable. The result of the reliability test for family and network influence is seen below in Table 46.

Table 46: Reliability statistics for family and network influence – 9 characteristics

Item – Total statistics	Cronbach's Alpha if Item Deleted
B6a. An immediate family member is an entrepreneur	.569
B6b I was raised to be self-sufficient and t act without support from others	.587
B6c. My family actively supports my new ideas	.601
B6d. I prefer to make decisions independently without help from others	.637
B6e. leveraging fiend or acquaintance is an entrepreneur	.559
B6f. I was raised to believe in the value of advice and support from others	.591
B6g. I prefer to discuss options with others before deciding	.608
B6h. I am aware of where and who to go to in order to ask for help	.574
B6i. Even when my ideas are not supported or accepted I pursue them	.625
Reliability Statistics	
Cronbach's Alpha	Number of items
.624	9

Since the results above in Table 46, at 0.624, are close to the lower limit of greater than 0.70 for Cronbach's Alpha, an additional test was run after eliminating two of the characteristics who are believed to not be consistent with the other characteristics that are able to be grouped.

The two characteristics removed include B6d and B6i from Table 48 above. Table 47 below gives the results after re-computing the test for reliability for the same but now amended variables.

Table 47: Reliability statistics for family and network influence – reduced to only 7 characteristics

Item – Total statistics – revised characteristics of the variable	Cronbach's Alpha if Item Deleted
B6a. An immediate family member is an entrepreneur	.587
B6b I was raised to be self-sufficient and t act without support from others	.665
B6c. My family actively supports my new ideas	.624
B6e. leveraging fiend or acquaintance is an entrepreneur	.601
B6f. I was raised to believe in the value of advice and support from others	.601
B6g. I prefer to discuss options with others before deciding	.619
B6h. I am aware of where and who to go to in order to ask for help	.628
Reliability Statistics	
Cronbach's Alpha	Number of items
.655	7

In Table 47 above given the characteristics of aptitude listed, the result is reliable as the Cronbach's Alpha is computed at 0.655. The descriptive statistics applicable following the re-coding [R] of the variable family and support network influence can now be seen below in Table 48.

Table 48: Re-coded [R] variable for family and network influence - descriptive result

Statistics		
Influence – family and networks		
N	Valid	170
	Missing	0
Mean		3.6008
Std. Deviation		.64093

In order to determine whether any of the variables stipulated above have a statistical relationship with the constructs created, an Independent Samples t-test (also known as the two-sample t-test) was computed. This test assists in comparing the means of the two groups created. If the p-value is found to be less than 0.05 then; this means that the independent variable in question does have a significant relationship with the factor at hand. The results of the testing, is below in Table 49.

Table 49: Independent Samples Test t-test for the variable family and network influence

	A1. Age	N	Mean	Std. Deviation
Influence – family and networks	X	113	3.6220	.61798
	Y	57	3.5589	.09112
Independent Samples Test				
Equal variances assumed				
			t-test for Equality of Means	
	t	df		Sig. (2-tailed)
Influence – family and networks	.605	168		.546

The result above in Table 49 shows that at a confidence level of 95 percent, the p-value is greater than the required lower limit of less than 0.05 and therefore the resulting difference between the means of the two groups, x and y is not significant.

5.7.1.7.   *Proposition 7:*

There are no significant differences in the creative or innovative behaviours and traits as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

Question B7 was utilised in the questionnaire to measure the creativity and innovative behaviours of individuals as drivers of entrepreneurial intent. Firstly, the measurement of the influence of creativity and innovation inclined behaviours (Question B7) were re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the creativity and innovation behavioural variable. The result of the reliability test for creativity and innovation behaviour is seen below in Table 50.

Table 50: Reliability statistics for creativity and innovation behaviour– 4 characteristics

Item – Total statistics	Cronbach's Alpha if Item Deleted
B7a. I have developed new products and/or services during my working career	.553
B7b. I have had ideas about making processes more efficient in my work	.508
B7c. I am comfortable to experiment with untried and untested methods	.487
B7d. I prefer to solve problems in my own way	.676
Reliability Statistics	
Cronbach's Alpha	Number of items
.632	4

Since the results above in Table 50, at 0.632, are close to the lower limit of greater than 0.70 for Cronbach's Alpha, an additional test was run after eliminating one of

the characteristics believed to not be consistent with the other characteristics that are able to be grouped.

The one characteristics removed is B7d from Table 50 above. Table 51 below gives the results after re-computing the test for reliability for the same but now amended variable.

Table 51: Reliability statistics for creativity and innovation behaviour – reduced to only 3 characteristics

Item – Total statistics – revised characteristics of the variable	Cronbach's Alpha if Item Deleted
B7a. I have developed new products and/or services during my working career	.640
B7b. I have had ideas about making processes more efficient in my work	.575
B7c. I am comfortable to experiment with untried and untested methods	.556
Reliability Statistics	
Cronbach's Alpha	Number of items
.676	3

In Table 51 above given the characteristics of creativity and innovation behaviour listed, the result is highly reliable as the Cronbach's Alpha is computed at 0.676. The descriptive statistics applicable following the re-coding [R] of the variable creativity and innovation behaviour can now be seen below in Table 52.

Table 52: Re-coded [R] variable for creativity and innovation behaviours - descriptive result

Statistics		
Creativity and innovation behaviour		
N	Valid	170
	Missing	0
Mean		3.8137
Std. Deviation		.85116

In order to determine whether any of the variables stipulated above have a statistical relationship with the constructs created, an Independent Samples t-test (also known as the two-sample *t*-test) was computed.

This test assists in comparing the means of the two groups created. If the p-value is found to be less than 0.05, then this means that the independent variable in question does have a significant relationship with the factor at hand. The results of the testing, is below in Table 53.

Table 53: Independent Samples Test t-test for the variable creativity and innovation behaviour

	A1. Age	N	Mean	Std. Deviation
Creativity and Innovative behaviour	X	113	3.9351	.84381
	Y	57	3.5731	.82075
Independent Samples Test				
Equal variances assumed				
		t-test for Equality of Means		
	t	df	Sig. (2-tailed)	
Creativity and innovative behaviour	2.665	168	.008	

The result above in Table 53 show that at a confidence level of 95 percent, the p-value is smaller than the required lower limit of less than 0.05 and therefore the resulting difference between the means of the two groups, X and Y is significant. The graphical representation of this is below in Figure 45.

Figure 44: T-test result for creativity and innovation behaviour
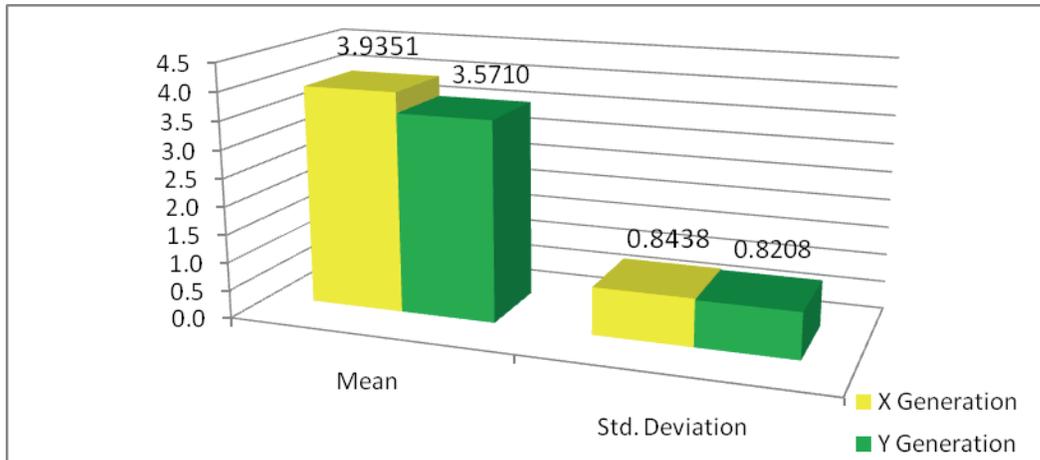
Question B8a-k was utilised in the questionnaire to measure the creative and innovative traits of an individual as drivers of entrepreneurial intent. Firstly, the measurement of the influence of creative and innovative traits (Question B8a-k) was re-coded[R] in an attempt to assess the degree of consistency between multiple measures of creative and innovative traits variables. The descriptive statistics result, subsequent to the re-coding [R] of the creative and innovative traits follows in Table 54.

Table 54: Re-coded [R] variable for family and network influence - descriptive result

Statistics		
Creative and innovative traits		
N	Valid	170
	Missing	0
Mean		6.50
Std. Deviation		2.004

In order to determine whether any of the variables stipulated above have a statistical relationship with the constructs created, an Independent Samples t-test (also known as the two-sample t-test) was computed.

This test assists in comparing the means of the two groups created. If the p-value is found to be less than 0.05 then this means that the independent variable in question does have a significant relationship with the factor at hand. The results of the testing, is below in Table 55.

Table 55: Independent Samples Test t-test for the variable creative and innovative traits

	A1. Age	N	Mean	Std. Deviation
Creative and innovative traits	X	113	6.48	2.075
	Y	57	6.54	1.871
Independent Samples Test				
Equal variances assumed				
			t-test for Equality of Means	
	t	df	Sig. (2-tailed)	
Creative and innovative traits	-.202	168	.840	

The result above in Table 55 shows that at a confidence level of 95 percent, the p-value is greater than the required lower limit of less than 0.05 and therefore the resulting difference between the means of the two groups, X and Y is not significant.

5.7.1.8.   Proposition 8:

There are no significant differences in the propensity to act in an entrepreneurial manner in terms of attitude towards risk-taking, and self-confidence factors as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

Question D1 was utilised in the questionnaire to measure the individual's propensity to act as a driver of entrepreneurial intent. Firstly, the measurement of propensity to act (question D1) was re-coded[R] in an attempt to assess the degree of consistency between multiple measures of the propensity to act variable. The result of the reliability test for propensity to act follows in Table 56 below.

Table 56: Reliability statistics for propensity to act – 11 characteristics

Item – Total statistics	Cronbach's Alpha if Item Deleted
D1a. Starting a business could be possible for me	.958
D1b. A career as an entrepreneur or business owner is attractive to me	.955
D1c. I believe I would be successful in starting a business	.958
D1d. I have no doubts about starting my own business	.963
D1e. If I had the opportunity and resources, I would love o start a business	.959
D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	.958
D1g. I am determined to create a business venture in the future	.957
D1h. If I tried to start a business, I believe that I would have a high chance of being successful	.960
D1i. Being a business owner or entrepreneur would give me great satisfaction	.957
D1j. My professional goal is to establish my own business	.956
D1k. Being an entrepreneur implies more advantages than disadvantages to me	.959
Reliability Statistics	
Cronbach's Alpha	Number of items
.962	11

In analysing the consistency with which the instrument is measuring the given performance or behaviour, in this case entrepreneurial aptitude, the diagnostic measure used, Cronbach's Alpha, is the reliability coefficient that assesses the consistency of the entire scale of characteristics tested under aptitude. The generally agreed upon lower limit for Cronbach's Alpha is 0.70.

In Table 56 above given the characteristics of aptitude listed, the result is highly reliable as the Cronbach's Alpha is computed at 0.962.

The descriptive statistics applicable following the re-coding [R] of the variable aptitude can now be seen below in Table 57.

Table 57: Re-coded [R] variable for propensity to act - descriptive result

Statistics		
Propensity to act		
N	Valid	170
	Missing	0
Mean		3.9348
Std. Deviation		.98540

In order to determine whether any of the variables stipulated above have a statistical relationship with the constructs created, an Independent Samples t-test (also known as the two-sample t-test) was computed. This test assists in comparing the means of the two groups created. If the p-value is found to be less than 0.05, then this means that the independent variable in question does have a significant relationship to the factor at hand (see table 58 below).

Table 58: Independent Samples Test t-test for the variable propensity to act

	A1. Age	N	Mean	Std. Deviation
Propensity to act	X	113	3.8986	.08708
	Y	57	4.0064	.14562
Independent Samples Test				
Equal variances assumed				
			t-test for Equality of Means	
	t	df	Sig. (2-tailed)	
Propensity to act	-.635	97.015	.527	

The result above in Table 58 shows that at a confidence level of 95 percent, the p-value is greater than the required lower limit of less than 0.05 and therefore the resulting difference between the means of the two groups, X and Y is not significant.

5.8 Conclusion

This chapter described the criteria utilised to classify the data collected in terms of the entrepreneurial intent of generation X and generation Y individuals being studied. The data collected was described under five broad themes including: the availability and access to resources, drivers for action, perceived feasibility and the resource advantage, propensity to act and association and support structures, using frequencies and descriptive statistics where relevant. The next chapter discusses the results using inferential statistical analysis.

CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

This study attempts to determine whether individuals from the X generation or Y generation have a greater propensity toward entrepreneurial intent in the South African context. The literature available, as per Chapter 2, on entrepreneurial intent is vast and varied while very little is available that reviews specifically entrepreneurial intent within the South African context. This study therefore will relate the findings back to the literature within the South African context where applicable.

6.2 Statistical tests defined

In order to perform the statistical analysis the data collected was captured into SPSS 14.0 Statistical Procedures programme following which non parametric tests were computed. Three types of tests were utilised for the analysis.

The Chi-square and Fisher's exact test were utilised to assist in the indication of differences between the X generation and Y generation groups regarding their attitudes towards the various characteristics and constructs of entrepreneurial intent tested in the questionnaire.

To determine whether any of the background variables specified have a statistical relationship with the constructs created the Independent Samples t-test otherwise known as the two sample t-test which compares the means of a variable for two groups, in this case, the X generation and the Y generation, were utilised. If the p-value is found to be less than 0.05, then the independent variable being tested can be understood to have a significant relationship with the constructs under analysis.

Finally, the third form of analysis used is reliability testing. This form of testing is utilised in order to assess the degree of consistency between multiple measurements of a variable. It It is a measurement concept that represents the consistency with which an instrument measures a given performance or behaviour.

A measurement instrument that is reliable will provide consistent results when a given individual is measured repeatedly under near-identical conditions. The diagnostic measure used is termed the reliability coefficient that assesses the consistency of the entire scale, namely Cronbach's Alpha, which is the most widely utilised measure. The generally agreed upon lower limit for Cronbach's Alpha is 0.70. A discussion of each proposition in detail follows.

6.3 Findings and interpretation by proposition

6.3.1. X generation respondent group profile

The X group generational cohort respondents can be summarised as a two third majority of the sample group with a stronger tendency towards males than females. These respondents, who emanate from predominantly two, three and four member households with the majority ethnic group being white. The respondents of this group are found to belong to the two upper most income brackets with a strong tendency towards household income exceeding R 51 201 per month. Paid employment is the dominant job status of these respondents.

It appears that this X group has an equal distribution of those who have owned a business before and those that have had entrepreneurial tuition and those that have not at a differential of approximately 60 percent to 40 percent for both constructs. Formal qualifications in the form of a degree or postgraduate qualifications dominate.

They also appear to be reliant on information technology (IT) and are highly computer literate however they do not seem to show a strong tendency toward having easy access to the technology 24/7/365. Despite this their access to the Internet is overwhelmingly strong as indicated by an exceptionally high access percentage.

6.3.2. Y generation respondent group profile

In summary, the Y group generational cohort respondents can be summarised as one third of the sample group with a stronger tendency towards females than males. They emanate from predominantly two to three member households with the majority ethnic group being white.

The respondents of this group are found to belong to the two upper most income brackets with a strong tendency towards household income exceeding R 51 201 per month. Paid employment is the dominant job status of these respondents.

It appears that the Y generational group has had less opportunity to have owned a business prior to this study but this could be a function of their specific age at this point in time. An equivalent distribution of those who have had entrepreneurial orientated tuition and those that have not is at a differential of 54.4 percent to 45.6 percent. Formal qualifications in the form of a degree or postgraduate qualifications again dominate for this generational cohort.

Reliance on information technology (IT) and high levels of computer literacy also dominate this group with 80.4 percent of respondents scored as either advanced or expert users. Accessibility to the Internet 24/7/365 is high for both groups.

6.3.3. Proposition 1:

There are no significant differences in formal education or entrepreneurial training that serve as a foundation for business understanding that underpins entrepreneurial intent between X generation and Y generation individuals.

6.3.3.1. Level of education

There are no significant differences in the X generation and Y generation groups of individuals in terms of the highest level of education. A Fisher's Exact test indicated a p value of 0.061 which is greater than 0.05. At a confidence level of 95 percent, the result of the Chi-square test in order to be statistically significant should be less than 0.05. This result is therefore not statistically significant and cannot prove that the education level of an individual from either generational group differs significantly in terms of its impact upon entrepreneurial intent.

Of all the X generation respondents, 92.9 percent indicated that they have achieved an education level of above a matric/grade 12. The Y generation respondents also registered a high percentage at 82.5 percent with higher education. Based on these results, it is apparent that respondents from both the X and Y generation value education as a foundational aspect that can contribute to the propensity towards entrepreneurial intent.

This finding is in agreement with the report by Herrington, Kew and Kew (2009) where in the 2008 Global Entrepreneurship Monitor (GEM) it was confirmed that those individuals with grade twelve and tertiary education (according to the educational system used in South Africa) are significantly more likely to own and manage a start-up business than those individuals lacking these educational levels.

Secondly further research by Acs and Virgill (2009) indicated that adults with tertiary level education were more than twice as likely to believe that they had the ability to start a business, compared to those without a secondary level education. Individuals with a secondary level of education were also more likely to believe they had the ability to start a business, but the difference was less significant.

Finally, the high valuation of education also aligns with Netshitenzhe and Chikane's (2006) research findings that firstly, a minimum of a grade twelve qualification increases one's capacity to pursue entrepreneurial activities; and secondly, that tertiary qualification education increases the durability of entrepreneurial activity.

6.3.3.2. *Attendance of entrepreneurial orientated training*

There are no significant differences in the X generation and Y generation groups of individuals in terms of attendance of entrepreneurial orientated training programmes.

A Fisher's Exact test indicated a *p* value of 0.870 which is greater than 0.05. At a confidence level of 95 percent, the result of the Chi-square test in order to be statistically significant should be less than 0.05. This result is therefore not statistically significant and cannot prove that the attendance of entrepreneurial orientated training by an individual from either generational group differs significantly in terms of its impact upon entrepreneurial intent.

Of all the X generation respondents, 56.6 percent indicated that they have attended some or other form of entrepreneurial orientated training. The Y generation respondents also registered a similar percentage of entrepreneurial orientated training at 54.4. Based on these results, it is apparent that just over half of the respondents from both the X and Y generation who took part in the survey believe that entrepreneurial orientated training increases the propensity toward entrepreneurial intent and adds value to the learning process.

This finding is in agreement with Antonites and van Vuuren (2005) where they established that entrepreneurial training acts as a facilitator of entrepreneurial activity, primarily being responsible for stimulating and inspiring new and innovative entrepreneurial activity and performance. Building on these findings, Audretsch, Bönte and Keilbach (2008) found that individuals undergoing training would have the opportunity to test their ideas and behaviours in a variety of practical situations, thereby enhancing their ability to analyse their own entrepreneurial ideas and to reformulate them to be more robust.

6.3.3.3. Acceptance or rejection of proposition 1

The findings of the above significance tests relating to educational level and entrepreneurial orientation training are summarised below:

- Level of education – *accepted*

- Attendance of individuals at entrepreneurial orientation training – *accepted*

All sub propositions are accepted, hence proposition 1 is accepted. Thus, there are no significant differences in formal education or entrepreneurial training that serve as a foundation for business understanding that underpins entrepreneurial intent between X generation and Y generation individuals.

6.3.4. Proposition 2:

There are no significant differences in exposure to information technology (IT) and the realisation of its importance in entrepreneurial activity in increasing the propensity towards entrepreneurial intent between X generation and Y generation individuals.

6.3.4.1. *Availability of information technology (IT)*

There is a significant difference in the availability of information technology (IT) between the respondents from the X generation group and the Y generation group. A Fisher's exact test indicated a *p* value of 0.000 which is less than 0.05. At a confidence level of 95 percent, the result of the Chi-square test in order to be statistically significant should be less than 0.05. This result is therefore statistically significant and proves that availability of information technology (IT) to an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

Of all the X generation respondents, only 23.0 percent indicated that the availability of information technology (IT) was important in an entrepreneurial venture while in comparison, the Y generation group indicated availability of IT importance at 52.6 percent.

Based on these results, it is apparent that the availability of information technology (IT) to the Y generational cohort individual as a driver of entrepreneurial intent is of higher significance to that of the X generational cohort individual. The findings further revealed that the Y generation group of individuals tended to be more reliant on information technology (IT) with a large proportion being rated as expert and advanced users.

Cennamo and Gardner (2008) found that the technology gap between subsequent generations remains one of the most challenging to bridge, and it continues to widen with the speed and frequency at which technological innovations currently occur. Subsequent generations tend to depend on technology to make them more productive.

Generation Y individuals were also confirmed by Loughlin and Barling (2001) to want total flexibility in how they operate in their work. Nicholas (2008) later found that this techno-literate group requires flexibility and freedom of choice while conducting multi-tasking, running multiple projects or programs concurrently, and working with a number of diverse people. Their preferred learning style is interactive or via multimedia presentations utilising advanced information technology (IT). (Loughlin & Barling, 2001).

6.3.4.2. Internet access 24/7/365

Despite the significant difference in information technology (IT) availability identified between individuals from the X generation group and the Y generation group above, there is no significant difference in the accessibility of the Internet 24/7/365 between the respondents. A Fisher's Exact test indicated a *p* value of 0.103 which is greater than 0.05. At a confidence level of 95 percent, the result of the Chi-square test in order to be statistically significant should be less than 0.05. This result is therefore not statistically significant and does not prove that availability of information technology (IT) to an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

Of all the X generation respondents, 92.9 percent indicated that 24/7/365 Internet accessibility is important to them in terms of entrepreneurial intent. In comparison, the Y generation group indicated that 24/7/365 Internet access was only critical to 84.2 percent of the respondents.

Based on these results, it is apparent that the accessibility to the Internet on a 24/7/365 basis is important as a driver of entrepreneurial intent even though the difference in their measured degree of importance is not significant.

According to Nicholas and Lewis (2008) Y generation individuals download podcasts and music, take pictures with their mobile phones, and text one another in their self created text messaging language as a daily routine.

In a paper published by Nicholas (2008) he established that the Y generation are accustomed to relating and interacting with others using collaborative technology and tend to be rather intolerant of those who are challenged by the swift pace of technology. He proposed that in essence, the Y generation especially relies on modern technology to fill in their experience and knowledge gaps, to problem solve, to interact, and to stay fully engaged in their work.

Building on his prior research, Nicholas (2009) established further that the primary role of technology in an entrepreneurial venture is to automate processes and to serve as a point of collection of business related information. It is also limitless when used as a marketing and promotional tool in terms of communicating a unique offering to a selected target market. As such, the importance of information technology and the Internet is growing in the context of business today.

6.3.4.3.   Acceptance or rejection of proposal 2

The findings of the above significance tests relating to availability of information technology (IT) and accessibility of the Internet 24/7/365 are summarised below:

- Availability of information technology (IT) – *accepted*

- Accessibility of the Internet 24/7/365 – *accepted*

All sub propositions are accepted, hence proposition 2 is accepted, therefore there are no significant differences in exposure to information technology (IT) and the realisation of its importance in entrepreneurial activity in increasing the propensity towards entrepreneurial intent between X generation and Y generation individuals.

6.3.5. Proposition 3:

There are no significant differences in the extent of entrepreneurial aptitude, as measured by ability, skill sets or problem solving ability as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.5.1. *Extent of entrepreneurial aptitude*

There is no significant difference in the extent of entrepreneurial aptitude as measured by ability, skill sets or problem solving ability between the respondents from the X generation group and the Y generation group. An Independent *t*-test (Sig. 2-tailed) indicated a *p* value of 0.104 which is greater than 0.05. At a confidence level of 95 percent, the result of the Independent *t*-test in order to be statistically significant should be less than 0.05.

This result is therefore not statistically significant and does not prove that the extent of entrepreneurial aptitude as measured by ability, skill sets or problem solving ability of an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

The X generation respondents indicated that of the criteria offered under aptitude that their order of preference was firstly toward the "likelihood that they would be able to solve problems" at 83.2 percent, then "the ease with which they can effectively communicate their ideas to others verbally and in writing" at 62.8 percent and finally, "the ease with which they creatively come up with new ideas an initiatives" at 58.4 percent scoring.

In contrast, the Y generation respondents indicated that of the criteria offered under aptitude that their order of preference was firstly also toward the "likelihood that they would be able to solve problems" at 59.7 percent, then "the ease with which they can effectively communicate their ideas to others verbally and in writing" at 49.1 percent and finally, the ease with which they "build a network of associates and professional contacts for future leveraging" at 45.7 percent scoring.

Based on these results, it is apparent that the extent of entrepreneurial aptitude as measured by ability, skill sets or problem solving ability is understood as important by both generational groups. Common themes emerge between the groups; that

of the criticality of communication and innovative thinking including the ability to recognise opportunities,) to elevate the propensity toward entrepreneurial intent of the individual.

The importance of an aptitude for communication is supported by a study by Kropp, Lindsay and Shoham (2006) where they confirm that it is important for an entrepreneurial individual to develop open communication channels with customers, suppliers and the team. In addition, the team's enhanced ability to communicate on a proficient level will enable it to obtain, and avoid squandering the necessary resources.

Goman (2006) further confirms that open communication, particularly among team members, is important so that they can work together on complex innovative tasks. According to his study, he found that the environment of entrepreneurship is often hostile and always dynamic. Good communication dramatically increases the need for good communication in order to leverage networks, support communities and employees.

The finding on the link between entrepreneurial capability or aptitude and the ability to recognise opportunities is supported by research conducted by Choi, Lèvesque and Shepherd (2008). According to them, opportunity recognition is understood as an awareness and comprehension of business information and identified

opportunity, expressed as careful evaluation, market inspiration, and insightful rapid judgment and decision-making.

The concept of entrepreneurial aptitude is further supported by In an earlier study by Ismail, Khalid, Othman, Jusoff, Abdul Rahman, N., and Mohammed (2009), where they found that perceived desirability or aptitude can be described as the degree to which an individual is aware of an attraction to a given behaviour or intent to become an entrepreneur.

6.3.5.2. Problem solving ability

Regarding the test for problem solving ability, both the X generation and Y generation respondent groups displayed the same order of preference to the criteria given. Their order of preference according to the results was firstly that both groups enjoy the challenge of difficult problems, secondly, both groups see problems as opportunities, thirdly, they agree that problems may slow things down but they will persevere to find a solution, and finally both groups usually seek the advice of others in problem solving.

In addition, it is notable that X generation individuals indicate a high tendency towards readily asking for advise when problem solving as indicated by a mean of

3.67 while they do note that problems tend to slow progress indicated by a mean of 3.88 (Appendix 1), however they do resolve issues with time.

Y generation results show a distinct one third-two third split where one third of the sample group are less willing to tackle problems, where some individuals shy away from problem solving in general as shown by their rankings of between 1 (low problem solving aptitude) and 2(Appendix 1). These findings also indicate that an ability to problem solve is an important component of the propensity toward entrepreneurial intent.

In earlier research by Duchesneau and Gartner (1990) they found that existing business experience is often considered to provide valuable knowledge that can help an entrepreneur to overcome the traditional problems, "liabilities of newness" and obstacles that a new venture faces. Mostly experience in gaining the correct information and effective decision-making can only be gained through trial and error while undertaking certain entrepreneurial activities.

These findings regarding problem solving ability are further supported by Choi, Lèvesque and Shepherd (2008) who concluded that the ability to combine different objects in different ways to produce new products and discover new purposes for products or better ways to solve customer problems is needed in innovative problem solving.

6.3.5.3. Acceptance or rejection of proposition 3

The findings of the above significance tests relating to the extent of entrepreneurial aptitude as measured by ability, skill sets or problem solving ability are summarised below:

- Extent of entrepreneurial aptitude – *accepted*

- Problem solving ability – *accepted*

All sub propositions are accepted, hence proposition 3 is accepted and consequently finds that there are no significant differences in the extent of entrepreneurial aptitude, as measured by ability, skill sets or problem solving ability as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.6. Proposition 4:

There are no significant differences in operational leadership orientation as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.6.1.   *Operational leadership orientation*

There is no significant difference in the operational leadership orientation between the respondents from the X generation group and the Y generation group. A Fisher's Exact test indicated a *p* value of 0.162 which is greater than 0.05. At a confidence level of 95 percent, the result of the Chi-square test in order to be statistically significant should be less than 0.05. This result is therefore not statistically significant and does not prove that operational leadership orientation from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

Of the characteristics tested for operational leadership orientation, the least favoured characteristic of leadership as indicated by the X group is toughness and aggressiveness at a mean of 1.48. The majority of respondents at 72.9 percent also indicated that this leadership characteristic is "least like me". Imagination and creativity were also rated mostly between "slightly like me" at 38.1 percent and "most like me" at 49.6 percent for this group.

Care and support for others also featured in the results for the X generation group at 53.1 percent. The X generation also scores higher on the leadership characteristics for clear and logical thinking ability and toughness and

aggressiveness than the Y generation group at 32.7 and 13.3 percent for the X generation group compared with 8.8 and 8.8 percent for the Y generation group.

A stark contrast is seen when comparing the results of the Y generation group in that their support of creativity and imagination and the caring and support of others is scored much lower than the X group at 33.3 and 26.4 percent respectively. Instead, for the Y generation group, charisma is indicated as the strongest trait with a mean of 2.58 however, the majority of individuals at 66.7 percent did indicate that the characteristic for charisma was ranked at 66.7 percent as "slightly like me" and not "most like me".

Perseverance in the face of conflict is the least popular with the Y group with a "least like me" ranking of 86 percent marking that analysis of situations being their lowest focus area. There appears to be a slight focus on the "attention to detail" characteristic but this is still low with a mean of 2.09.

Based on these results, it is apparent that the X generation group appears to be more imaginative and creative in nature utilising clear and logical thinking and with a caring and supportive disposition towards the people around them when operating from a leadership perspective. The Y generation group however also tends to be imaginative and creative but to a far lesser extent rather relying on caring and support of others when operating from a leadership perspective.

These leadership perspectives are supported by the research conducted by Townsend, Busenitz and Arthurs (2010) where they conclude that the survival of small medium enterprises (SMEs) in the turbulent changing markets of today is largely dependent on the ability of the owner or manager's ability to engage in environmental scanning activities for the purpose of understanding the behaviour and influence of trends in the market and the people around them.

Herrington, Kew and Kew (2010) in the GEM Report 2009 also claim; citing Argenti's (1976) argument, that most problems affecting SME's, relate to the lack of managerial or leadership capacity of the individual owner or manager of the SME business itself. Although it is often argued, far beyond the context of developing countries that entrepreneurs, because they appear ignorant or untrained at the adoption of more efficient production and management techniques, Crane and Crane (2007) believe that these individuals would best improve their businesses through further training and skills development, particularly in the areas of managerial leadership training.

Gorman (2006) reiterates that a key leadership attribute is the ability to facilitate open communication, particularly among team members, in order that they can work together on complex innovative tasks. In closing, Gill (2009) generalises that many (but not all) of the people skills identified as being involved in

entrepreneurship are consistent with those which are often recognised as leadership skills.

6.3.6.2. *Acceptance or rejection of proposal 4*

The findings of the above significance tests relating to operational leadership orientation are summarised below:

- Operational leadership orientation – *accepted*

With the sub proposition above being accepted, hence proposition 4 is accepted. There are no significant differences in operational leadership orientation as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.7. Proposition 5:

There are no significant differences in short- or long-term visionary perspective as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

As discussed in the literature review in Chapter 2, vision is an important characteristic of the entrepreneur and is one of the necessary components of

entrepreneurial intent that is being tested here. In this test, long-term and short-term vision, were tested separately.

6.3.7.1.   Short-term vision

With the results of the short-term vision testing being found unreliable (Cronbach's Alpha must be greater than 0.7 to ensure reliability) following reliability testing where the Cronbach's Alpha was found to be 0.47, the researcher decided instead to focus on long-term vision as this has an influence on the longer-term prospects of an entrepreneurial venture initiation especially in terms of measuring the propensity toward entrepreneurial intent of an individual. This is further supported by the majority of the X generation group marking that they believe the statements under short-term vision to be ranked at a 4 or 5 with up to 75 percent of the respondents marking towards the non visionary end of the scale.

Insufficient clarification of how the questions should have been answered may have contributed to this inaccurate result but this is further discussed under research limitations in Chapter 4.

6.3.7.2. Long-term vision

There is no significant difference in the short- or long-term visionary perspective between the respondents from the X generation group and the Y generation group. An Independent *t*-test (Sig. 2-tailed) indicated a *p* value of 0.111 which is greater than 0.05. At a confidence level of 95 percent, the result of the Independent *t*-test in order to be statistically significant should be less than 0.05.

This result is therefore not statistically significant and does not prove that short- or long-term visionary perspective of an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

The results show that for both; the X generation and Y generation group of respondents, all three characteristics of long-term vision measured, including ideas and dreams of the future, knowing what their life purpose is and planning long-term to achieve their goals measured lie in the upper quartile. In particular, the Y generation group scores considerably higher than the X generation group on all three characteristics which indicates their higher propensity towards visionary behaviour. Based on these results, it is apparent that a visionary perspective and in particular that of the long-term nature is important as a driver of entrepreneurial intent.

Acs (2008) reiterates in his research that this line of thought regarding the criticality of vision as a basis of the emergence of an idea overlooks one key element; that is that many people already have great ideas and a vision, but they have neither the will nor the confidence to pursue them.

In order to address this, research by McGuire and Hutchings (2007) established that in order to compliment the entrepreneurial vision of the individual, the leadership skills and technical skills would need to be incorporated to achieve the vision through the leveraging of willingness of the individual.

Xiao, Marino and Zhuang (2010) more recently concluded that in terms of entrepreneurial vision, people need to be encouraged to look at things around them in a more critical way, observing events and incidents more closely and questioning how things might be done differently and thereby improved for greater commercial, social or aesthetic benefit.

Finally, Choi, Lèvesque and Shepherd (2008) confirmed that what attracts an individual towards developing a new vision can be the intent to initiate an entrepreneurial venture and according to Acs (2008) therefore, every effort is therefore made by that individual to keep the actionable state of the vision as real and as close to that vision and end goal as conceived throughout the process.

6.3.7.3. Acceptance or rejection of proposition 5

The findings of the above significance tests relating to the short- and long- term visionary perspective of an individual are summarised below:

- Short-term visionary perspective – *abandoned* due to reasons of unreliability

- Long-term visionary perspective – *accepted*

With the valid sub proposition above being accepted, hence proposition 5 is accepted, stating that there are no significant differences in short- or long-term visionary perspective as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.8. Proposition 6:

There are no significant differences in influences from family or support organisations or networks regarding motivation and decision-making as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.8.1. Influence of the family on the individual

There is a no significant difference in the influence of the family on the individual regarding motivation and decision-making between the respondents from the X

generation group and the Y generation group. An Independent *t*-test (sig. 2-tailed) indicated a *p* value of 0.546 which is greater than 0.05. At a confidence level of 95 percent, the result of the Independent *t*-test in order to be statistically significant should be less than 0.05.

This result is therefore not statistically significant and does not prove that the influence of the family regarding motivation and decision-making of an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

In terms of the support a family and organisational network structure can give to an individual who has the propensity towards entrepreneurial intent, the emotional and motivational support can be critical to the venture getting off the ground.

In comparing the results for the influence of family between X generation and Y generation respondents, The X generation respondents value the existence of an acquaintance who is an entrepreneur as their top family influence factor at 64.6 percent. In contrast, the Y generation respondents show that their top family influential factor is that their value system ensures that they rely and value the advice and support from others at 70.1 percent.

The X and Y generation groups tend to agree that the second most influential family support factor is that their family supports their new ideas at 63.7 and 63.2 percent respectively. The final key finding is that X generation respondents are raised to be self-sufficient and to act without support from others at 62.8 percent while in comparison, the Y generation respondents prefer to discuss options with others before making a decision at 64.1 percent.

Based on these results, it is apparent that the influence of family support is important to both generational cohorts however, it appears that the Y generation requires a more collaborative support approach while the X generation individual tends to prefer their independence within a family support structure.

These findings are supported by Begley and Boyd (1986) established that the family's support also provides a psychological boost in terms of the individual's self-belief and confidence levels that are required to make entrepreneurial ventures successful. More recent research by Dries, Pepermans and De Kerpel (2008) further concludes that the support of family is important to an individual who has the intent to embark on an entrepreneurial venture. This is especially important when managing the risk and associated stresses starting a new business.

6.3.8.2. Influence of support organisations and networks on the individual

There is no significant difference in the influence of support organisations and networks on the individual regarding motivation and decision-making between the respondents from the X generation group and the Y generation group. An Independent *t*-test (sig. 2-tailed) indicated a *p* value of 0.832 which is greater than 0.05. At a confidence level of 95 percent, the result of the Independent *t*-test in order to be statistically significant should be less than 0.05.

This result is therefore not statistically significant and does not prove that the influence of support organisations and networks on the individual regarding motivation and decision-making of an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

In comparing the results for the influence of support organisations and networks between X generation and Y generation respondents, both generation groups value the support network and functionality of the Internet, blogging, and personal websites highly with 69 percent and 57.9 percent respectively. The X generation group of respondents however value formal coaching and mentoring programmes as a valuable support network particularly in terms of technical aid during business start-up with 52.2 percent of respondents in strong agreement.

The Y generation group of respondents however have a higher tendency to value Web 2.0 technology and social networking for example Facebook, Twitter, LinkedIn, MySpace, Plaxo and others with a 49.1 percent of respondents in strong agreement. Based on these results, it is apparent that the influence of support organisations and networks are important as drivers of entrepreneurial intent, particularly in relation to the propensity to act.

In research by Burt (1997) social and organisational networks were found to provide many of the resources that new start-ups seek; often more immediately and effectively than government-sponsored programs. Since social networks are usually an outgrowth of long-standing human social relationships they are a significant portion of an entrepreneur's social capital and also serve to enhance the return on human capital such as intellect and education.

Burt (1997) further supports that the importance of these network ties is underscored by findings that in many countries human and social capital have been shown to impact small business performance. These networks are particularly significant in the early stages of a start-up where internal resources are frequently very limited.

The importance of Web 2.0 technology to the Y generation response group is supported by research by van Delft, Gorter and Nijkamp (2000) where social networks were shown to provide competitive advantage for ethnic entrepreneurs in all these critical resource areas. Kloosterman, Van der Leaun and Rath (1998) also concluded that support networks facilitate mutual trust within the network; hence, members of the group are more willing to do business with each other and to exchange critical information.

Finally, Jenssen and Koenig (2002) concluded that the notion that social networks give access to resources that entrepreneurs need and suggest that entrepreneurs seek resources through their social networks regardless as to whether the ties are weak (acquaintances) or strong (close friends) is significant.

6.3.8.3. Acceptance or rejection of proposition 6

The findings of the above significance tests relating to the influence of support organisations and networks are summarised below:

- Influence of family influence on the individual – *accepted*

- Influence of support organisations and networks on the individual – *accepted*

All sub propositions are accepted, hence proposition 6 is accepted, there are no significant differences in influences from family or support organisations or

networks regarding motivation and decision-making as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.9. Proposition 7:

There are no significant differences in the creative or innovative behaviours as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.9.1. Creativity and innovation

An independent t-test was concluded to establish statistical significance. Testing revealed that there is a significant difference in the creative and innovative behaviours between the respondents from the X generation group and the Y generation group.

An Independent t-test (sig. 2-tailed) indicated a p value of 0.008 which is less than 0.05. At a confidence level of 95 percent, the result of the Independent t-test in order, to be statistically significant should be less than 0.05. This result is therefore statistically significant and proves that the creative and innovative behaviours of an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

The X generation respondents indicated that of the criteria offered under creativity and innovation that their order of preference was firstly a strong tendency toward "I have had ideas about making processes more efficient in my work" at 90.2 percent, then an equal scoring for "I prefer to develop my own solutions" and" I am comfortable to experiment with untried and untested methods" at 71.7 percent each.

In contrast, the Y generation respondents also indicated that of the criteria offered under creativity and innovation that their order of preference was firstly a strong tendency toward "I have had ideas about making processes more efficient in my work" at 82.4 percent, followed by "I prefer to develop my own solutions" at 73.7 percent (see Figure 46 below).

Figure 45: Creativity and innovation comparative result by generational cohort
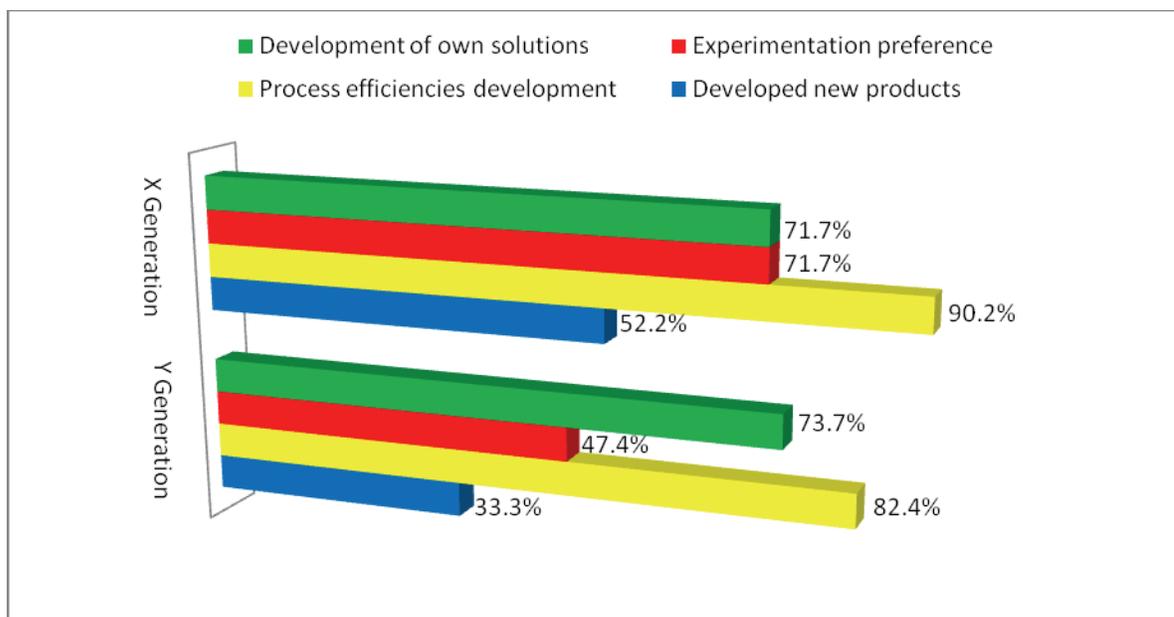
Based on these results, it is apparent that the creativity and innovative behaviour is highest within the X generation group where the reengineering of process efficiencies, development of own solutions and experimentation were scored highest. In comparison the results of the Y generation group show similar interest in the reengineering of processes and the development of own solutions however they tend to prefer to avoid experimentation.

Alvarez and Barney (2007) support the findings above in that they established that innovation and creativity have also been identified as critical resource advantages especially regarding entrepreneurship. The absence of resources should not be a finite limitation to the feasibility of embarking on an entrepreneurial venture but rather a challenge in terms of forcing the individual to think beyond the obvious to create value by some other means.

Recent studies by Xiao, Marino and Zhuang (2010) suggest that environmental uncertainty has an important bearing on the shaping and the embedding of exploratory entrepreneurial learning and that the scope of entrepreneurial learning will then impact entrepreneurs' innovation propensity. These abilities are developed from childhood and are established through exposure to knowledge, experiences, learning and environment.

Kodithuwakkua and Rosa (2002) also found that the existing and future workplace will continue to be one of constant change, where innovation and ability to adapt, seize new opportunities, and upgrade and develop new skills will become more and more important.

From the current working generations according to Blackman (2009), organizational managers and leaders will expect to identify individuals who understand human behaviour, can engender co-operation, have skills that can be transferred to others, have innovation and creativity at their core and can bring out the best in workers to continue their role into the future..

Sarasvathy (2001) in her research supports that the primary task of the entrepreneur is thus to identify new combinations of the factors and resources available, in order to profit from them. The entrepreneur is not necessarily the one who specifically invents new combinations of resources at his disposal but the one who identifies how these newly found combinations can be applied in a sustainable business production context.

It is therefore plausible to integrate creativity and innovation where innovation is in essence applied creativity in the business context as concluded by Wu, Cheng, Ip and McBride-Chang (2005) where they established that the harnessing of creativity leads to innovation.

6.3.9.2.   Acceptance or rejection of proposition 7

The findings of the above significance tests relating to creative and innovative behaviour of the individual are summarised below:

▶   Creativity and innovation – *accepted*

All sub propositions are accepted, hence proposition 7 is accepted: there are no significant differences in the creative or innovative behaviours as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.10. Proposition 8:

There are no significant differences in the propensity to act in an entrepreneurial manner in terms of attitude towards risk-taking, and self-confidence factors as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.3.10.1.   Attitude towards risk-taking

An independent *t*-test was concluded to establish statistical significance. Testing revealed that there is no significant difference in the attitude towards risk-taking between the respondents from the X generation group and the Y generation group.

An Independent *t*-test (sig. 2-tailed) indicated a *p* value of 0.527 which is greater than 0.05. At a confidence level of 95 percent, the result of the Independent *t*-test in order, to be statistically significant should be less than 0.05.

This result is therefore not statistically significant and does not prove that the attitude towards risk-taking of an individual from either generational group differs significantly in terms of enabling the propensity towards entrepreneurial intent.

The X generation respondents indicated that of the criteria offered under attitude towards risk-taking that their order of preference was firstly a strong tendency toward; "If I had the opportunity and resources, I would love to start a business" at 84.0 percent, secondly "A career as an entrepreneur or business owner is attractive to me" at 77.8 percent and finally, "Starting a business could be possible for me" at 77.0 percent.

The Y generation respondents indicated that of the criteria offered under attitude towards risk-taking that their order of preference was firstly a strong tendency toward "If I had the opportunity and resources, I would love to start a business" at 84.3 percent, secondly "Starting a business could be possible for me" at 73.7 percent and finally, "A career as an entrepreneur or business owner is attractive to me" at 70.2 percent.

Based on these results, it is apparent that the attitude towards risk-taking is similar between the X generation and Y generation respondents with both groups being risk averse when asked whether they would start a business having the necessary opportunity and resources.

It is possible that the degree of positive attitude towards risk-taking may decline once the complex subject of entrepreneurial risk-taking especially in terms of the propensity to initiate a business venture is explored (discussed further under limitations in Chapter 4).

The findings regarding the attitude of X and Y generation respondents is supported by research by Wong, Gardiner, Lang and Coulon (2008) where they concluded that various traits, such as loyalty to organizations, creativity and risk aversion vary across the generations. Crane and Crane (2007) in the previous year found that while environmental analysis can potentially increase the possible success of a new business venture it can also highlight a myriad of risks and pitfalls which might discourage an individual from initiating an entrepreneurial venture altogether.

Although the concept of risk-taking tends to have negative connotations, causing some individuals to become risk averse to action, Townsend, Busenitz and Arthurs (2010) found that some individuals may perceive the risk of missing an opportunity more critical thus prompting urgent action on their part.

In essence, uncertainty and risk-taking stems from the inability to accurately predict market demand, changes in key segments of the external environment (that is; technological, socio-cultural, economic trends, etcetera), or competitor actions according to Webb, Kistruck, Ireland, and Ketchen Jr. (2010). Antonites and van Vuuren (2005) therefore conclude that subsequent action by an individual in initiating an entrepreneurial venture should include the willingness to assume calculated degrees of risk-taking.

6.3.10.2. Attitude towards self-confidence

The X generation respondents indicated that of the criteria offered under attitude towards self-confidence that their order of preference was firstly a strong tendency toward "Being a business owner or an entrepreneur would give me great satisfaction" at 81.4 percent, secondly "If I tried to start a business, I believe that I would have a high chance of being successful" at 76.1 percent and finally, "Starting a business could be possible for me" also at 76.1 percent.

The Y generation respondents indicated that of the criteria offered under attitude towards risk-taking that their order of preference was firstly a tendency toward "If I tried to start a business, I believe that I would have a high chance of being successful" at 75.5 percent, secondly "Being a business owner or an entrepreneur

would give me great satisfaction" at 71.9 percent and finally, "A career as an entrepreneur or business owner is attractive to me" at 70.2 percent.

Based on these results, it is apparent that the attitude towards self-confidence of the individual is slightly higher in the X generation individual that the Y generation individual. This may be as a result of maturity and increased experience gained in business related knowledge due to the longer time period that the X generation individuals have had commercial exposure than compared to that of the Y generation individuals. Despite this difference between the generational cohorts of this study, the fact remains that self-confidence is a contributing factor towards the propensity of an individual in terms of entrepreneurial intent.

The concept of self-confidence improving with maturity of the individual over time is supported by research conducted by Wu, Cheng, Ip, and McBride-Chang (2005). Further to this Begley and Boyd (1986) in an earlier study established the criticality of the supporting role of the family in that their actions towards the entrepreneurial individual provides a psychological boost in terms of the their self-belief and confidence levels that are required to make entrepreneurial ventures successful.

In addition, Mair and Marti (2009) also found that, strong communication skills, greater self-confidence and resourcefulness play a crucial role in the success of entrepreneurial activity, especially during the initiation and start-up phases.

Countless studies have been conducted regarding the profile of the entrepreneur. As such, according to a study by Beugelsdijk and Noorderhaven (2005) the profiles of entrepreneurs have been proven to include factors such as optimism and other entrepreneurial characteristics including self confidence, high expectations, and the willingness to accept and take appropriate risks.

6.3.10.3. Acceptance or rejection of proposition 8

The findings of the above significance tests relating to the attitude towards risk-taking and self-confidence of the individual are summarised below:

- Attitude towards risk-taking – *accepted*

- Attitude towards self-confidence - *accepted*

All sub propositions are accepted, hence proposition 8 is accepted: there are no significant differences in the attitude towards risk-taking or self-confidence as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.

6.4 Conclusion

This chapter presented the main findings of the empirical study. During the course of this chapter relevant information was obtained and explained through the utilisation of inferential statistics. The following chapter will revisit the objectives, discuss the findings, make final conclusions and make suggestions for further research.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

The concept of entrepreneurial intent has been widely researched however there is limited research on this concept within the South African context. The fostering and encouragement of entrepreneurial activity is an ongoing challenge in South Africa in the quest to improve our competitive world ranking and economic prosperity for all.

This study explores the propensity towards entrepreneurial intent of the X and Y generational cohorts in South Africa in relation to the aspects identified as pertinent to entrepreneurial intent through a literature review. The objective of this study in attempting to identify which generational cohort shows greater propensity towards entrepreneurial intent is to derive insights into what aspects of their personalities, influences; surrounding environment and support structures have possibly caused this differential behaviour.

Chapter 6 presents some findings on how individuals from the X and Y generational cohort compare in terms of entrepreneurial intent.

Recommendations for individuals responsible for delivering entrepreneurial orientated tuition in training institutes, educational institutions and in mentoring and coaching roles within South Africa are presented in the hope of stimulating entrepreneurial activity within South Africa so that their support, nurturing and mentoring can guide and help to contribute to a sustainable increase in entrepreneurial venture creation into the future.

The research question attempts to identify which of the two, the X generation individual or the Y generation individual, if either, has a higher propensity towards entrepreneurial intent. To date, insufficient research has been conducted on the influence of the socio-political circumstances in South Africa over the last few decades with specific reference to entrepreneurship. It is however clear that in order to compete at a global scale, South Africa needs to urgently address entrepreneurial activity within its borders.

7.2   Overview of the literature

This research builds on existing literature on entrepreneurial intent, more specifically focusing its attention within the South African context. Entrepreneurship development and generational theory originate across many disciplines. As such a multiplicity of literature sources were consulted in order to gain an understanding of

the relevant definitions, concepts and constructs required to effectively relate the objectives of this study.

The literature review begins with defining an entrepreneur from three contrasting points of view; an economist (Baker & Nelson, 2005), a psychologist (Crane & Crane, 2007), and a sociologist (Acs & Virgill, 2009). Entrepreneurship has been defined many times over the years. A summary of these definitions, including that of Schumpeter (1934) through to Haber and Reichel (2007) has been included. In order to complete the discussion on entrepreneurship as a concept, the entrepreneurial process is presented in terms of opportunity awareness, opportunity recognition and opportunity exploitation, with the contrast between entrepreneurial orientation (Wang, 2008) and entrepreneurial intent (Gird & Bagraim, 2008) being clarified.

In order to link the title of this research report, the literature review continues to include a discussion on generations and generational cohort theory. The precise demarcation of each generation is contentious. The literature therefore offers various defining factors that differentiate the different cohorts and as such, the X generation and Y generation individuals under review in this study are defined as belonging to the X generation, born from 1965–1980 (Severt *et. al.*, 2009; Dries *et. al.,* 2008; Eisner 2005), and the Y generation or Millennials, born after 1981 but before 1989 (Simoneaux & Stroud, 2009).

The next section of the literature review presents the relationship between entrepreneurship and economic prosperity and in particular draws attention to the South African economic situation. The Global Entrepreneurship Monitor 2009 – GEM Report (Herrington, Kew, & Kew, 2010) is utilised as a foundation for understanding South Africa's current position on the competitive index in terms of entrepreneurial activity. Research by Scheepers, Solomon, and de Vries (2009) also serves to integrate the idiosyncracies of entrepreneurial activity from a South African viewpoint including socio-economic factors, the state of education, training and skills development. Aspects of government intervention and support is also covered (Netshitenzhe & Chikane, 2006).

Finally, common themes and aspects pertinent to the study of entrepreneurial intent are drawn together into several constructs. These are then tested in order to assimilate findings that will answer the research question of which generational cohort; that of X generation or Y generation, as defined has the greater propensity towards entrepreneurial intent in South Africa.

7.3 Research objectives revisited

This study sought to answer the following research question:

Of individuals from the X Generation and the Y Generation in South Africa, is there a statistically significant difference in terms of their propensity towards entrepreneurial intent?

The aim of this research was to explore the degree to which the sample group could be compared in terms of their degree of propensity towards entrepreneurial intent. The two generational cohorts were compared in terms of the following aspects of entrepreneurial intent:

- Education and entrepreneurial training

- Exposure to and interaction with information technology (IT)

- Entrepreneurial aptitude as measured by ability, skill sets and problem solving ability

- Operational leadership orientation

- Long- or short-term visionary perspective

- Influence of family and organisational support networks

- Creative or innovative behaviours

- Attitude towards risk-taking and self-confidence

7.4 Findings summarised

The research concluded that there is no statistically significant difference between the propensity toward entrepreneurial intent between X generation and Y generation individuals within the South African context. Having established this, some interesting findings were identified. These are summarised below:

- *Education and entrepreneurial training:* both the X and Y generational groups value education and particularly that of tertiary education highly, however, only approximately 50 percent of respondents from both groups showed that they valued attending entrepreneurial related tuition.

- *Exposure to technology:* the availability of information technology (IT) appears to be more important to the Y generational cohort than to the X generation however, access to the Internet is strongly supported by both groups.

- *Problem solving:* the X generational cohort appears to have a greater self-confidence in their ability to problem solve and leverage the advice from others in finding solutions. They also tend to communicate and utilise innovation in problem solving. In contrast, the Y generational cohort tend to work more independently preferring to shy away from problem solving or by waiting for a solution to come from someone else.

- *Leadership orientation:* the X generation tend to be innovative in their approach to leadership and rely on logical and clear thinking in their leadership decision-making. The Y generation however, prefers a collaborative style of leadership based on a charismatic style with a strong emphasis on caring and support of others.

- *Visionary perspective:* the Y generation in terms of long-term visionary perspective tends to score higher on all three characteristics tested including: having long-term ideas and dreams of what they wish to achieve, planning long-term to achieve their objectives and knowing what they want to achieve in life than the X generation.

- *Influence of family and organisational support networks:* the support of family and their associated influence appears to be strong for both generational groups. The X generation tends to rely more on their belief system which has enabled them to act independently and to look towards figures of authority and role models for guidance, while the Y generation individuals prefer a team-based collaborative approach where family and support networks are integrated into their daily lives.

- *Creativity and innovation:* the re-engineering of processes and procedures to enable improved productivity efficiencies seem to be priorities for both X and Y generation individuals. The X generation however is also more

inclined to experiment while both generations tend to prefer finding their own innovative methods of achieving the required objectives.

- *Attitude towards risk-taking and self-confidence:* the X generation appears to be less risk adverse and self-confident that the Y generation however, this could be attributable to their maturity and longer period of commercial experience.

7.5   Contribution of this study

This study contributes to the existing literature on entrepreneurial intent and in particular to that within the South African context, with special reference to the following interest areas:

- *Generational Theory studies*: Aspects of similarity and difference are highlighted in terms of the two generational cohorts under study – X and Y generation within the South African context.

- *Entrepreneurial education and tuition*: The findings contribute to the existing understanding of what drives entrepreneurial intent in South Africans between the ages of 20 and 45 in order to assist stakeholders within educational and entrepreneurship tuition roles to align their current

entrepreneurial teaching methods and foundations to better suit the needs of entrepreneurial individuals today.

- *Scarcity of resources*: The importance of the allocation of resources including financial (start-up funding and sustainability), social (influence of family and value systems, organisational network support, and human capital) and technical (the role of information technology, creativity and innovation and skills) in initiating an entrepreneurial venture is presented in terms of whether they either drive or inhibit the propensity toward entrepreneurial intent.

7.6   Recommendations for future research

The following are recommendations for further research:

- Draw comparisons across ethnic groups across South Africa in terms of their propensity towards entrepreneurial intent.

- Narrow the generational cohort down to those born before 1994, when South Africa achieved its new democracy and those born after 1994, and test the differences in entrepreneurial intent between the two.

- Compare entrepreneurial intent between South Africa and another Sub-Saharan or developing nation in terms of its contribution to economic growth and prosperity.

- Compare entrepreneurship between the formal and informal sectors within South Africa and compare their economic and social contribution to society.

7.7   Limitations of the study

The following limitations were identified during the course of this study:

- An unintended limitation was placed on the total number of respondents possible for this study due to the questionnaire being electronic and therefore not accessible to all individuals within South Africa within the generational cohorts under review.

- A criticism of the questionnaire design was that it was too long or complex in places which may have caused the respondents to answer haphazardly.

- Willing participation in research is not in the culture of most South Africans, especially those classified as non-white in ethnicity.

- The instruction regarding the question on short-term vision was not clarified sufficiently which led to confusion on the part of respondents when answering positively or negatively.

- A provincial measure was excluded which could have identified region specific trends.

- The sample was small at 170 which is not sufficient for the result to be accepted as representative of the population of South Africa.

7.8 Conclusion

Entrepreneurs are known to create economic growth and prosperity in their communities through the initiation of business ventures. As such, this study was undertaken to explore the similarities and differences; between the X generation and Y generation individuals currently participating in the South African economy in order to try to identify what makes a specific generation more inclined towards entrepreneurial intent.

The resulting entrepreneurial ventures subsequently contribute to economic growth and wealth creation through the outsourcing of non-core activities and operations

to smaller enterprises, and funding and networking with emerging ventures, both on a national and/or local level (Low, Henderson, & Weiler, 2005).

At national level, entrepreneurial activity contributes directly to increasing Gross Domestic Product (GDP), while on a localised level, entrepreneurs create new jobs, increase incomes and wealth and serve to connect the local community in which they operate to the broader economy. These entrepreneurs also serve as role models with their actions, inspiring other potential entrepreneurs into initiating innovation and change (Scheepers, Solomon, & de Vries, 2009).

The findings reveal that there appears to be no significant difference in propensity toward entrepreneurial intent between the X generation and Y generation individuals within the South African context, however, it is interesting to note that there do appear to be some differences in terms of their approach to education, technology, problem solving, leadership orientation, visionary perspective, family and organisational support networks, creativity and innovation and their attitude towards risk-taking and the self-confidence of the individual.

The objective of this study has thus been achieved in that the findings open the way forward for those interested in embarking on an entrepreneurial venture, those guiding future entrepreneurs through training and mentorship and those who are supporting future entrepreneurs financially to better understand the drivers of

entrepreneurial intent which, as per the findings of this study, do not differ significantly across different generations in South Africa.

In focusing the existing entrepreneurial knowledge sharing structures available it is hoped that this will in turn stimulate an upsurge in the propensity towards entrepreneurial intent among the X and Y generations and indeed those of the generations of the future, which will ultimately lead to increased economic prosperity and improved competitiveness of the country as a whole.

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There is nothing more important, and nothing that works faster than for you to cast off your own limitations, than for you to begin dreaming and fantasizing about the wonderful things that you can become, have and do.

Brian Tracy – American Business trainer and motivational speaker

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APPENDICES

Descriptive Statistical Tests

QUESTIONNAIRE SECTION A: Demographics

A2. Gender			Frequency	Percent	Valid Percent	Cumulative Percent
A1. Age						
X	Valid	F	50	44.2	44.2	44.2
		M	63	55.8	55.8	100.0
		Total	113	100.0	100.0	
Y	Valid	F	35	61.4	61.4	61.4
		M	22	38.6	38.6	100.0
		Total	57	100.0	100.0	

A3. Nationality			Frequency	Percent	Valid Percent	Cumulative Percent
A1. Age						
X	Valid	South African	113	100.0	100.0	100.0
Y	Valid	South African	57	100.0	100.0	100.0

Statistics								
A4. # People @ Home								
	N							
A1. Age	Valid	Missing	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
X	113	0	3.27	3.00	2	1.377	.305	-.779
Y	57	0	3.21	3.00	2	1.485	.540	-.810

A4. # People @ Home					
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	1	8	7.1	7.1	7.1
		2	32	28.3	28.3	35.4
		3	25	22.1	22.1	57.5
		4	25	22.1	22.1	79.6
		5	15	13.3	13.3	92.9
		6	8	7.1	7.1	100.0
		Total	113	100.0	100.0	
Y	Valid	1	4	7.0	7.0	7.0
		2	20	35.1	35.1	42.1
		3	12	21.1	21.1	63.2
		4	8	14.0	14.0	77.2
		5	7	12.3	12.3	89.5
		6	6	10.5	10.5	100.0
		Total	57	100.0	100.0	

A5. Monthly Gross Income						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	from R 3 201 to R 6 400	3	2.7	2.7	2.7
		from R 6 401 to R 12 800	3	2.7	2.7	5.3
		from R 12 800 to R 25 600	9	8.0	8.0	13.3
		from R 25 601 to R 51 200	31	27.4	27.4	40.7
		from R 51 200 and above	67	59.3	59.3	100.0
		Total	113	100.0	100.0	
Y	Valid	from R 1 601 to R 3 200	1	1.8	1.8	1.8
		from R 3 201 to R 6 400	3	5.3	5.3	7.0
		from R 6 401 to R 12 800	4	7.0	7.0	14.0
		from R 12 800 to R 25 600	11	19.3	19.3	33.3
		from R 25 601 to R 51 200	19	33.3	33.3	66.7
		from R 51 200 and above	19	33.3	33.3	100.0

A6. Ethnicity						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Black	14	12.4	12.4	12.4
		Coloured	4	3.5	3.5	15.9
		Indian or Asian	17	15.0	15.0	31.0
		White	78	69.0	69.0	100.0
		Total	113	100.0	100.0	
Y	Valid	Black	10	17.5	17.5	17.5
		Coloured	7	12.3	12.3	29.8
		Indian or Asian	11	19.3	19.3	49.1
		White	29	50.9	50.9	100.0
		Total	57	100.0	100.0	

A7. Work Status						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Employer	3	2.7	2.7	2.7
		Paid employee	94	83.2	83.2	85.8
		Self-employed	13	11.5	11.5	97.3
		Unemployed	2	1.8	1.8	99.1
		Unpaid worker	1	.9	.9	100.0
		Total	113	100.0	100.0	
Y	Valid	Employer	2	3.5	3.5	3.5
		Full time student	2	3.5	3.5	7.0
		Paid employee	46	80.7	80.7	87.7
		Self-employed	5	8.8	8.8	96.5
		Unemployed	1	1.8	1.8	98.2
		Unpaid worker	1	1.8	1.8	100.0
		Total	57	100.0	100.0	

A8. Owned A Business Before						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	N	66	58.4	58.4	58.4
		Y	47	41.6	41.6	100.0
		Total	113	100.0	100.0	
Y	Valid	N	38	66.7	66.7	66.7
		Y	19	33.3	33.3	100.0
		Total	57	100.0	100.0	

PROPOSITION 1:

Experience, education and business training

A9. Entrepreneurial Courses Attended						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	N	49	43.4	43.4	43.4
		Y	64	56.6	56.6	100.0
		Total	113	100.0	100.0	
Y	Valid	N	26	45.6	45.6	45.6
		Y	31	54.4	54.4	100.0
		Total	57	100.0	100.0	

A10. Education Level						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Matric / Grade 12	8	7.1	7.1	7.1
		Certificate	7	6.2	6.2	13.3
		Diploma	18	15.9	15.9	29.2
		Degree	35	31.0	31.0	60.2
		Post Graduate	45	39.8	39.8	100.0
		Total	113	100.0	100.0	
Y	Valid	Matric / Grade 12	10	17.5	17.5	17.5
		Certificate	3	5.3	5.3	22.8
		Diploma	12	21.1	21.1	43.9
		Degree	17	29.8	29.8	73.7
		Post Graduate	15	26.3	26.3	100.0
		Total	57	100.0	100.0	

PROPOSITION 2:

Technology

A11_1. Computer Literacy						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Average user	23	20.4	20.5	20.5
		Advanced user	58	51.3	51.8	72.3
		Expert user	31	27.4	27.7	100.0
		Total	112	99.1	100.0	
	Missing	System	1	.9		
	Total		113	100.0		
Y	Valid	Average user	7	12.3	12.5	12.5
		Advanced user	38	66.7	67.9	80.4
		Expert user	11	19.3	19.6	100.0
		Total	56	98.2	100.0	
	Missing	System	1	1.8		
	Total		57	100.0		

A11_2. IT Role Daily						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Cannot do without it	70	61.9	61.9	61.9
		Major role	41	36.3	36.3	98.2
		Minor role	2	1.8	1.8	100.0
		Total	113	100.0	100.0	
Y	Valid	Cannot do without it	25	43.9	44.6	44.6
		Major role	24	42.1	42.9	87.5
		Minor role	6	10.5	10.7	98.2
		Very little/minimal	1	1.8	1.8	100.0
		Total	56	98.2	100.0	
	Missing	System	1	1.8		
	Total		57	100.0		

A12. IT Availability						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	N	87	77.0	77.0	77.0
		Y	26	23.0	23.0	100.0
		Total	113	100.0	100.0	
Y	Valid	N	27	47.4	47.4	47.4
		Y	30	52.6	52.6	100.0
		Total	57	100.0	100.0	

A13. Internet Access 24/7						
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	N	8	7.1	7.1	7.1
		Y	105	92.9	92.9	100.0
		Total	113	100.0	100.0	
Y	Valid	N	9	15.8	15.8	15.8
		Y	48	84.2	84.2	100.0
		Total	57	100.0	100.0	

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QUESTIONNAIRE SECTION B: Drivers for Entrepreneurial action

PROPOSITION 3:

Aptitudes

				1	2	3	4	Entrepreneurial Aptitude
A1. Age	X	B1a. Likelihood of recognizing a possible business opportunity	Count	2	15	35	42	19
			Row N %	1.8%	13.3%	31.0%	37.2%	16.8%
		B1b. Ease with which you creatively come up with new ideas and initiatives	Count	2	11	34	35	31
			Row N %	1.8%	9.7%	30.1%	31.0%	27.4%
		B1c. The likelihood that you will be able to solve problems and find solutions	Count	0	0	19	59	35
			Row N %	.0%	.0%	16.8%	52.2%	31.0%
		B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	Count	1	6	35	51	20
			Row N %	.9%	5.3%	31.0%	45.1%	17.7%
		B1e. Building a network of associates and professional contacts for future leveraging	Count	5	16	31	43	18
			Row N %	4.4%	14.2%	27.4%	38.1%	15.9%
	Y	B1a. Likelihood of recognizing a possible business opportunity	Count	2	4	27	18	6
			Row N %	3.5%	7.0%	47.4%	31.6%	10.5%
		B1b. Ease with which you creatively come up with new ideas and initiatives	Count	1	9	24	13	10
			Row N %	1.8%	15.8%	42.1%	22.8%	17.5%
		B1c. The likelihood that you will be able to solve problems and find solutions	Count	0	0	23	23	11
			Row N %	.0%	.0%	40.4%	40.4%	19.3%
		B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	Count	0	5	24	13	15
			Row N %	.0%	8.8%	42.1%	22.8%	26.3%

	B1e. Building a network of associates and professional contacts for future leveraging	Count	1	8	22	14	12
		Row N %	1.8%	14.0%	38.6%	24.6%	21.1%

Statistics								
		N					Std.		
A1. Age		Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X	B1a. Likelihood of recognizing a possible business opportunity	113	0	3.54	4.00	4	.982	-.286	-.464
	B1b. Ease with which you creatively come up with new ideas and initiatives	113	0	3.73	4.00	4	1.029	-.377	-.563
	B1c. The likelihood that you will be able to solve problems and find solutions	113	0	4.14	4.00	4	.680	-.182	-.817
	B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	113	0	3.73	4.00	4	.845	-.363	.090
	B1e. Building a network of associates and professional contacts for future leveraging	113	0	3.47	4.00	4	1.061	-.442	-.378
Y	B1a. Likelihood of recognizing a possible business opportunity	57	0	3.39	3.00	3	.901	-.252	.548
	B1b. Ease with which you creatively come up with new ideas and initiatives	57	0	3.39	3.00	3	1.013	.109	-.607

B1c. The likelihood that you will be able to solve problems and find solutions	57	0	3.79	4.00	3[a]	.750	.369	-1.116
B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	57	0	3.67	3.00	3	.970	.117	-1.125
B1e. Building a network of associates and professional contacts for future leveraging	57	0	3.49	3.00	3	1.037	-.026	-.721

a. Multiple modes exist. The smallest value is shown

Problem solving

				1	2	3	4	High Aptitude
A1. Age	X	B2a. I enjoy dealing with difficult problems	Count	0	2	18	58	35
			Row N %	.0%	1.8%	15.9%	51.3%	31.0%
		B2b. I usually seek advice of others in solving problems	Count	0	15	28	49	21
			Row N %	.0%	13.3%	24.8%	43.4%	18.6%
		B2c. Problems slow things down but I usually find a solution	Count	1	5	28	52	27
			Row N %	.9%	4.4%	24.8%	46.0%	23.9%
		B2d. I see problems as opportunities	Count	1	3	22	51	36
			Row N %	.9%	2.7%	19.5%	45.1%	31.9%
	Y	B2a. I enjoy dealing with difficult problems	Count	3	3	16	22	13
			Row N %	5.3%	5.3%	28.1%	38.6%	22.8%
		B2b. I usually seek advice of	Count	5	4	18	19	11

others in solving problems	Row N %	8.8%	7.0%	31.6%	33.3%	19.3%
B2c. Problems slow things down but I usually find a solution	Count	0	6	19	18	14
	Row N %	.0%	10.5%	33.3%	31.6%	24.6%
B2d. I see problems as opportunities	Count	3	4	17	20	12
	Row N %	5.4%	7.1%	30.4%	35.7%	21.4%

Statistics

A1. Age		N		Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
		Valid	Missing						
X	B2a. I enjoy dealing with difficult problems	113	0	4.12	4.00	4	.729	-.463	-.101
	B2b. I usually seek advice of others in solving problems	113	0	3.67	4.00	4	.930	-.315	-.704
	B2c. Problems slow things down but I usually find a solution	113	0	3.88	4.00	4	.857	-.537	.235
	B2d. I see problems as opportunities	113	0	4.04	4.00	4	.839	-.731	.621
Y	B2a. I enjoy dealing with difficult problems	57	0	3.68	4.00	4	1.055	-.744	.405
	B2b. I usually seek advice of others in solving problems	57	0	3.47	4.00	4	1.151	-.589	-.133
	B2c. Problems slow things down but I usually find a solution	57	0	3.70	4.00	3	.963	-.104	-.975
	B2d. I see problems as opportunities	56	1	3.61	4.00	4	1.073	-.609	.088

Describing self in terms of abilities and skills

My strongest skills in order of strength:				Least like me	Slightly like me	Somewhat like me	Most like me
A1. Age	X	B3a. Analyze situations	Count	78	4	9	22
			Row N %	69.0%	3.5%	8.0%	19.5%
		B3b. Develop Interpersonal relationships	Count	5	45	16	47
			Row N %	4.4%	39.8%	14.2%	41.6%
		B3c.Build a network of contacts for possible future leveraging	Count	11	43	49	10
			Row N %	9.7%	38.1%	43.4%	8.8%
		B3d. Excite and motivate others	Count	14	71	18	10
			Row N %	12.4%	62.8%	15.9%	8.8%
	Y	B3a. Analyze situations	Count	52	1	2	2
			Row N %	91.2%	1.8%	3.5%	3.5%
		B3b. Develop Interpersonal relationships	Count	0	39	3	15
			Row N %	.0%	68.4%	5.3%	26.3%
		B3c.Build a network of contacts for possible future leveraging	Count	3	37	14	3
			Row N %	5.3%	64.9%	24.6%	5.3%
		B3d. Excite and motivate others	Count	1	51	2	3
			Row N %	1.8%	89.5%	3.5%	5.3%

Statistics									
A1. Age		N		Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
		Valid	Missing						
X	B3a. Analyze situations	113	0	1.78	1.00	1	1.230	1.078	-.678
	B3b. Develop Interpersonal relationships	113	0	2.93	3.00	4	.997	-.131	-1.516
	B3c.Build a network of contacts for possible future leveraging	113	0	2.51	3.00	3	.792	-.099	-.392

	B3d. Excite and motivate others	113	0	2.21	2.00	2	.773	.793	.599
Y	B3a. Analyze situations	57	0	1.19	1.00	1	.667	3.512	11.537
	B3b. Develop Interpersonal relationships	57	0	2.58	2.00	2	.885	.952	-1.044
	B3c.Build a network of contacts for possible future leveraging	57	0	2.30	2.00	2	.654	.800	.900
	B3d. Excite and motivate others	57	0	2.12	2.00	2	.503	2.871	9.314

The best way to describe me in order of my strengths is:

				Least like me	Slightly like me	Somewhat like me	Most like me
A1. Age	X	B3e. Technical expert	Count	83	7	6	17
			Row N %	73.5%	6.2%	5.3%	15.0%
		B3f. Good listener	Count	10	36	52	15
			Row N %	8.8%	31.9%	46.0%	13.3%
		B3g. Skilled negotiator	Count	6	81	21	5
			Row N %	5.3%	71.7%	18.6%	4.4%
		B3h. Inspirational leader	Count	13	41	13	46
			Row N %	11.5%	36.3%	11.5%	40.7%
	Y	B3e. Technical expert	Count	52	2	1	2
			Row N %	91.2%	3.5%	1.8%	3.5%
		B3f. Good listener	Count	3	37	15	2
			Row N %	5.3%	64.9%	26.3%	3.5%
		B3g. Skilled negotiator	Count	0	52	1	4
			Row N	.0%	91.2%	1.8%	7.0%

			%				
	B3h. Inspirational leader	Count		1	37	3	16
		Row N %	1.8%		64.9%	5.3%	28.1%

Statistics								
		N				**Std.**		
A1. Age		Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X	B3e. Technical expert	113	0	1.62	1.00	1	1.121	1.458	.384
	B3f. Good listener	113	0	2.64	3.00	3	.824	-.207	-.423
	B3g. Skilled negotiator	113	0	2.22	2.00	2	.608	1.059	1.818
	B3h. Inspirational leader	113	0	2.81	3.00	4	1.098	-.157	-1.465
Y	B3e. Technical expert	57	0	1.18	1.00	1	.630	3.842	14.386
	B3f. Good listener	57	0	2.28	2.00	2	.620	.671	.846
	B3g. Skilled negotiator	57	0	2.16	2.00	2	.527	3.203	8.800
	B3h. Inspirational leader	57	0	2.60	2.00	2	.923	.765	-1.160

What helps me most to be successful are my abilities to:

				Least like me	Slightly like me	Somewhat like me	Most like me
A1. Age	X	B3i. Make good decisions	Count	72	6	10	25
			Row N	63.7%	5.3%	8.8%	22.1%

		%				
	B3j. Coach and develop people	Count	7	44	50	12
		Row N %	6.2%	38.9%	44.2%	10.6%
	B3k. Build strong alliances	Count	12	77	17	7
		Row N %	10.6%	68.1%	15.0%	6.2%
	B3l. Energize and inspire others	Count	17	38	12	46
		Row N %	15.0%	33.6%	10.6%	40.7%
Y	B3i. Make good decisions	Count	49	2	2	4
		Row N %	86.0%	3.5%	3.5%	7.0%
	B3j. Coach and develop people	Count	3	41	12	1
		Row N %	5.3%	71.9%	21.1%	1.8%
	B3k. Build strong alliances	Count	2	49	2	4
		Row N %	3.5%	86.0%	3.5%	7.0%
	B3l. Energize and inspire others	Count	2	36	4	15
		Row N %	3.5%	63.2%	7.0%	26.3%

Statistics

A1. Age		N		Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
		Valid	Missing						
X	B3i. Make good decisions	113	0	1.89	1.00	1	1.270	.868	-1.082
	B3j. Coach and develop people	113	0	2.59	3.00	3	.763	-.014	-.339
	B3k. Build strong alliances	113	0	2.17	2.00	2	.693	.910	1.382
	B3l. Energize and inspire others	113	0	2.77	3.00	4	1.142	-.158	-1.500
Y	B3i. Make good decisions	57	0	1.32	1.00	1	.848	2.606	5.449
	B3j. Coach and develop people	57	0	2.19	2.00	2	.549	.763	1.622

| | | | Count/Row | 57 | 0 | 2.14 | 2.00 | 2 | .581 | 2.259 | 5.987 |

B3k. Build strong alliances	57	0	2.14	2.00	2	.581	2.259	5.987
B3l. Energize and inspire others	57	0	2.56	2.00	2	.926	.722	-1.010

What people are most likely to notice about me is my:

				Least like me	Slightly like me	Somewhat like me	Most like me
A1. Age	X	B3m. Attention to detail	Count	10	67	13	23
			Row N %	8.8%	59.3%	11.5%	20.4%
		B3n. Concern for people	Count	8	45	48	12
			Row N %	7.1%	39.8%	42.5%	10.6%
		B3o. Ability to persevere, in the face of conflict and opposition	Count	70	14	17	12
			Row N %	61.9%	12.4%	15.0%	10.6%
		B3p. Charisma	Count	21	38	15	39
			Row N %	18.6%	33.6%	13.3%	34.5%
	Y	B3m. Attention to detail	Count	3	49	2	3
			Row N %	5.3%	86.0%	3.5%	5.3%
		B3n. Concern for people	Count	3	38	14	2
			Row N %	5.3%	66.7%	24.6%	3.5%
		B3o. Ability to persevere, in the face of conflict and opposition	Count	49	3	2	3
			Row N %	86.0%	5.3%	3.5%	5.3%
		B3p. Charisma	Count	1	38	2	16
			Row N %	1.8%	66.7%	3.5%	28.1%

Statistics								
	N					Std.		
A1. Age	Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis

X	B3m. Attention to detail	113	0	2.43	2.00	2	.915	.663	-.603
	B3n. Concern for people	113	0	2.57	3.00	3	.778	.007	-.375
	B3o. Ability to persevere, in the face of conflict and opposition	113	0	1.74	1.00	1	1.067	1.070	-.359
	B3p. Charisma	113	0	2.64	2.00	4	1.142	-.016	-1.467
Y	B3m. Attention to detail	57	0	2.09	2.00	2	.544	2.141	7.220
	B3n. Concern for people	57	0	2.26	2.00	2	.613	.750	1.072
	B3o. Ability to persevere, in the face of conflict and opposition	57	0	1.28	1.00	1	.774	2.820	6.971
	B3p. Charisma	57	0	2.58	2.00	2	.925	.813	-1.108

PROPOSITION 4:

My most important leadership trait is:

				Least like me	Slightly like me	Somewhat like me	Most like me
A1. Age	X	B3q. Clear, logical thinking	Count	7	69	18	19
			Row N %	6.2%	61.1%	15.9%	16.8%
		B3r. Caring and support for others	Count	13	40	16	44
			Row N %	11.5%	35.4%	14.2%	38.9%
		B3s. Toughness and aggressiveness	Count	85	13	4	11
			Row N %	75.2%	11.5%	3.5%	9.7%
		B3t. Imagination and creativity	Count	5	43	56	9
			Row N %	4.4%	38.1%	49.6%	8.0%
	Y	B3q. Clear, logical thinking	Count	1	51	2	3
			Row N %	1.8%	89.5%	3.5%	5.3%
		B3r. Caring and support for others	Count	3	39	1	14
			Row N %	5.3%	68.4%	1.8%	24.6%
		B3s. Toughness and aggressiveness	Count	52	0	2	3
			Row N %	91.2%	.0%	3.5%	5.3%
		B3t. Imagination and creativity	Count	0	38	15	4
			Row N %	.0%	66.7%	26.3%	7.0%

Statistics									
		N					Std.		
A1. Age		Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X	B3q. Clear, logical thinking	113	0	2.43	2.00	2	.844	.757	-.328

			Mean	Median	Mode	Std. Dev	Skewness	Kurtosis
	B3r. Caring and support for others	113	0	2.81	3.00	4	1.084	-.158	-1.416
	B3s. Toughness and aggressiveness	113	0	1.48	1.00	1	.955	1.910	2.258
	B3t. Imagination and creativity	113	0	2.61	3.00	3	.700	-.086	-.160
Y	B3q. Clear, logical thinking	57	0	2.12	2.00	2	.503	2.871	9.314
	B3r. Caring and support for others	57	0	2.46	2.00	2	.927	.899	-.618
	B3s. Toughness and aggressiveness	57	0	1.23	1.00	1	.756	3.183	8.796
	B3t. Imagination and creativity	57	0	2.40	2.00	2	.623	1.300	.650

Leadership Orientation

Leadership Orientation					
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	I have never been in a leadership role	1	.9	.9	.9
		I work with the team as a member	41	36.3	36.3	37.2
		I usually take the lead in team initiatives	44	38.9	38.9	76.1
		I tend to be an independent leader of new initiatives	27	23.9	23.9	100.0
		Total	113	100.0	100.0	
Y	Valid	I have never been in a leadership role	6	10.5	10.5	10.5
		I work with the team as a member	24	42.1	42.1	52.6
		I usually take the lead in team	19	33.3	33.3	86.0

				8	14.0	14.0	100.0
		I tend to be an independent leader of new initiatives					

PROPOSITION 5:

Vision

Vision - Long term perspective

				1	2	3	4	Visionary
A1. Age	X	B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve	Count	0	4	10	54	45
			Row N %	.0%	3.5%	8.8%	47.8%	39.8%
		B5b. I have always known what I want to do with and achieve in my life	Count	3	18	44	30	18
			Row N %	2.7%	15.9%	38.9%	26.5%	15.9%
		B5c. I tend to plan long term in order to achieve my goals	Count	2	11	36	44	20
			Row N %	1.8%	9.7%	31.9%	38.9%	17.7%
	Y	B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve	Count	0	1	3	14	39
			Row N %	.0%	1.8%	5.3%	24.6%	68.4%
		B5b. I have always known what I want to do with and achieve in my life	Count	2	7	19	19	10
			Row N %	3.5%	12.3%	33.3%	33.3%	17.5%
		B5c. I tend to plan long term in order to achieve my goals	Count	4	2	16	20	15
			Row N %	7.0%	3.5%	28.1%	35.1%	26.3%

Statistics								
	N					Std.		
A1. Age	Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X B5a. I tend to have ideas and dreams of what I would one day in the future	113	0	4.24	4.00	4	.759	-.931	.870

		N	Missing	Mean	Median	Mode	Std. Dev	Skewness	Kurtosis
	like to achieve								
	B5b. I have always known what I want to do with and achieve in my life	113	0	3.37	3.00	3	1.019	-.031	-.546
	B5c. I tend to plan long term in order to achieve my goals	113	0	3.61	4.00	4	.949	-.356	-.208
Y	B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve	57	0	4.60	5.00	5	.678	-1.791	3.216
	B5b. I have always known what I want to do with and achieve in my life	57	0	3.49	4.00	3ª	1.037	-.324	-.319
	B5c. I tend to plan long term in order to achieve my goals	57	0	3.70	4.00	4	1.117	-.808	.358
a. Multiple modes exist. The smallest value is shown									

Vision - Short term perspective

				1	2	3	4	Not Visionary
A1. Age	X	B5d. My goals and plans are practical and apply to my daily life	Count	0	6	26	57	24
			Row N %	.0%	5.3%	23.0%	50.4%	21.2%
		B5e. I tend to set short term objectives and goals of things I will achieve in the next few days or weeks	Count	2	23	31	42	15
			Row N %	1.8%	20.4%	27.4%	37.2%	13.3%
		B5f. I tend to focus on the importance of the here and now rather than future possibilities	Count	7	32	44	20	10
			Row N %	6.2%	28.3%	38.9%	17.7%	8.8%
	Y	B5d. My goals and plans are	Count	2	6	11	26	12

		practical and apply to my daily life	Row N %	3.5%	10.5%	19.3%	45.6%	21.1%
		B5e. I tend to set short term objectives and goals of things I will achieve in the next few days or weeks	Count	4	7	16	22	8
			Row N %	7.0%	12.3%	28.1%	38.6%	14.0%
		B5f. I tend to focus on the importance of the here and now rather than future possibilities	Count	4	19	14	12	8
			Row N %	7.0%	33.3%	24.6%	21.1%	14.0%

Statistics									
		N					Std.		
A1. Age		Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X	B5d. My goals and plans are practical and apply to my daily life	113	0	3.88	4.00	4	.803	-.402	-.187
	B5e. I tend to set short term objectives and goals of things I will achieve in the next few days or weeks	113	0	3.40	4.00	4	1.014	-.189	-.770
	B5f. I tend to focus on the importance of the here and now rather than future possibilities	113	0	2.95	3.00	3	1.034	.256	-.371
Y	B5d. My goals and plans are practical and apply to my daily life	57	0	3.70	4.00	4	1.034	-.767	.197
	B5e. I tend to set short term objectives and goals of things I will achieve in the next	57	0	3.40	4.00	4	1.100	-.539	-.234

		57	0	3.02	3.00	2	1.188	.230	-.955
	B5f. I tend to focus on the importance of the here and now rather than								

PROPOSITION 6:

Influence – family, networks

				1	2	3	4	Strong influence
A1. Age	X	B6a. An immediate family members is an entrepreneur	Count	16	11	27	20	39
			Row N %	14.2%	9.7%	23.9%	17.7%	34.5%
		B6b. I was raised to be self-sufficient and to act without support from others	Count	6	12	24	40	31
			Row N %	5.3%	10.6%	21.2%	35.4%	27.4%
		B6c. My family actively supports my new ideas	Count	3	7	31	50	22
			Row N %	2.7%	6.2%	27.4%	44.2%	19.5%
		B6d. I prefer to make decisions independently without help from others	Count	5	22	27	46	13
			Row N %	4.4%	19.5%	23.9%	40.7%	11.5%
		B6e. A friend or acquaintance is an entrepreneur	Count	11	8	21	38	35
			Row N %	9.7%	7.1%	18.6%	33.6%	31.0%
		B6f. I was raised to believe in the value of advice and support from others	Count	4	10	31	46	22
			Row N %	3.5%	8.8%	27.4%	40.7%	19.5%
		B6g. I prefer to discuss options with others before deciding	Count	4	6	40	46	17
			Row N %	3.5%	5.3%	35.4%	40.7%	15.0%
		B6h. I am aware of where and who to go to, to ask for help	Count	3	10	37	48	15
			Row N %	2.7%	8.8%	32.7%	42.5%	13.3%
		B6i. Even when my ideas are not supported or accepted I pursue them	Count	1	11	42	43	16
			Row N %	.9%	9.7%	37.2%	38.1%	14.2%
	Y	B6a. An immediate family members is an entrepreneur	Count	9	5	8	18	17
			Row N %	15.8%	8.8%	14.0%	31.6%	29.8%

B6b. I was raised to be self-sufficient and to act without support from others	Count	4	6	13	22	12
	Row N %	7.0%	10.5%	22.8%	38.6%	21.1%
B6c. My family actively supports my new ideas	Count	1	7	13	23	13
	Row N %	1.8%	12.3%	22.8%	40.4%	22.8%
B6d. I prefer to make decisions independently without help from others	Count	10	5	20	18	4
	Row N %	17.5%	8.8%	35.1%	31.6%	7.0%
B6e. A friend or acquaintance is an entrepreneur	Count	10	8	9	18	12
	Row N %	17.5%	14.0%	15.8%	31.6%	21.1%
B6f. I was raised to believe in the value of advice and support from others	Count	1	4	12	30	10
	Row N %	1.8%	7.0%	21.1%	52.6%	17.5%
B6g. I prefer to discuss options with others before deciding	Count	3	5	14	22	13
	Row N %	5.3%	8.8%	24.6%	38.6%	22.8%
B6h. I am aware of where and who to go to, to ask for help	Count	0	12	19	13	13
	Row N %	.0%	21.1%	33.3%	22.8%	22.8%
B6i. Even when my ideas are not supported or accepted I pursue them	Count	1	2	26	18	10
	Row N %	1.8%	3.5%	45.6%	31.6%	17.5%

Statistics

A1. Age		N		Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
		Valid	Missing						
X	B6a. An immediate family members is an entrepreneur	113	0	3.49	4.00	5	1.415	-.473	-1.030
	B6b. I was raised to be self-sufficient and to act without support from others	113	0	3.69	4.00	4	1.142	-.682	-.265
	B6c. My family actively supports my new ideas	113	0	3.72	4.00	4	.940	-.650	.448
	B6d. I prefer to	113	0	3.35	4.00	4	1.060	-.387	-.610

		N	Missing	Mean	Median	Mode	Std. Dev	Skewness	Kurtosis
	make decisions independently without help from others								
	B6e. A friend or acquaintance is an entrepreneur	113	0	3.69	4.00	4	1.254	-.829	-.228
	B6f. I was raised to believe in the value of advice and support from others	113	0	3.64	4.00	4	1.009	-.595	.067
	B6g. I prefer to discuss options with others before deciding	113	0	3.58	4.00	4	.933	-.552	.532
	B6h. I am aware of where and who to go to, to ask for help	113	0	3.55	4.00	4	.926	-.489	.202
	B6i. Even when my ideas are not supported or accepted I pursue them	113	0	3.55	4.00	4	.886	-.150	-.303
Y	B6a. An immediate family members is an entrepreneur	57	0	3.51	4.00	4	1.416	-.664	-.852
	B6b. I was raised to be self-sufficient and to act without support from others	57	0	3.56	4.00	4	1.150	-.667	-.196
	B6c. My family actively supports my new ideas	57	0	3.70	4.00	4	1.017	-.522	-.340
	B6d. I prefer to make decisions independently without help from others	57	0	3.02	3.00	3	1.188	-.433	-.674
	B6e. A friend or acquaintance is an entrepreneur	57	0	3.25	4.00	4	1.405	-.376	-1.163

				1	2	3	4	Strong agreement

B6f. I was raised to believe in the value of advice and support from others	57	0	3.77	4.00	4	.887	-.801	.869
B6g. I prefer to discuss options with others before deciding	57	0	3.65	4.00	4	1.094	-.694	.040
B6h. I am aware of where and who to go to, to ask for help	57	0	3.47	3.00	3	1.071	.116	-1.216
B6i. Even when my ideas are not supported or accepted I pursue them	57	0	3.60	3.00	3	.884	-.063	.127

SECTION E: Support Networks

Association and Support

				1	2	3	4	Strong agreement
A1. Age	X	E1a. Private associations (e.g. Chamber of Commerce)	Count	10	21	50	23	9
			Row N %	8.8%	18.6%	44.2%	20.4%	8.0%
		E1b. Government support bodies (e.g. The DTI, SEDA, Khula, National Youth Development Agency etc.)	Count	14	23	41	28	7
			Row N %	12.4%	20.4%	36.3%	24.8%	6.2%
		E1c. Loans in specially favourable terms	Count	9	24	36	35	9
			Row N %	8.0%	21.2%	31.9%	31.0%	8.0%
		E1d. Technical aid for business start-ups	Count	6	13	40	43	11
			Row N %	5.3%	11.5%	35.4%	38.1%	9.7%
		E1e. Formal coaching and mentoring	Count	4	18	32	38	21
			Row N %	3.5%	15.9%	28.3%	33.6%	18.6%

	E1f. Business clubs and institutes	Count	6	14	46	37	10
		Row N %	5.3%	12.4%	40.7%	32.7%	8.8%
	E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo	Count	5	22	39	32	15
		Row N %	4.4%	19.5%	34.5%	28.3%	13.3%
	E1h. Internet, own websites or blogs etc.	Count	2	7	26	50	28
		Row N %	1.8%	6.2%	23.0%	44.2%	24.8%
Y	E1a. Private associations (e.g. Chamber of Commerce)	Count	5	8	26	13	5
		Row N %	8.8%	14.0%	45.6%	22.8%	8.8%
	E1b. Government support bodies (e.g. The DTI, SEDA, Khula, National Youth Development Agency etc.)	Count	8	15	24	6	4
		Row N %	14.0%	26.3%	42.1%	10.5%	7.0%
	E1c. Loans in specially favourable terms	Count	8	4	21	18	6
		Row N %	14.0%	7.0%	36.8%	31.6%	10.5%
	E1d. Technical aid for business start-ups	Count	2	7	21	19	8
		Row N %	3.5%	12.3%	36.8%	33.3%	14.0%
	E1e. Formal coaching and mentoring	Count	5	6	18	18	10
		Row N %	8.8%	10.5%	31.6%	31.6%	17.5%
	E1f. Business clubs and institutes	Count	4	4	25	19	5
		Row N %	7.0%	7.0%	43.9%	33.3%	8.8%
	E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo	Count	3	8	18	13	15
		Row N %	5.3%	14.0%	31.6%	22.8%	26.3%
	E1h. Internet, own websites or blogs etc.	Count	1	4	19	12	21
		Row N %	1.8%	7.0%	33.3%	21.1%	36.8%

Statistics								
	N					Std.		
A1. Age	Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis

X	E1a. Private associations (e.g. Chamber of Commerce)	113	0	3.00	3.00	3	1.035	-.049	-.226
	E1b. Government support bodies (e.g. The DTI, SEDA, Khula, National Youth Development Agency etc.)	113	0	2.92	3.00	3	1.095	-.131	-.619
	E1c. Loans in specially favourable terms	113	0	3.10	3.00	3	1.077	-.197	-.631
	E1d. Technical aid for business start-ups	113	0	3.35	3.00	4	.990	-.483	.021
	E1e. Formal coaching and mentoring	113	0	3.48	4.00	4	1.078	-.312	-.615
	E1f. Business clubs and institutes	113	0	3.27	3.00	3	.975	-.343	.009
	E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo	113	0	3.27	3.00	3	1.061	-.095	-.602
	E1h. Internet, own websites or blogs etc.	113	0	3.84	4.00	4	.931	-.688	.352
Y	E1a. Private associations (e.g. Chamber of Commerce)	57	0	3.09	3.00	3	1.040	-.181	-.074
	E1b. Government support bodies (e.g. The DTI, SEDA, Khula, National Youth Development Agency etc.)	57	0	2.70	3.00	3	1.068	.269	-.124
	E1c. Loans in specially favourable	57	0	3.18	3.00	3	1.167	-.494	-.362

terms								
E1d. Technical aid for business start-ups	57	0	3.42	3.00	3	.999	-.276	-.179
E1e. Formal coaching and mentoring	57	0	3.39	3.00	3[a]	1.161	-.458	-.380
E1f. Business clubs and institutes	57	0	3.30	3.00	3	.981	-.524	.469
E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo	57	0	3.51	3.00	3	1.182	-.291	-.760
E1h. Internet, own websites or blogs etc.	57	0	3.84	4.00	5	1.066	-.408	-.722
a. Multiple modes exist. The smallest value is shown								

PROPOSITION 7:

Creativity and innovation

				1	2	3	4	Strong creativity
A1. Age	X	B7a. I have developed new products and/or services during my working career	Count	17	15	22	25	34
			Row N %	15.0%	13.3%	19.5%	22.1%	30.1%
		B7b. I have had ideas about making processes more efficient in my work	Count	0	1	10	45	57
			Row N %	.0%	.9%	8.8%	39.8%	50.4%
		B7c. I am comfortable to experiment with untried and untested methods	Count	1	5	26	40	41
			Row N %	.9%	4.4%	23.0%	35.4%	36.3%
		B7d. I prefer to solve problems	Count	1	3	28	45	36

		in my own way	Row N %	.9%	2.7%	24.8%	39.8%	31.9%
Y	B7a. I have developed new products and/or services during my working career	Count	14	8	16	8	11
		Row N %	24.6%	14.0%	28.1%	14.0%	19.3%
	B7b. I have had ideas about making processes more efficient in my work	Count	1	0	9	21	26
		Row N %	1.8%	.0%	15.8%	36.8%	45.6%
	B7c. I am comfortable to experiment with untried and untested methods	Count	1	5	24	14	13
		Row N %	1.8%	8.8%	42.1%	24.6%	22.8%
	B7d. I prefer to solve problems in my own way	Count	1	2	12	23	19
		Row N %	1.8%	3.5%	21.1%	40.4%	33.3%

Statistics

A1. Age		N Valid	N Missing	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
X	B7a. I have developed new products and/or services during my working career	113	0	3.39	4.00	5	1.423	-.396	-1.147
	B7b. I have had ideas about making processes more efficient in my work	113	0	4.40	5.00	5	.688	-.879	.269
	B7c. I am comfortable to experiment with untried and untested methods	113	0	4.02	4.00	5	.926	-.654	-.107
	B7d. I prefer to solve problems in my own way	113	0	3.99	4.00	4	.871	-.560	.051
Y	B7a. I have developed new products and/or services during my working career	57	0	2.89	3.00	3	1.435	.078	-1.231
	B7b. I have had	57	0	4.25	4.00	5	.851	-1.223	2.179

ideas about making processes more efficient in my work								
B7c. I am comfortable to experiment with untried and untested methods	57	0	3.58	3.00	3	.999	-.058	-.545
B7d. I prefer to solve problems in my own way	57	0	4.00	4.00	4	.926	-.840	.728

PROPOSITION 8:

Attitude towards risk-taking and self-confidence

					N	Y
A1. Age	X	B8a. I generally take a long term view toward achieving my goals	Count		24	89
			Row N %		21.2%	78.8%
		B8b. Like going with the flow and deciding on the spur of the moment	Count		71	42
			Row N %		62.8%	37.2%
		B8c. I believe that concern for people and relationships is very important for business success	Count		0	113
			Row N %		.0%	100.0%
		B8d.Prefer a flexible lifestyle where I make plans as needs arise	Count		17	96
			Row N %		15.0%	85.0%
		B8e. I tend to make decisions quite easily and often reevaluate my decision and change the decision depending on circumstances	Count		34	79
			Row N %		30.1%	69.9%
		B8f. I like surprises and frequent variety	Count		43	70
			Row N %		38.1%	61.9%
		B8g. I enjoy experimenting with new ideas	Count		16	97
			Row N %		14.2%	85.8%
		B8h. Routine – I prefer predictable outcomes	Count		37	76
			Row N %		32.7%	67.3%
		B8i.Structured – I prefer to work in an organized way and follow a plan one step at a time to achieve	Count		36	77
			Row N %		31.9%	68.1%
		B8j. I prefer more immediate evidence and reward for my achievements	Count		29	84
			Row N %		25.7%	74.3%
		B8k. Prefer a planned lifestyle with predictable outcomes	Count		44	69
			Row N		38.9%	61.1%

				%		
Y	B8a. I generally take a long term view toward achieving my goals		Count		10	47
			Row N %		17.5%	82.5%
	B8b. Like going with the flow and deciding on the spur of the moment		Count		35	22
			Row N %		61.4%	38.6%
	B8c. I believe that concern for people and relationships is very important for business success		Count		1	56
			Row N %		1.8%	98.2%
	B8d.Prefer a flexible lifestyle where I make plans as needs arise		Count		2	55
			Row N %		3.5%	96.5%
	B8e. I tend to make decisions quite easily and often reevaluate my decision and change the decision depending on circumstances		Count		18	39
			Row N %		31.6%	68.4%
	B8f. I like surprises and frequent variety		Count		22	35
			Row N %		38.6%	61.4%
	B8g. I enjoy experimenting with new ideas		Count		5	52
			Row N %		8.8%	91.2%
	B8h. Routine – I prefer predictable outcomes		Count		20	37
			Row N %		35.1%	64.9%
	B8i.Structured – I prefer to work in an organized way and follow a plan one step at a time to achieve		Count		15	42
			Row N %		26.3%	73.7%
	B8j. I prefer more immediate evidence and reward for my achievements		Count		7	50
			Row N %		12.3%	87.7%
	B8k. Prefer a planned lifestyle with predictable outcomes		Count		25	32
			Row N %		43.9%	56.1%

QUESTIONNAIRE SECTION D: Propensity to act/intent

Behavioural Aspects - Attitude

				1	2	3	4	Attitude conducive to EI
A1. Age	X	D1a. Starting a business could be possible for me	Count	4	9	13	38	49
			Row N %	3.5%	8.0%	11.5%	33.6%	43.4%
		D1b. A career as an entrepreneur or business owner is attractive to me	Count	7	6	12	38	50
			Row N %	6.2%	5.3%	10.6%	33.6%	44.2%
		D1c. I believe I would be successful in starting a business	Count	4	4	19	46	40
			Row N %	3.5%	3.5%	16.8%	40.7%	35.4%
		D1d. I have no doubts about starting my own business	Count	10	17	35	24	27
			Row N %	8.8%	15.0%	31.0%	21.2%	23.9%
		D1e. If I had the opportunity and resources, I would love to start a business	Count	2	7	9	31	64
			Row N %	1.8%	6.2%	8.0%	27.4%	56.6%
		D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	Count	5	16	24	32	36
			Row N %	4.4%	14.2%	21.2%	28.3%	31.9%
		D1g. I am determined to create a business venture in the future	Count	9	13	17	37	37
			Row N %	8.0%	11.5%	15.0%	32.7%	32.7%
		D1h. If I tried to start a business, I believe that I would have a high chance of being successful	Count	3	6	18	52	34
			Row N %	2.7%	5.3%	15.9%	46.0%	30.1%
		D1i. Being a business owner or an entrepreneur would give me great satisfaction	Count	5	4	12	38	54
			Row N %	4.4%	3.5%	10.6%	33.6%	47.8%
		D1j. My professional goal is to establish my own business	Count	11	5	26	28	43
			Row N %	9.7%	4.4%	23.0%	24.8%	38.1%

	D1k. Being an entrepreneur implies more advantages than disadvantages to me	Count	5	8	24	42	34
		Row N %	4.4%	7.1%	21.2%	37.2%	30.1%
Y	D1a. Starting a business could be possible for me	Count	2	5	8	9	33
		Row N %	3.5%	8.8%	14.0%	15.8%	57.9%
	D1b. A career as an entrepreneur or business owner is attractive to me	Count	5	6	6	5	35
		Row N %	8.8%	10.5%	10.5%	8.8%	61.4%
	D1c. I believe I would be successful in starting a business	Count	3	5	10	10	29
		Row N %	5.3%	8.8%	17.5%	17.5%	50.9%
	D1d. I have no doubts about starting my own business	Count	4	11	12	7	23
		Row N %	7.0%	19.3%	21.1%	12.3%	40.4%
	D1e. If I had the opportunity and resources, I would love to start a business	Count	1	4	4	12	36
		Row N %	1.8%	7.0%	7.0%	21.1%	63.2%
	D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	Count	5	3	18	3	28
		Row N %	8.8%	5.3%	31.6%	5.3%	49.1%
	D1g. I am determined to create a business venture in the future	Count	3	7	7	12	28
		Row N %	5.3%	12.3%	12.3%	21.1%	49.1%
	D1h. If I tried to start a business, I believe that I would have a high chance of being successful	Count	0	5	9	16	27
		Row N %	.0%	8.8%	15.8%	28.1%	47.4%
	D1i. Being a business owner or an entrepreneur would give me great satisfaction	Count	2	3	11	10	31
		Row N %	3.5%	5.3%	19.3%	17.5%	54.4%
	D1j. My professional goal is to establish my own business	Count	5	6	9	6	31
		Row N %	8.8%	10.5%	15.8%	10.5%	54.4%
	D1k. Being an entrepreneur implies more advantages than disadvantages to me	Count	2	4	14	12	25
		Row N %	3.5%	7.0%	24.6%	21.1%	43.9%

Statistics								
	N					**Std.**		
A1. Age	Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X D1a. Starting a business could be possible for me	113	0	4.05	4.00	5	1.093	-1.152	.640
D1b. A career as an entrepreneur or business owner is attractive to me	113	0	4.04	4.00	5	1.153	-1.299	.986
D1c. I believe I would be successful in starting a business	113	0	4.01	4.00	4	.995	-1.124	1.246
D1d. I have no doubts about starting my own business	113	0	3.36	3.00	3	1.247	-.244	-.865
D1e. If I had the opportunity and resources, I would love to start a business	113	0	4.31	5.00	5	.983	-1.522	1.772
D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	113	0	3.69	4.00	5	1.188	-.545	-.700
D1g. I am determined to create a business venture in the future	113	0	3.71	4.00	4[a]	1.258	-.770	-.444
D1h. If I tried to start a business, I believe that I would have a high chance of being successful	113	0	3.96	4.00	4	.958	-1.027	1.082
D1i. Being a business owner or an entrepreneur	113	0	4.17	4.00	5	1.051	-1.470	1.854

	would give me great satisfaction							
	D1j. My professional goal is to establish my own business	113	0	3.77	4.00	5	1.275	-.847	-.214
	D1k. Being an entrepreneur implies more advantages than disadvantages to me	113	0	3.81	4.00	4	1.082	-.827	.205
Y	D1a. Starting a business could be possible for me	57	0	4.16	5.00	5	1.177	-1.203	.336
	D1b. A career as an entrepreneur or business owner is attractive to me	57	0	4.04	5.00	5	1.401	-1.114	-.256
	D1c. I believe I would be successful in starting a business	57	0	4.00	5.00	5	1.239	-.992	-.117
	D1d. I have no doubts about starting my own business	57	0	3.60	4.00	5	1.374	-.380	-1.248
	D1e. If I had the opportunity and resources, I would love to start a business	57	0	4.37	5.00	5	1.011	-1.667	2.052
	D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job	57	0	3.81	4.00	5	1.342	-.690	-.676
	D1g. I am determined to create a business venture in the future	57	0	3.96	4.00	5	1.267	-.969	-.282

				5	.990	-.864	-.375
D1h. If I tried to start a business, I believe that I would have a high chance of being successful	57	0	4.14	4.00	5	.990	-.864	-.375
D1i. Being a business owner or an entrepreneur would give me great satisfaction	57	0	4.14	5.00	5	1.125	-1.144	.468
D1j. My professional goal is to establish my own business	57	0	3.91	5.00	5	1.392	-.908	-.578
D1k. Being an entrepreneur implies more advantages than disadvantages to me	57	0	3.95	4.00	5	1.141	-.792	-.226

a. Multiple modes exist. The smallest value is shown

QUESTIONNAIRE SECTION C: Perceived feasibility and resource advantage

Social circumstances

				1	2	3	4	Social circumstances conducive to EI
A1. Age	X	C1a. Access to transport 24/7	Count	8	8	12	25	60
			Row N %	7.1%	7.1%	10.6%	22.1%	53.1%
		C1b. The business can be run from home	Count	4	11	35	32	31
			Row N %	3.5%	9.7%	31.0%	28.3%	27.4%
		C1c. Access to a large network of people	Count	1	2	17	43	50
			Row N %	.9%	1.8%	15.0%	38.1%	44.2%
		C1d. Access to funding	Count	2	3	8	30	70

		Row N %	1.8%	2.7%	7.1%	26.5%	61.9%
	C1e. People and resources are freely available and are easy to find	Count	1	12	33	39	28
		Row N %	.9%	10.6%	29.2%	34.5%	24.8%
Y	C1a. Access to transport 24/7	Count	0	1	5	14	37
		Row N %	.0%	1.8%	8.8%	24.6%	64.9%
	C1b. The business can be run from home	Count	2	7	17	21	10
		Row N %	3.5%	12.3%	29.8%	36.8%	17.5%
	C1c. Access to a large network of people	Count	0	0	5	21	31
		Row N %	.0%	.0%	8.8%	36.8%	54.4%
	C1d. Access to funding	Count	0	1	7	12	37
		Row N %	.0%	1.8%	12.3%	21.1%	64.9%
	C1e. People and resources are freely available and are easy to find	Count	1	6	15	13	22
		Row N %	1.8%	10.5%	26.3%	22.8%	38.6%

Statistics								
		N					Std.		
A1. Age		Valid	Missing	Mean	Median	Mode	Deviation	Skewness	Kurtosis
X	C1a. Access to transport 24/7	113	0	4.07	5.00	5	1.252	-1.249	.446
	C1b. The business can be run from home	113	0	3.66	4.00	3	1.091	-.430	-.474
	C1c. Access to a large network of people	113	0	4.23	4.00	5	.835	-1.020	1.091
	C1d. Access to funding	113	0	4.44	5.00	5	.876	-1.892	3.811
	C1e. People and resources are freely available and are easy to	113	0	3.72	4.00	4	.986	-.312	-.656

	find								
Y	C1a. Access to transport 24/7	57	0	4.53	5.00	5	.734	-1.495	1.668
	C1b. The business can be run from home	57	0	3.53	4.00	4	1.037	-.421	-.262
	C1c. Access to a large network of people	57	0	4.46	5.00	5	.657	-.814	-.376
	C1d. Access to funding	57	0	4.49	5.00	5	.782	-1.363	.888
	C1e. People and resources are freely available and are easy to find	57	0	3.86	4.00	5	1.109	-.527	-.750

Experience

C2.Working Experience					
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Never	1	.9	.9	.9
		1 - 3 years	14	12.4	12.4	13.3
		4 years +	98	86.7	86.7	100.0
		Total	113	100.0	100.0	
Y	Valid	Never	4	7.0	7.0	7.0
		less than 6 months	2	3.5	3.5	10.5
		1 - 3 years	30	52.6	52.6	63.2
		4 years +	21	36.8	36.8	100.0
		Total	57	100.0	100.0	

C3. Last Job Capacity					
A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	Employee	45	39.8	42.1	42.1

			Frequency	Percent	Valid Percent	Cumulative Percent
		Line manager	52	46.0	48.6	90.7
		CEO/Executive level	10	8.8	9.3	100.0
		Total	107	94.7	100.0	
	Missing	System	6	5.3		
	Total		113	100.0		
Y	Valid	Employee	41	71.9	75.9	75.9
		Line manager	8	14.0	14.8	90.7
		CEO/Executive level	5	8.8	9.3	100.0
		Total	54	94.7	100.0	
	Missing	System	3	5.3		
	Total		57	100.0		

C4. In Charge Of People

A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	N	10	8.8	8.8	8.8
		Y	103	91.2	91.2	100.0
		Total	113	100.0	100.0	
Y	Valid	N	25	43.9	43.9	43.9
		Y	32	56.1	56.1	100.0
		Total	57	100.0	100.0	

C5. Participate In Business Activities

A1. Age			Frequency	Percent	Valid Percent	Cumulative Percent
X	Valid	N	24	21.2	21.2	21.2
		Y	89	78.8	78.8	100.0
		Total	113	100.0	100.0	
Y	Valid	N	4	7.0	7.0	7.0
		Y	53	93.0	93.0	100.0
		Total	57	100.0	100.0	

				Unmarked	Marked
A1. Age	X	Activity: C6a. Making things to sell personally	Count	79	34
			Row N %	69.9%	30.1%
		Activity: C6b. Fundraising activities for your school/church	Count	63	50
			Row N	55.8%	44.2%

			%		
		Activity: C6c. Community fundraising initiatives	Count	113	0
			Row N %	100.0%	.0%
		Activity: C6d. Junior city councils/chambers	Count	106	7
			Row N %	93.8%	6.2%
		Activity: C6e. Church and welfare volunteer/youth groups	Count	51	62
			Row N %	45.1%	54.9%
		Activity: C6f. Student vacation work or part time work	Count	113	0
			Row N %	100.0%	.0%
	Y	Activity: C6a. Making things to sell personally	Count	33	24
			Row N %	57.9%	42.1%
		Activity: C6b. Fundraising activities for your school/church	Count	35	22
			Row N %	61.4%	38.6%
		Activity: C6c. Community fundraising initiatives	Count	57	0
			Row N %	100.0%	.0%
		Activity: C6d. Junior city councils/chambers	Count	51	6
			Row N %	89.5%	10.5%
		Activity: C6e. Church and welfare volunteer/youth groups	Count	25	32
			Row N %	43.9%	56.1%
		Activity: C6f. Student vacation work or part time work	Count	57	0
			Row N %	100.0%	.0%

Inferential Statistical Tests

PROPOSITION 1:

Descriptives

A10. Education Level		Frequency	Percent
Valid	Matric / Grade 12	18	10.6
	Certificate	10	5.9
	Diploma	30	17.6
	Degree	52	30.6
	Post Graduate	60	35.3
	Total	170	100.0

[R] A10. Education Level		Frequency	Percent
Valid	Matric / Grade 12	18	10.6
	Higher	152	89.4
	Total	170	100.0

A1. Age * A9. Entrepreneurial Courses Attended

Crosstab			A9. Entrepreneurial Courses Attended		Total
			No	Yes	
A1. Age	X	Count	49	64	113
		% within A1. Age	43.4%	56.6%	100.0%
	Y	Count	26	31	57
		% within A1. Age	45.6%	54.4%	100.0%
Total		Count	75	95	170
		% within A1. Age	44.1%	55.9%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-	Exact Sig. (2-	Exact Sig. (1-

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.078a	1	.780		
Continuity Correctionb	.013	1	.908		
Likelihood Ratio	.078	1	.780		
Fisher's Exact Test				.870	.453
Linear-by-Linear Association	.077	1	.781		
N of Valid Cases	170				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.15.					

A1. Age * [R] A10. Education Level

Crosstab					
			[R] A10. Education Level		Total
			Matric / Grade 12	Higher	
A1. Age	X	Count	8	105	113
		% within A1. Age	7.1%	92.9%	100.0%
	Y	Count	10	47	57
		% within A1. Age	17.5%	82.5%	100.0%
Total		Count	18	152	170
		% within A1. Age	10.6%	89.4%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.382a	1	.036		
Continuity Correctionb	3.347	1	.067		
Likelihood Ratio	4.129	1	.042		
Fisher's Exact Test				.061	.036
Linear-by-Linear Association	4.356	1	.037		
N of Valid Cases	170				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.04. b. Computed only for a 2x2 table					

PROPOSITION 2:

Descriptives

A11_1. Computer Literacy

		Frequency	Percent
Valid	Average user	30	17.6
	Advanced user	96	56.5
	Expert user	42	24.7
	Total	168	98.8
Missing	System	2	1.2
Total		170	100.0

A11_2. IT Role Daily

		Frequency	Percent
Valid	Cannot do without it	95	55.9
	Major role	65	38.2
	Minor role	8	4.7
	Very little/minimal	1	.6
	Total	169	99.4
Missing	System	1	.6
Total		170	100.0

A12. IT Availability

		Frequency	Percent
Valid	No	114	67.1
	Yes	56	32.9
	Total	170	100.0

A13. Internet Access 24/7

		Frequency	Percent
Valid	No	17	10.0
	Yes	153	90.0
	Total	170	100.0

A1. Age * A12. IT Availability

Crosstab					
			A12. IT Availability		Total
			No	Yes	
A1. Age	X	Count	87	26	113
		% within A1. Age	77.0%	23.0%	100.0%
	Y	Count	27	30	57
		% within A1. Age	47.4%	52.6%	100.0%
Total		Count	114	56	170
		% within A1. Age	67.1%	32.9%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	15.051a	1	.000		
Continuity Correctionb	13.740	1	.000		
Likelihood Ratio	14.717	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	14.962	1	.000		
N of Valid Cases	170				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 18.78. b. Computed only for a 2x2 table					

A1. Age * A13. Internet Access 24/7

Crosstab					
			A13. Internet Access 24/7		Total
			No	Yes	
A1. Age	X	Count	8	105	113
		% within A1. Age	7.1%	92.9%	100.0%
	Y	Count	9	48	57
		% within A1. Age	15.8%	84.2%	100.0%
Total		Count	17	153	170
		% within A1. Age	10.0%	90.0%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.194a	1	.074		
Continuity Correctionb	2.299	1	.129		
Likelihood Ratio	3.019	1	.082		
Fisher's Exact Test				.103	.067
Linear-by-Linear Association	3.175	1	.075		
N of Valid Cases	170				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.70. b. Computed only for a 2x2 table					

PROPOSITION 3:

Reliability Analyses

Reliability Statistics	
Cronbach's Alpha	N of Items
.768	5

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B1a. Likelihood of recognizing a possible business opportunity	.667	.679
B1b. Ease with which you creatively come up with new ideas and initiatives	.623	.694
B1c. The likelihood that you will be able to solve problems and find solutions	.429	.761
B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing	.537	.727
B1e. Building a network of associates and professional contacts for future leveraging	.462	.757

Reliability Statistics	
Cronbach's	N of

Alpha	Items
.452	4

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B2a. I enjoy dealing with difficult problems	.311	.332
B2b. I usually seek advice of others in solving problems	.160	.484
B2c. Problems slow things down but I usually find a solution	.200	.434
B2d. I see problems as opportunities	.373	.260

Descriptives

Statistics	
Aptitudes	
N	Valid	170
	Missing	0
Mean		3.6624
Std. Deviation		.67491

T-Test

	A1. Age	N	Mean	Std. Deviation
Aptitudes	X	113	3.7221	.63832
	Y	57	3.5439	.73364

Independent Samples Test			
Equal variances assumed			
	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Aptitudes	1.634	168	.104

PROPOSITION 4:

Descriptives

Leadership Orientation			
		Frequency	Percent
Valid	I have never been in a leadership role	7	4.1
	I work with the team as a member	65	38.2
	I usually take the lead in team initiatives	63	37.1
	I tend to be an independent leader of new initiatives	35	20.6
	Total	170	100.0

[R] Leadership Orientation			
		Frequency	Percent
Valid	Not	135	79.4
	Entrepreneur	35	20.6
	Total	170	100.0

Crosstabs

A1. Age * [R] Leadership Orientation Crosstabulation					
			[R] Leadership Orientation		Total
			Not	Entrepreneur	
A1. Age	X	Count	86	27	113
		% within A1. Age	76.1%	23.9%	100.0%
	Y	Count	49	8	57
		% within A1. Age	86.0%	14.0%	100.0%
Total		Count	135	35	170
		% within A1. Age	79.4%	20.6%	100.0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.252a	1	.133		
Continuity Correctionb	1.690	1	.194		

Likelihood Ratio	2.368	1	.124		
Fisher's Exact Test				.162	.095
Linear-by-Linear Association	2.239	1	.135		
N of Valid Cases	170				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.74. b. Computed only for a 2x2 table					

PROPOSITION 5:

Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.680	3

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve	.362	.735
B5b. I have always known what I want to do with and achieve in my life	.587	.452
B5c. I tend to plan long term in order to achieve my goals	.564	.488

Reliability Statistics	
Cronbach's Alpha	N of Items
.473	3

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted

B5e. I tend to set short term objectives and goals of things I will achieve in the next few days or weeks	.368	.235
B5f. I tend to focus on the importance of the here and now rather	.291	.383

Descriptives

Statistics		
Vision - Long Term		
N	Valid	170
	Missing	0
Mean		3.8039
Std. Deviation		.73029

T-Test

	A1. Age	N	Mean	Std. Deviation
Vision - Long Term	X	113	3.7404	.72338
	Y	57	3.9298	.73392

Independent Samples Test			
Equal variances assumed			
	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Vision - Long Term	-1.604	168	.111

PROPOSITION 6:

Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.624	9

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B6a. An immediate family members is an entrepreneur	.401	.569
B6b. I was raised to be self-sufficient and to act without support from others	.340	.587
B6c. My family actively supports my new ideas	.286	.601
B6d. I prefer to make decisions independently without help from others	.136	.637

B6e. A friend or acquaintance is an entrepreneur	.431	.559
B6f. I was raised to believe in the value of advice and support from others	.331	.591
B6g. I prefer to discuss options with others before deciding	.255	.608
B6h. I am aware of where and who to go to, to ask for help	.408	.574
B6i. Even when my ideas are not supported or accepted I pursue them	.162	.625

Removed D and I

Reliability Statistics	
Cronbach's Alpha	N of Items
.655	7

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B6a. An immediate family members is an entrepreneur	.461	.587
B6b. I was raised to be self-sufficient and to act without support from others	.209	.665
B6c. My family actively supports my new ideas	.350	.624
B6e. A friend or acquaintance is an entrepreneur	.421	.601
B6f. I was raised to believe in the value of advice and support from others	.440	.601
B6g. I prefer to discuss options with others before deciding	.368	.619
B6h. I am aware of where and who to go to, to ask for help	.333	.628

Descriptives

Statistics		
Influence – Family, Networks		
N	Valid	170
	Missing	0
Mean		3.6008
Std. Deviation		.64093

T-Test

Group Statistics					
	A1. Age	N	Mean	Std. Deviation	Std. Error Mean
Influence – Family, Networks	X	113	3.6220	.61798	.05813
	Y	57	3.5589	.68792	.09112

Independent Samples Test			
Equal variances assumed			
	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Influence – Family, Networks	.605	168	.546

Proposition 7:

Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.632	4

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B7a. I have developed new products and/or services during my working career	.474	.553
B7b. I have had ideas about making processes more efficient in my work	.553	.508
B7c. I am comfortable to experiment with untried and untested methods	.523	.487
B7d. I prefer to solve problems in my own way	.221	.676

Removed D

Reliability Statistics	
Cronbach's Alpha	N of Items

.676	3

Item-Total Statistics

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B7a. I have developed new products and/or services during my working career	.521	.640
B7b. I have had ideas about making processes more efficient in my work	.559	.575
B7c. I am comfortable to experiment with untried and untested methods	.518	.556

Descriptives

Statistics

Creativity and innovation

N	Valid	170
	Missing	0
Mean		3.8137
Std. Deviation		.85116

T-Test

	A1. Age	N	Mean	Std. Deviation
Creativity and innovation	X	113	3.9351	.84381
	Y	57	3.5731	.82075

Independent Samples Test

Equal variances assumed

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Creativity and innovation	2.665	168	.008

Summed up Traits

Statistics

N	Valid	170
	Missing	0
Mean		6.50

T-Test

Group Statistics				
	A1. Age	N	Mean	Std. Deviation
Creativity and innovation - Traits	X	113	6.48	2.075
	Y	57	6.54	1.871

Independent Samples Test			
Equal variances assumed			
	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Creativity and innovation - Traits	-.202	168	.840

PROPOSITION 8:

Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.962	11

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
D1a. Starting a business could be possible for me	.810	.958
D1b. A career as an entrepreneur or business owner is attractive to me	.898	.955
D1c. I believe I would be successful in starting a business	.841	.958
D1d. I have no doubts about starting my own business	.682	.963
D1e. If I had the opportunity and resources, I would love to start a business	.792	.959
D1f. I would rather be a business owner or	.829	.958

entreprenuer than employed in a rewarding job		
D1g. I am determined to create a business venture in the future	.860	.957
D1h. If I tried to start a business, I believe that I would have a high chance of being successful	.750	.960
D1i. Being a business owner or an entrepreneur would give me great satisfaction	.870	.957
D1j. My professional goal is to establish my own business	.895	.956
D1k. Being an entrepreneur implies more advantages than disadvantages to me	.806	.959

Descriptives

Statistics	
Behavioural Aspects - Attitude	
N Valid	170
Missing	0
Mean	3.9348
Std. Deviation	.98540

T-Test

Group Statistics					
	A1. Age	N	Mean	Std. Deviation	Std. Error Mean
Behavioural Aspects - Attitude	X	113	3.8986	.92572	.08708
	Y	57	4.0064	1.09938	.14562

Independent Samples Test			
Equal variances not assumed			
	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Behavioural Aspects - Attitude	-.635	97.015	.527

Ad-hoc Tests
Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	N of Items
.813	8

Item-Total Statistics		
	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E1a. Private associations (e.g. Chamber of Commerce)	.437	.805
E1b. Government support bodies (e.g. The DTI, SEDA, Khula, National Youth Development Agency etc.)	.524	.793
E1c. Loans in specially favourable terms	.585	.784
E1d. Technical aid for business start-ups	.609	.781
E1e. Formal coaching and mentoring	.627	.777
E1f. Business clubs and institutes	.703	.769
E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo	.343	.820
E1h. Internet, own websites or blogs etc.	.438	.805

Descriptives

Statistics		
Support Networks		
N	Valid	170
	Missing	0
Mean		3.2868
Std. Deviation		.69066

T-Test

Group Statistics				
	A1. Age	N	Mean	Std. Deviation
Support Networks	X	113	3.2788	.70731
	Y	57	3.3026	.66226

Independent Samples Test			
Equal variances assumed			
	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Support Networks	-.212	168	.832

Questionnaire

In the questionnaire value-scales below, some statements are positive while others are negative. For each statement, you are asked to respond to the items by marking what you consider to be the most appropriate answer, or filling in the blanks. Choose only one answer to each statement/question.

The questionnaire will take approximately 20 minutes to complete. Please respond to every statement/question to ensure that that we can successfully use your input (exclusion or not answering a question/s will render the survey unable to be processed by the system).

Thank you very much for your cooperation.

SECTION A: Demographics

A1. Age

A1a.20 to 29	A1b.30 to 45

A2. Gender

A2a. Male	A2b.Female

A3. Nationality:

A3a.

A4. How many people are living in your household? (Including yourself):

A4a.

A5. Roughly speaking, what is the total monthly (gross) income in your household?
(Adding up all revenues from any person living in the household):
Select from:

A5a. No income
A5b. R 1 to R 1600
A5c. R 1601 to R 3200
A5d. R 3201 to R6400
A5e. R 6401 to R 12800
A5f. R 12800 to R 25600
A5g. R 25600 to R 51200
A5h. R 51201 +

A6. How would you describe yourself in terms of population group? **This information is needed for Employment Equity purposes only)**
Select from:

A6a. Black
A6b. Coloured
A6c. Indian or Asian
A6d. White

A7. What best describes your current work status:
Select from:

A7a. Paid employee
A7b. Unpaid worker
A7c. Self-employed
A7d. Employer
A7e. Full time student
A7f. Active Job seeker
A7g. Unemployed

A8. Have you ever been self-employed or the owner of a Small or Medium-sized Enterprise (SME)?

A8a. Yes	A8b. No

Experience, education and business training

A9. Have you ever participated in any programs that taught entrepreneurial or enterprise initiation skills?

A9a. Yes	A9b. No

A10. Do you have a degree or other tertiary diploma or qualifications?

A10a. Yes	A10b.No

Technology

A11. What influence does technology or IT play in your daily working life?
Select from:

A11a. Cannot do without it
A11b. Major
A11c. Minor
A11d. Very little/minimal
A11e. Nothing

A11. Rate your level of computer literacy:
Select from:

A11a. Expert user
A11b. Advanced
A11c. Average
A11d. Basic

A11e. None

A12. Was technology/IT freely available in your household during your childhood or formative years?

A12a. Yes	A12b. No

A13. Do you have internet access available 24/7?

A13a. Yes	A13b. No

SECTION B: Drivers for Entrepreneurial action

Aptitudes

B1. How do you rate yourself relative to your peers, colleagues and friends on the following aptitudes?

Indicate from 1 = very little aptitude through 4 average, about the same as my peer group to 5 = higher aptitude than most people:

Aptitudes *(Codification: high score 5 = entrepreneurial aptitude)*	1	2	3	4	5
B1a. Likelihood of recognizing a possible business opportunity					
B1b. Ease with which you creatively come up with new ideas and initiatives					
B1c. The likelihood that you will be able to solve problems and find solutions					
B1d. The ease with which you can effectively communicate your ideas to others verbally and in writing					
B1e. Building a network of associates and professional contacts for future leveraging					

Problem solving

B2. When problem solving, I tend to: Indicate from 1 = very little aptitude through 4 average, about the same as my peer group; to 5 = higher aptitude than most people:

Problem solving *(Codification: high score 5 = high aptitude)*	1	2	3	4	5
B2a. I enjoy dealing with difficult problems					■
B2b. I usually seek advice of others in solving problems					■
B2c. Problems slow things down but I usually find a solution					■
B2d. I see problems as opportunities					■

Describing self in terms of abilities and skills

B3. Describe yourself

Rank each item below from 1-4 (1 = least like me; 2 = slightly like me; 3= somewhat like me

to 4 = most like me) so that in each group, you will have numbered the items from 1 to 4 using each number only once.

For example:

My strongest skills in order of strength are my abilities to find my way around in strange places by:	Rank
Bi) Using a GPS	1
Bii) Reading a map	3
Biii) Asking directions	2
Biv) Using my instincts and sense of direction	4

Now complete the following:

My strongest skills in order of strength are my abilities to:	Rank
B3a. Analyze situations	4
B3b. Develop Interpersonal relationships	2
B3c.Build a network of contacts for possible future leveraging	3
B3d. Excite and motivate others	1

The best way to describe me in order of my strengths is:	Rank
B3e. Technical expert	2
B3f. Good listener	4
B3g. Skilled negotiator	3
B3h. Inspirational leader	1

What helps me most to be successful are my is my abilities to:	Rank
B3i. Make good decisions	4
B3j. Coach and develop people	1
B3k. Build strong alliances	3
Bs3l. Energize and inspire others	2

What people are most likely to notice about me is my:	Rank
B3m. Attention to detail	3
B3n. Concern for people	1
B3o. Ability to persevere, in the face of conflict and opposition	4
B3p. Charisma	2

My most important leadership trait is:	Rank	
B3q. Clear, logical thinking	2	
B3r. Caring and support for others	1	
B3s. Toughness and aggressiveness	4	
B3t. Imagination and creativity	3	

Leadership Orientation

B4. When working in a leadership role, I tend to:

Select from:

B4a. I have never been in a leadership role
B4b. I work with the team as a member
B4c. I usually take the lead in team initiatives
B4d. I tend to be an independent leader of new initiatives

Vision

B5. Indicate your level of attraction to the statements below as follows:

1 = minimum attraction to 5 = maximum attraction:

Vision - Long term perspective *(Codification high score 5 = visionary)*	1	2	3	4	5
B5a. I tend to have ideas and dreams of what I would one day in the future like to achieve					■
B5b. I have always known what I want to do with and achieve in my life					■
B5c. I tend to plan long term in order to achieve my goals					■

B5. Indicate your level of attraction to the statements below as follows:

1 = minimum attraction to 5 = maximum attraction:

Vision – Short term perspective *(Codification high score 5 = not visionary)*	1	2	3	4	5
B5d. My goals and plans are practical and apply to my daily life	■				
B5e. I tend to set short term objectives and goals of things I will achieve	■				

	1	2	3	4	5
in the next few days or weeks	■				
B5f. I tend to focus on the importance of the here and now rather than future possibilities	■				

Influence – family, networks

B6. To what extent do you consider the following family and network factors to impact your decision-making and motivation? Indicate from 1= not at all important in motivating me to 5 = extremely important in motivating me:

Influence *(Codification high score 5 = strong influence. Controls incl.)*	1	2	3	4	5
B6a. An immediate family members is an entrepreneur				■	■
B6b. I was raised to be self-sufficient and to act without support from others					■
B6c. My family actively supports my new ideas					■
B6d. I prefer to make decisions independently without help from others					■
B6e. A friend or acquaintance is an entrepreneur					■
B6f. I was raised to believe in the value of advice and support from others					■
B6g. I prefer to discuss options with others before deciding					■
B6h. I am aware of where and who to go to, to ask for help					■
B6i. Even when my ideas are not supported or accepted I pursue them					■

Creativity and innovation

B7. To what extent do you consider the following factors to be part of your personality or character as a person? Indicate from 1= hardly true of me 5 = very true of me

Creativity/Innovation *(Codification high score 5 = strong creativity)*	1	2	3	4	5
B7a. I have developed new products and/or services during my working career					
B7b. I have had ideas about making processes more efficient in my work					
B7c. I am comfortable to experiment with untried and untested methods					
B7d. I prefer to solve problems in my own way					

B8. How do you see yourself according to the statements below? Please answer either yes' or 'no' once for each statement:

Traits *(Codification YES score = strong intent)*	Yes	No
B8a. I generally take a long term view toward achieving my goals	■	
B8b. Like going with the flow and deciding on the spur of the moment	■	
B8c. I believe that concern for people and relationships is very important for business success	■	
B8d.Prefer a flexible lifestyle where I make plans as needs arise	■	
B8e. I tend to make decisions quite easily and often reevaluate my decision and change the decision depending on circumstances	■	
B8f. I like surprises and frequent variety	■	
B8g. I enjoy experimenting with new ideas	■	

B8. How do you see yourself according to the statements below? Please answer either yes' or 'no' once for each statement:

Traits *(Codification YES score = weak intent)*	Yes	No
B8h. Routine – I prefer predictable outcomes		■
B8i.Structured – I prefer to work in an organized way and follow a plan one step at a time to achieve		■
B8j. I prefer more immediate evidence and reward for my achievements		■
B8k. Prefer a planned lifestyle with predictable outcomes		■

SECTION C: Perceived feasibility and resource advantage

Social circumstances

C1. To what extent do you consider the following factors to contribute to successfully starting your own business? Indicate from 1= not at all important to 5 = extremely important:

Social circumstance *(Codification high score 5 = social circumstances conducive to EI)*	1	2	3	4	5
C1a. Access to transport 24/7					☐
C1b. The business can be run from home					☐
C1c. Access to a large network of people					☐
C1d. Access to funding					☐
C1e. People and resources are freely available and are easy to find					☐

Experience

C2. Do you have experience being an employee in a company or business?

C2a.Yes	C2b. No

C3. In what capacity were you last employed? E.g. Line Manager

C3a. Employee
C3b.Line manager
C3c. CEO/Executive level

C4. Have you been in charge of other people whilst you were an employee?

C4a. Yes	C4b. No

C5. Have you ever participated in or initiated any business related activities? E.g. fund raising initiatives at school, making and selling things, etc

C5a. Yes	C5b. No

C6. What type of activities? Mark all relative items from the list below (can be as many as you actually participated in)

C6a. Making things to sell personally
C6b. Fundraising activities for your school/church
C6c. Community fundraising initiatives e.g. SPCA, Cansa, Junior Lions. Rotary or other student exchange programmes
C6d. Junior city councils/chambers
C6e. Church and welfare volunteer/youth groups
C6f. Student vacation work or part time work e.g. waitering, paper deliveries etc.

SECTION D: Propensity to act/intent

Behavioural Aspects - Attitude

D1. Indicate your level of agreement for each of the following statements from
1= Total disagreement to 5 = Total agreement:

Attitude Statements *(Codification high score 5 = attitude conducive to EI)*	1	2	3	4	5
D1a. Starting a business could be possible for me					
D1b. A career as an entrepreneur or business owner is attractive to me					
D1c. I believe I would be successful in starting a business					
D1d. I have no doubts about starting my own business					
D1e. If I had the opportunity and resources, I would love to start a business					
D1f. I would rather be a business owner or entrepreneur than employed in a rewarding job					
D1g. I am determined to create a business venture in the future					
D1h. If I tried to start a business, I believe that I would have a high chance of being successful					
D1i. Being a business owner or an entrepreneur would give me great satisfaction					
D1j. My professional goal is to establish my own business					
D1k. Being an entrepreneur implies more advantages than disadvantages to me					

SECTION E: Support Networks

Association and Support

E1. Indicate your level of agreement for each of the following statements about supportive institutions and structures from 1= Total disagreement to 5 = Total agreement:

The following institutions offer worthwhile support to entrepreneurs:

Support institution and structures *(Codification high score 5 = strong agreement)*	1	2	3	4	5
E1a. Private associations (e.g. Chamber of Commerce)					
E1b. Government support bodies (e.g. The DTI, SEDA, Khula, National Youth Development Agency etc.)					
E1c. Loans in specially favourable terms					
E1d. Technical aid for business start-ups					
E1e. Formal coaching and mentoring					
E1f. Business clubs and institutes					
E1g. Social networking e.g. Facebook, Twitter, MySpace, LinkedIn, Plaxo					
E1h. Internet, own websites or blogs etc.					

	1	1	0	form-a611fed7a0	webform_client_

Submit Survey

<u>Appendix 3 – Consistency matrix</u>

TITLE: Generation X and Y: a comparative analysis of their entrepreneurial intent to initiate a business venture.

Research propositions	Literature review	Data collection	Analysis
Proposition 1: There are no significant differences in formal education or entrepreneurial training that serve as a business understanding foundation for entrepreneurial intent between X generation and Y generation individuals.	(Herrington, Kew, & Kew, 2010) (Acs & Virgill, 2009) (Netshitenzhe & Chikane, 2006) (Antonites & van Vuuren, 2005) (Audretsch, Bönte, & Keilbach, 2008)	Questionnaire	Chi-square Fisher's Exact test (sig. 2-tailed)
Proposition 2: There are no significant differences in exposure to information technology (IT) and the realisation of its importance in entrepreneurial activity increasing the propensity towards entrepreneurial intent between X generation and Y generation individuals.	(Cennamo & Gardner, 2008) (Loughlin & Barling, 2001) (Nicholas, 2008)	Questionnaire	Chi-square Fisher's Exact test (sig. 2-tailed)
Proposition 3: There are no significant differences in the extent of entrepreneurial aptitude, as measured by ability, skill sets or problem solving ability as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.	(Kropp, Lindsay, & Shoham, 2006) (Goman, 2006) (Choi, Lèvesque, & Shepherd, 2008) (Ismail, et al., 2009)	Questionnaire	Independent t-test

Proposition 4: There are no significant differences in operational leadership orientation as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.	(Townsend, Busenitz, & Arthurs, 2010) (Herrington, Kew, & Kew, 2010) (Crane & Crane, 2007) (Gill, 2009)	Questionnaire	Chi-square Fisher's Exact test (sig. 2-tailed)
Proposition 5: There are no significant differences in short- or long-term visionary perspective as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.	(Acs Z. , 2008) (McGuire, By, & Hutchings, 2007) (Xiao, Marino, & Zhuang, 2010) (Choi, Lèvesque, & Shepherd, 2008)	Questionnaire	Independent t-test
Proposition 6: There are no significant differences in influences from family or support organisations or networks regarding motivation and decision-making as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.	(Begley & Boyd, 1986) (Dries, Pepermans, & De Kerpel, 2008) (Burt, 1997) (Kloosterman, Van der Leun, & Rath, 1998) (Jenssen & Koenig, 2002)	Questionnaire	Independent t-test
Proposition 7: There are no significant differences in the creative or innovative behaviours as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.	(Alvarez & Barney, 2007) (Xiao, Marino, & Zhuang, 2010) (Kodithuwakkua & Rosa, 2002) (Blackman, 2009) (Sarasvathy, 2001) (Wu, Cheng, Ip, & McBride-Chang, 2005)	Questionnaire	Independent t-test

Proposition 8: There are no significant differences in the propensity to act in an entrepreneurial manner in terms of attitude towards risk-taking, and self-confidence factors as required for the propensity toward entrepreneurial intent between X generation and Y generation individuals.	(Wong, Gardiner, Lang, & Coulon, 2008) (Crane & Crane, 2007) (Townsend, Busenitz, & Arthurs, 2010) (Webb, Kistruck, Ireland, & Ketchen Jr., 2010) (Antonites & van Vuuren, 2005) (Wu, Cheng, Ip, & McBride-Chang, 2005) (Begley & Boyd, 1986) (Mair & Marti, 2009) (Beugelsdijk & Noorderhaven, 2005)	Questionnaire	Independent t-test