
South African female entrepreneurs: a profile and investigation of their risk taking propensity

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Declaration

I declare that this research report is my own, unaided work. It is being submitted for the degree of Masters of Arts (Organisational Psychology) at the University of the Witwatersrand, Johannesburg.

It has not been submitted before for any degree or examination at any university, nor has it been prepared under the aegis or with the assistance of any other body, or organisation, or person outside the University of the Witwatersrand.

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Abstract

Entrepreneurial activity is a vital part of any economy whether developed or developing. In South Africa the primary focus of the government has been on the development of previously disadvantaged communities and designing programs to encourage the participation of women in entrepreneurship. This study sought to profile South African female entrepreneurs as well as investigate their risk taking propensity in relation to other constructs. T-tests as well as ANOVAs were conducted on data obtained from 122 female entrepreneurs across South Africa. The results indicated that the female entrepreneurs in the current study were typically white, English speaking, married with children, were well educated and possessed previous working experience mainly in managerial positions. The results also indicated a significant difference in risk taking propensity according to age with entrepreneurs who are 35 years and younger having a higher risk taking propensity than those who are 36 years and older. However, no significant differences were found in risk taking according to entrepreneurial motivations, gender role orientation, level of education and previous experience. The practical implications of the study are discussed together with the limitations.

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CHAPTER 1

Introduction

All economies need entrepreneurial activity as it is a vital part of any economy whether developed or developing in nature. For developed economies, entrepreneurial activity renews economies that have stagnated and helps alleviate the problem of unemployment by creating new job opportunities (Gurol & Atsan, 2006). For developing economies however, entrepreneurial activity is very important, since entrepreneurship can be seen as an engine for economic progress, job creation and social adjustment (Gurol & Atsan, 2006).

Entrepreneurs have long been acknowledged in research as playing an important role in stimulating economic growth as well as contributing to regional development. Entrepreneurs are not important just because they exist but because they prosper in creating businesses (Aldrich & Martinez, 2001). These businesses in turn are in a position to create new job opportunities that did not exist previously. Entrepreneurs have also demonstrated unique leadership abilities and have made a significant contribution to economic growth worldwide (Sowmya, Majumdar & Gallant, 2010).

Entrepreneurs have an important role to play in the South African society as well as in the economy. South Africa faces various economic, political and social challenges in its new democracy, one of which is that of growing unemployment (Herrington, Kew & Kew 2009). South Africa's unemployment and poverty levels remain very high, by international standards, for a country with a relatively high level of per capita income (Herrington et al., 2009). Entrepreneurial activity has been increasingly accepted as a practical means for addressing South Africa's socioeconomic challenges (Greene, Hart, Gatewood, Brush & Carter, 2003). Thus small business growth or new business formation is encouraged by national economic policies to stimulate economic growth and wealth creation (Gurol & Atsan, 2006). Thus studying entrepreneurship in South Africa makes a valuable contribution to the country's economic agenda.

Women have made significant contributions to their economies and communities through entrepreneurship; for example women are said to produce more than 80% of food for sub Saharan Africa (Woldie & Adersua, 2004). No country can achieve economic success if it

utilises less than half of its business resources. South Africa is no exception. More than half of South Africa's business force comprises of women, however their contribution to the economy has not been fully nurtured (DTI, 2005). In recent decades, one of the most significant developments in small business ownership in the United States and worldwide has been the great influx of women seeking to create their own job opportunities (Loscocco & Robinson, 1991). The available, albeit limited, information on female entrepreneurs shows that the involvement of women in entrepreneurial activity and the consequent self-employment rates, which include women who own and operate their own businesses, are increasing around the world, especially in urban areas (Levent, Masurel & Nijkamp, 2003).

Women entrepreneurs have changed the face of modern business both in their contribution to large organisations as well as in their contribution to the economy through running their own businesses. Lavoie (1985) defined the female entrepreneur as the female head of a business who has taken the initiative of launching a new venture, who accepts the associated risks and the financial, administrative and social responsibilities, and who is effectively in charge of its day-to-day management. Even with the increasing number of females becoming entrepreneurs the business world still remains a largely male dominated domain (Winn, 2005).

In addition, most of what researchers have come to understand about female entrepreneurs has been based on studies focused on male entrepreneurs who have started new businesses ventures. Because the number of women starting their own businesses has increased so rapidly across the globe, it is important to understand whether their experiences are different from those of their male colleagues (Buttner, 1993). Understanding women's experiences can help us better understand the education and training needs of potential women entrepreneurs (Anna, Chandler, Jansen, & Mero, 1999).

As mentioned before, entrepreneurial activity is critical for developing countries. Recent studies have shown that female entrepreneurship tends to be more prevalent in developing economies than in developed ones (Minniti & Naude, 2010). This is due in part to the fact that women in developing countries still face some barriers to entry into the labour market and as a result they often have to resort to entrepreneurship as a way out of unemployment and poverty. South Africa which is part of the developing world has also seen a surge in the number of female entrepreneurs. More and more women have entered the entrepreneurship arena and have made a significant contribution to society as a result. For example in the

United States one in every four persons is employed by a woman-owned firm (Woldie & Adersua, 2004). Levent et al. (2003) stated:

“Female entrepreneurs can be identified as having untapped job-creating potential; while they reflect different cultures and open-ended capacities for creating economic growth in cities, they are also special in urban economic life because of their growing numbers and their contributions to economic diversity” (Levent et al., 2003, p. 1131).

Female entrepreneurship matters for not only for individuals, but for communities and for countries as well. Female entrepreneurs are becoming more noticeable not only in the industries where they traditionally operated, but also in less traditional or non-traditional sectors (i.e. manufacturing, construction and transportation), and in new growth areas such as financial services and communication (Levent et al., 2003). Thus, it is important to study female entrepreneurship in South Africa because of the significant contribution it makes towards economic growth and stability.

One of the aims of the present study was to provide a profile of the characteristics of female entrepreneurs in the current study. Demographic variables such as their current age, the age at which they started their businesses, marital status, population group, home language, level of education and previous work experience will be used to describe and better understand these entrepreneurs. The study also investigates some statistical relationships in the biographical variables and the risk taking propensity of these female entrepreneurs.

The research report is structured in six chapters. Chapter one provides an introduction into the study and the importance of studying female entrepreneurs in South Africa. Chapter two provides an exploration of entrepreneurship and the variables of interest in the current study through addressing some of the debates, approaches, and research that have been associated with this field and these variables. Finally, based on the theoretical underpinning, the research questions are presented. Chapter Three provides an overview of the methodological procedures that have been utilised in order to effectively answer the research questions. It focuses on the research design, the composition of the sample, the procedures used, as well as the demographic information of the participants that form part of the present research. Finally, the statistical analyses conducted on the data gathered are discussed.

Chapter four presents the results of the statistical analyses conducted. Chapter five provides a discussion of the findings, both in terms of the theoretical underpinnings and the research

questions described in chapter two. This is followed by the limitations of the present study, the practical implications of the study as well as suggestions for future research. Finally, chapter six provides a conclusion for the present study.

CHAPTER 2

Literature Review

This chapter provides a literature review of theory and research relating to the key variables of interest in this study. A definition of entrepreneurship and of what constitutes an entrepreneur will be provided first. This will be followed by a review of the research and theory on the entrepreneur as an individual as well as demographic variables used to profile female entrepreneurs in this study.

2.1 Entrepreneurship

2.1.1 The importance of entrepreneurship for economies.

As already mentioned, entrepreneurship plays an important role in the economic development of any country. In the past few years the important role played by new and small firms in job generation and in regional economic development has come to be widely recognised by researchers as well as governments (Cooper & Dunkelberg, 1986). As a result the concept of entrepreneurship has, in recent years, become a key focus of research as well as government policies in many regions of the world. Entrepreneurship “is considered to be an important mechanism for economic development through job creation, innovation and its welfare effect, which has led to a burgeoning policy interest in national-level entrepreneurial activity” (Herrington et al., 2009, p. 7).

Entrepreneurship plays an even more important role in today’s economic climate when countries are faced with various challenges brought about by the economic downturn (Sowmya, Majumdar & Gallant, 2010). Entrepreneurship as a force can influence growth and recovery through increasing innovation, generating employment and empowering societies (World Economic forum, 2009 as cited in Sowmya, et al., 2010).

Entrepreneurship is manifested through the small to medium enterprise (SME) sector, and through this medium creates significant employment opportunities and economic output in many countries (Nicheter & Goldmark, 2009). The SME share of total employment tends to be higher in developing countries than in developed ones (Tybout, 2000). According to studies that were conducted in five African countries (Botswana, Kenya, Malawi, Swaziland, and Zimbabwe) it was found that SMEs generate almost twice the level of employment that

registered, large-scale enterprises and the public sector do (Mead & Liedholm, 1998). Despite its acknowledged contribution to economic welfare, there exists no universally accepted definition of entrepreneurship.

There are many definitions of entrepreneurship that have been presented in the research, each influenced by different assumptions. Following is a discussion of some of these definitions and a presentation of the definition that has been adopted for the purposes of the current study.

2.1.2 Defining Entrepreneurship and the entrepreneur.

Entrepreneurs have existed throughout history and yet the concept of entrepreneurship remains elusive in research literature. Researchers involved in the domain of entrepreneurship have conflicting views about whom and what constitutes an entrepreneur or entrepreneurship. The focus of entrepreneurship research has been the study of small firms from a variety of disciplines (e.g., psychology, sociology, economics, management, anthropology, and regional sciences) with each discipline providing different insights and definitions to entrepreneurship (Rauch & Frese, 2000).

In attempting to define an entrepreneur, some researchers focus on who the entrepreneur is, and the characteristics that set him/her apart from non-entrepreneurs (Begley and Boyd, 1987; Mescon & Montanary, 1981) while others focus on what the entrepreneur does or entrepreneurial activities (Carland, Hoy, Boulton & Carland, 1984; Martin, 1982). There are also those researchers who utilise entrepreneurial motives in their definitions, opting to rather focus on the underlying reasons for why people become engaged in entrepreneurship as well as those who consider the environment as important in defining and becoming an entrepreneur (Deakins, 1996; Gartner, 1988). This lack of agreement in the definition of an entrepreneur is further exacerbated by the fact that entrepreneurship is one of those fields that attract researchers from a variety of academic disciplines, and these researchers tend to view the concept through the lens of their respective disciplines.

Many scholars in the field have referred to traits in order to define entrepreneurs and distinguish them from other members of the population. According to McClelland (1961) personality traits such as need for achievement, risk-taking propensity, and willingness to take personal responsibility play an important role in the definition of an entrepreneur. For example, Rotter (1966) argues that entrepreneurs are individuals who are high on internal

locus of control. Entrepreneurs have also been defined as those individuals who thrive under uncertainty (Khilstrom & Laffont, 1979), have been considered to be innovators and creators (Schumpeter, 1934) and implementers of ideas (Baumol, 1968). Most researchers agree that risk taking propensity, innovation as well as an understanding of how the market works are among the important characteristics of a successful entrepreneur (Casson, 1982).

As evidenced by the definitions offered above there exists a schism even among researchers espousing a trait definition with regards to which entrepreneurial trait is important in distinguishing the entrepreneur from non-entrepreneurs. Risk taking for example has consistently been cited in research (Mill, 1984; Palmer, 1971; Liles, 1974) as a characteristic that sets an entrepreneur apart from non-entrepreneurs, consequently most researchers emphasise risk taking in their definitions. Mill for example (1848, as cited in Carland, et al., 1984), held the belief that the most important trait that separates entrepreneurs from managers was the assumption of risk. Schumpeter (1934) however, disagreed with the view that risk taking was inherent in entrepreneurship and stated that entrepreneurs were not necessarily owners; therefore, risk taking propensity would not be a central trait. He in turn places more importance on the role of innovation than on the aspect of risk taking (Brockhaus, 1980). However, if the concept of entrepreneur is just restricted to the possession of innovation (or risk taking propensity), it narrows the definition to a very small group of people (Rauch & Frese, 2000). Although trait definitions have been used extensively, they are limited in scope, as they do not consider behaviour or the influence of the environment.

On the other hand there are those researchers who view the entrepreneur in terms of what he or she does. They define the entrepreneur in terms of the activities that entrepreneurs undertake when engaging in the entrepreneurial process. These definitions do not view the entrepreneur as possessing traits that make them fundamentally different from other individuals within society, but rather view them as those people who engage in entrepreneurial activities as opposed to those who do not. Danhoff (1949, p. 21, as cited in Gartner, 1985) wrote, "Entrepreneurship is an activity or function and not a specific individual or occupation...". In line with this Carland et al., (1984, p. 358) suggest that an entrepreneur refers to "an individual who establishes and manages a business for the principal purposes of profit and growth". In these definitions entrepreneurs are characterised mainly by their entrepreneurial behaviour. Other researchers view entrepreneurs as organisation creators (Winn, 2005) or business owner-managers (Brockhaus, 1980).

These definitions raise another point of debate among researchers in this field with regards to whether the mere establishment of a business is synonymous with entrepreneurship. Definitions such as the one by Schumpeter (1934) cited above, do not consider the establishment of a small business to be the same as entrepreneurship, while many other researchers are less stringent in whom they consider an entrepreneur (McClelland, 1961). Not all new businesses are innovative or offer completely new products or service, most are carbon copies of existing businesses and therefore according to some definitions are not necessarily entrepreneurial in nature (Winn, 2005). McClelland (1961) believed that a business manager who is innovative and has decision making power is an entrepreneur. Entrepreneurship research concerns itself with the study of small businesses and as such small business owners are regarded as entrepreneurs and have been studied as such in entrepreneurial research. A key idea and foundation in entrepreneurial literature is that entrepreneurship can be understood through the investigation of new and small businesses (Cameron & Massey 2002; Covin & Slevin 1989; Glancey & McQuaid 2000). The notion of entrepreneurship as an activity is supported by existing definitions of entrepreneurship like the one posited by Shane and Venkataraman (2000), which refers to entrepreneurship as involving the detection, assessment and the seizing of opportunity to create future goods and services. McMullen and Shepherd (2006) also note that entrepreneurship requires action and suggest that the various views on entrepreneurship in the literature are basically investigations of action that can be classified as entrepreneurial, in different situations.

To further exacerbate the debate around business ownership, many scholars consider only those business owners who have achieved success to be entrepreneurs and exclude all those who have not achieved success (Brockhaus, 1980). Some authors also make a distinction between entrepreneurs, small business owner, founders, and CEO's (Rauch & Frese, 2000). Carland et al., (1984, p. 358) differentiated between entrepreneurs and small business owners. They stated that an entrepreneur "is innovative, employs strategic management practices, and manages his business for the purpose of profit and growth... a business owner establishes the enterprise to follow personal goals". In focusing on innovative behaviour, this definition is aligned to Schumpeter's (1934) definition which focused on the activities of the entrepreneur as innovator.

There are also those researchers who incorporate the motives of entrepreneurs in their definitions. They tend to focus on the reasons why entrepreneurs engage in entrepreneurial activities. In the 19th century, Jean Bertrand Say (as cited in Carsrud & Brannback, 2011)

defined the entrepreneur as a person who engages in behaviour that yields economic benefit and this idea has continued to persist in entrepreneurship research. In contrast to this, one can pose the argument that many non-profit organisations are also created by entrepreneurs (Rauch & Frese (2000). In addition to this, there is another body of research that has emerged that takes into account the situational or social factors in their definition of entrepreneurship. Shane and Venkataraman (2000), state that it is unlikely that entrepreneurship can be explained solely by referring to characteristics of certain people without taking cognisance of the situations in which these people find themselves. In addition, they argue that entrepreneurship does not necessarily require, but can include, the establishment of new organisations. As Amit, Glosten and Mueller (1993) and Casson (1982) note, entrepreneurship can also be manifested within an existing organisation. According to these definitions the characteristics needed in entrepreneurship are interlinked with the firms' environment and the prevailing environmental conditions (Littunen, 2000). It is thus evident from the literature that defining the field of entrepreneurship only on the basis of individual traits and behaviours, leads to inadequate definitions that are found to be lacking under the examination of other scholars (Gartner, 1988).

In the current study an entrepreneur is defined as a major owner and manager of a business venture who is not employed elsewhere (Brockhaus, 1980). This definition is used because it does not incorporate concepts such as innovation which may be difficult to measure and is inclusive of all type of entrepreneurs. This definition also excludes managers in big corporations who might exhibit entrepreneurial characteristics, these managers are not considered to be entrepreneurs in the present study because they do not own their own businesses. A distinction between successful and unsuccessful entrepreneurs will not be made. The study will consider those female entrepreneurs who own a small business and who are actively involved in the daily operations of the business. Their ownership may be acquired through their own creation, through inheritance or be jointly established with or without family or non-family members.

2.1.3. Trait research.

Trait research builds on the foundation of trait definitions of entrepreneurs and assumes that entrepreneurs possess unique characteristics that differentiate them from the general population. The aim of trait theory is to determine the entrepreneurial personality through discovering those unique characteristics of entrepreneurs.

Most entrepreneurship research aims to describe the entrepreneur. In a review of the research on entrepreneurs it is clear that there are various methodologies that have been employed in attempting to describe the entrepreneur namely trait, motivational, human capital as well as typological approaches (Rauch & Frese, 2000). However, early entrepreneurial research approaches tended to place a lot of emphasis on the personality traits of the entrepreneur (Swail, Bell & Ibbotson, 2005).

Most of the research conducted on entrepreneurship has concerned itself with demonstrating that entrepreneurs differ from non-entrepreneurs (Brockhaus, 1980, Carland, et al., 1984; Collins & Moore, 1964; McClelland, 1961). In these research studies business owners were normally compared to managers, because managers were considered to be an appropriate comparison group since they performed functions similar to those of entrepreneurs without establishing their own businesses (Rauch & Frese, 2000). McClelland's (1961) work on need for achievement led to many studies being conducted on the characteristics of the entrepreneur. A high need for achievement was said to lead a person to prefer challenging tasks of moderate difficulty rather than routine or very difficult tasks, to take personal responsibility for one's performance, to seek feedback on performance, and to look for new and better ways to improve one's performance. Entrepreneurs were said to possess a high need for achievement compared with the general population (Rauch & Frese, 2000).

Another concept that emerged in trait research is that of locus of control. This is a concept that emerged from Rotter's (1966) social learning theory, and it was examined in relation to characteristics of entrepreneurs. People with an internal locus of control are those who believe that they are in control of their futures and destinies while those with an external locus of control believe that they are controlled by external circumstances, others or chance events (Rotter, 1966). One might expect that business owners will demonstrate a higher internal locus of control than other populations. However, the research findings on locus of control are less consistent than the findings on need for achievement. While Green, David

and Dent (1996) reported negative relationships between being an entrepreneur and internal locus of control, Cromie and Hayes (1988) found strong differences between entrepreneurs and managers. Given the discrepancies in the results, researchers have been unable to conclude that entrepreneurs differ from non-entrepreneurs in with regards to locus of control.

Although other research studies have found significant differences between entrepreneurs and non-entrepreneurs, Wortman (1987) reached the conclusion that there has been no convincing psychological profile of successful entrepreneurs that has been developed. Another limitation in the traits identified in the literature as being related with entrepreneurial success is that these traits are usually conceptualised from completely male samples and are not representative of female entrepreneurs (Pollard, 2006).

The trait approach has come under wide criticism (both theoretical and empirical) from scholars because inherent in this approach is the assumption that entrepreneurs in and among themselves are a homogenous group. Gartner (1985) argued theoretically, that there are more differences among entrepreneurs themselves than the differences between entrepreneurs and non-entrepreneurs. This research therefore aims to conduct an intra group comparison rather than an inter group comparison.

The trait approach has also been used to understand and describe the female entrepreneur. At the individual level, the research attempts to provide demographic information identifying characteristics of women entrepreneurs, their personal goals, as well as their reasons for choosing entrepreneurship over paid employment (Brush, 1992; Greene et al., 2003).

2.1.4 Female entrepreneurs.

Small to Medium Enterprise (SME) statistics taken in tandem with those showing an increasing number of female entrepreneurs, serve to draw the attention of policy planners to the growing importance of the contribution made by women in sustaining local economies (Shaw et al., 2001; Warren-Smith, 1999). Women around the world have emerged as an economic force that policymakers cannot afford to overlook (Bonanno, 2001). In developed economies women own in excess of 25% of all the businesses while female owned businesses in Africa, Asia, Eastern Europe and Latin America show signs of rapid growth (Jalbert, 2000).

Generations of women from various backgrounds are contributing to their environment and are displaying entrepreneurial spirit (Arenius, Minniti & Langowitz, 2005). Lavoie (1985) defined the female entrepreneur as the female leader of an enterprise who has established a new business, accepts the risks that come with it and also assumes the responsibility for managing daily operations. In South Africa the primary focus of the government has been on the development of previously disadvantaged communities (Friedrich et al., 2003 as cited in Botha, 2006). Women entrepreneurs in South Africa have, however been particularly disadvantaged because in the past they were not allowed to own property that could have been used as collateral for loans (Simbwaye, 2002 as cited in Botha, 2006).

However, women entrepreneurs have made large strides with regards to obtaining business education, corporate experience, and technical expertise (Winn, 2005). More and more women are establishing businesses in fast-expanding industries such as financial services, biotechnology and software (Winn, 2005). They have become much more comfortable around issues such as cooperation, networking, transparency and relationships (Botha, 2006). As a result of the restructuring policies in many organisations, the current business climate in South Africa is right for women to enter business in much larger numbers and play a leading role in organisations.

Many studies have been conducted by researchers see to construct a typology of the typical female entrepreneur (Belcourt et al., 1991; Goffee & Scase, 1985; Grondin & Grondin, 1994; Hisrich & Brush, 1986). This was done through examining her background, education and previous experience (McClelland, Swail, Bell & Ibbotson, 2005). The first of such studies was conducted in the United Kingdom (UK) by Geofee and Scase in 1983. These researchers presented a typology of female entrepreneurs built on their motives and choices of both type of industry and type of business organisation (Greene et al., 2003). Their work was succeeded by that of Hisrich and Brush (1984), who in their analysis of 463 women entrepreneurs proposed the first composite depiction of the typical female entrepreneur. In this study female entrepreneurs were described as the first born child from a middle class background with a college education majoring in liberal arts, married with children and a supportive spouse who was in a technical or professional occupation (Hisrich & Brush, 1984). In addition to this most of the female entrepreneurs in the study were found to own and run businesses in traditionally female industries (retail, hospitality, services) (Hisrich & Brush, 1984).

In the 1990s researchers provided a similar profile to the one provided above of the female entrepreneur of the 1990s (Buttner, 1993). She was also described as from a middle to an upper-middle-class family, married with children and was between the age of 30 and 45 when she started her business (Buttner, 1993). She was often a first born child of a self-employed father with a college education and had acquired skills, expertise and knowledge through having worked for larger organisations and has set up her business in the same industry where she was employed (Buttner, 1993). A study of female entrepreneurs in Singapore reported characteristics similar to the ones mentioned above (Cooper & Goby, 1999). These studies are useful in that they provide valuable descriptions of a sector of the entrepreneurial population group that has been previously neglected by mainstream small-business research (McClelland et al., 2005).

Research on female entrepreneurs also suggests that they encounter several unique challenges in starting and growing their own businesses. Women are typically faced with stereotyping early on in life and this shapes the kinds of educational and career decisions that women make (Tan, 2007). Tan (2007) continues and states that socio-cultural influences have resulted in women receiving an education in the liberal arts as opposed to technical and financial areas and this in turn impacts on the business industry in which they establish businesses. Job-related discrimination, underrepresentation in top management positions, as well as beliefs about family roles and responsibilities can limit women to certain industry sectors, as well as impact on the motivations and goals for their businesses (Lerner, Brush & Hisrich, 1995).

Even though the current research aims to explore the characteristics of the female entrepreneurs in the current study it also acknowledges that female entrepreneurs are not a homogenous group and seeks to examine differences in this group. Research studies tend to compare female entrepreneurs to their male counterparts and thus fail to give an understanding of how female entrepreneurs differ from each other. This study fills that gap by comparing female entrepreneurs to each other to gain greater insight into how they are similar or different from each other.

The criteria that will be used to select female entrepreneurs for the purposes of this study are ownership and management of the business' daily operations. So the proposed study intends to look at those female entrepreneurs who own businesses regardless of the manner in which they came to own the business. The study will explore the motivations that female

entrepreneurs have for starting businesses. The following section presents a discussion of literature on entrepreneurial motivations.

2.3 Entrepreneurial Motivations

Entrepreneurship is particularly important for the South African economy which is characterised by high rates of unemployment. Since 1994, the government of South Africa has been committed to developing entrepreneurship through various strategies such as making funding accessible and has put a large number of resources as well as policies into place in the development of small, medium and micro enterprises (Jonker, Saayman & De Klerk, 2009).

Female entrepreneurs have various reasons for and are motivated by different factors to start their businesses. Ryan and Deci (2000) consider motivation to be the core of biological, cognitive, and social regulation. They stated that motivation comprises the energy, direction and persistence of instigation as well as purpose (Carsrud & Brannback, 2011). Herron and Sapienza (1992, p. 49) stated, "Because motivation plays an important part in the creation of new organizations, theories of organizational creation that fail to address this notion are incomplete". Studying entrepreneurial motivations is important because it takes into account the role that human agency plays in the entrepreneurial process. The literature on motivational factors influencing entrepreneurs classifies these motivations into push and pull factors, also described as positive and negative (Alstete, 2002; Brush, 1992; Buttner & Moore, 1997; Deakins & Whittam, 2000; Orhan & Scott, 2001, Robinson, 2001).

The push factors refer to those negative factors that are linked with necessity and thus push the female into entering into a business venture (Alstete, 2002). Push factors are therefore those factors that make the status quo less attractive such as insufficient income, job dissatisfaction, unemployment, need to balance family and work (Wickham, 2001). Other factors that have been found to push individuals into entrepreneurship are redundancy, unemployment, frustration with previous work experience or flexible work schedule (Alstete, 2002; Orhan and Scott, 2001). In this situation entrepreneurship is not the entrepreneur's first choice, but the entrepreneur is pushed into it because of the negative factors inherent in the environment (McClelland et al., 2005). Welsh (1988) and Carter and Cannon (1992) both

found evidence of a “glass ceiling effect” that prevents female executives from progressing to more senior executive positions and as a result pushes them from managerial positions into entrepreneurship. Orhan and Scott (2001) argue that push factors may play a more influential role in women becoming entrepreneurs than they do for men. This will be discussed in detail later when reviewing literature comparing male and female entrepreneurial motivations

On the other hand pull factors are those factors which lead potential entrepreneurs into establishing businesses because of the attractiveness of the option (Glancey et al., 1998; Hansemark, 1998). These are those factors that are associated with issues of choice (Orhan & Scott, 2001) as well as a desire to fulfil entrepreneurial aspirations (Deakins & Whittam, 2000). Pull factors can be said to be intrinsic attractors such as financial rewards, preference for independence, need for achievement, innovation, ambition and new challenges, entrepreneurial drive and to gain social standing and recognition (Alstete, 2002; Glancey et al., 1998; Hansemark, 1998). The most frequently cited pull motivators for women entrepreneurs are independence and the challenge of business ownership (McClelland et al., 2005). Although there is no conclusive evidence, it is argued that women who are entrepreneurs because they were attracted by pull factors tend to have businesses that are more profitable (Sarri & Trihopoulou, 2004).

As stated above push factors are usually linked with necessity whilst pull is linked to choice. Although it is useful to characterise motivations into these categories for analysis, motivation is not easily attributable to just one set of factors. The factors are often interlinked and combined (Brush, 1999). It can be argued that true entrepreneurs are those who are attracted by pull factors to become entrepreneurs, those who are able to recognise an opportunity in the market and take the necessary risks to maximise their gain. Due to the high levels of unemployment in South Africa, a lot of entrepreneurs are pushed to be entrepreneurs because of the need they have to take care of and provide for dependants. According to Herrington et al. (2009), developing countries tend to have a high ratio of ‘necessity’ entrepreneurs. The proposed study will therefore look at both necessity entrepreneurs and opportunity entrepreneurs, as only looking at opportunity entrepreneurs will exclude a large section of female entrepreneurs.

In a similar vein, motivational theories can also be categorised as drive theories and incentive theories (Carsrud & Brannback, 2011). Drive theories are based on the notion of the existence of an internal stimulus such as hunger or fear that drives the person and leads the individual

to act in a manner that aims to reduce the resultant tension. Motivation is thus represented as the need to reduce this tension (Festinger, 1957; Freud, 1924 as cited in Carsrud & Brannback, 2011). Incentive theories on the other hand focus on the motivational pull. There is an external stimulus or an end point in the form of a goal that attracts the person toward it, such as achievement motivation (Carsrud & Brannback, 2011). Put another way, in drive theories, the push factors are dominant, as opposed to incentive theories which are dominated by pull factors (Carsrud & Brannback, 2011).

Generally research studies that have been conducted on female entrepreneurs typically examine their demographic characteristics, their motivation for starting businesses as well as the constraints that female entrepreneurs encounter in the process of starting and running businesses (Shabbir & Di Gregorgio, 1996). There are various motivation factors that have been cited as why women decide to engage in entrepreneurship. One motivation that is cited for female entrepreneurs is that of flexibility and autonomy (Geofee & Scase, 1985; Orhan & Scott, 2001; Scott, 1986, Winn, 2005). Many women entrepreneurs have reported that they were frustrated with demanding and inflexible corporate environments (Winn, 2005). This allows women to be able to earn a living, fulfil their career aspirations while meeting their domestic responsibilities simultaneously. Indeed, Fielden et al. (2003) highlight the fact that the prevailing factor as stated by those women with domestic responsibilities was the belief that entrepreneurship seemed to be the only way that they could make a sustainable living while balancing other family commitments.

Some researchers have indicated that some female entrepreneurs choose to start their own business because they have had unsatisfying employment experiences most notably the failure to break through the glass ceiling to higher paid managerial positions (Glaser & Smalley, 1999; Weiler & Bernasek, 2001). Buttner (1993) and Coleman (2000) also attributed women's migration into entrepreneurship to the frustration that they have experienced at hitting the "glass ceiling" or the fact that they have experienced retrenchment rather than to a unique personality attribute. A large number of women find themselves occupying the lower rungs of the corporate ladder, and as a result find it difficult to climb, and therefore they choose to run their own businesses.

Similar to some of their male colleagues, some female entrepreneurs establish businesses as a result of having an idea or an innovation (Tan, 2007). At times business ownership comes about as a result of forced unemployment resulting from either retrenchment, having

inadequate skills that are marketable or family circumstances that place the woman in a position where she is in charge of a business she did not start (Geofee & Scase, 1985; Shannon, 2003). According to Moulton and Anderson (2005) women are often drawn to entrepreneurial ventures as a result of a lack of jobs generally, and that they may also possess inadequate education levels. In this way, women may be “pushed” into an entrepreneurial venture by the need to find a solution to their unemployment, rather than out of a desire to start up a business (Tan, 2007). While other researchers note that for female entrepreneurs, starting a business stems almost entirely from desire to fulfil their long time entrepreneurial aspirations, for recognition by others as well as the desire to utilise their knowledge and skills (Lee-Gosselin & Grise 1990). Furthermore, many researchers have suggested that women are motivated by the desire to make a contribution to society through their businesses (Orhan & Scott, 2001). According to Still and Timms (2000) when women engage in entrepreneurial ventures it is with the goal of making a difference in their community, which leads them to be more client-focused than men.

Research on entrepreneurial motivations has also focused on determining whether there are differences between male and female entrepreneurs in their motivations to start businesses. Researcher has yielded contrasting findings with some researchers finding significant differences while others find that males and female are very similar in their entrepreneurial motivations. There is a wide range of research that suggests that motivations to become an entrepreneur are similar for both men and women (Buttner, 1993; Hisrich, Brush, Good, & DeSouza, 1997; Moulton & Anderson, 2005; Orhan & Scott, 2001) with variables such as independence and a need for achievement being prominent regardless of sex. Welsch and Young (1984 as cited in Moulton & Anderson, 2005) also concluded that male and female entrepreneurs tend to have similar profiles. These researchers indicate that women and men who have established their own enterprises share similar qualities, traits and motivations such as drive, initiative, creativity and a desire for independence (Smith, Smits, & Hoy, 1997). Like their male counterparts, women have been found to want to make money, to be independent, to achieve, to use their skills and talents, and to enhance their job satisfaction (Sexton & Bowman-Upton, 1990; Winn, 2005). As with male entrepreneurs, females seek independence, autonomy, higher income, and the opportunity to be their own boss (Buttner, 1993).

Contrary to the findings cited above, some researchers have reported differences among male and female entrepreneurs in terms of their entrepreneurial motivations. Scott (1986) found

gender differences in reasons that men and women offered as motivators for starting a business. In his study men emphasised the desire to be their own bosses whilst women reported being concerned with personal challenge and satisfaction. Another study reported differences in motivation depending upon the age of the woman business owner and the circumstances of founding in particular whether the founding of the business was as a means of job transition or a re-entry into the workforce (Kaplan, 1988 as cited in Greene et al., 2003). Buttner (1993) also noted that there is a difference in the way that men and women view the decision to be an entrepreneur; men were reported to generally see entrepreneurship as a business decision as opposed to many women who view it as life choice and a way of combining family needs and career aspirations.

The investigation into gender differences was taken a step further by researchers wanting to discover whether male and female entrepreneurs are motivated by similar or different push and pull factors. Female entrepreneurs were found to be motivated by the same kind of pull factors that motivated male entrepreneurs (Birley, 1988). Women's pull factors such as the aspirations to run their own businesses, independence and autonomy, financial success etc. are broadly the same sort of factors as that have been cited by men (Birley, 1988; Smits et al., 1997; Tan, 2007). They want to enjoy the same satisfaction of independence, they want to achieve. "Women may also be "pulled" into an entrepreneurial venture to leverage resources and pursue an opportunity to develop an idea, to receive high income, to fulfil oneself, and to be their own boss and not having to take orders from others" (Tan, 2007, p. 549).

However there were some differences between male and female entrepreneurs in terms of their push motivators. Miskin and Rose (1990) argue that this difference between male and female entrepreneurial motivations can be attributed to social traditions and the prevalent notion that women are primarily responsible for the home and family. As a result of the gender-influenced social division of work, women end up carrying a "double burden" because they carry the primary responsibility for domestic matters (Moult & Anderson, 2005). Most women have come to view the establishment of their own enterprises as a solution to the challenge that they encounter in finding work that allows them to achieve their career aspirations while meeting their family responsibilities (Goffee & Scase, 1985; Loscocco et al., 1991; Robinson, 2001). It is apparent from this research that there are some differences between male and female entrepreneurs in how push factors shape their entrepreneurial opportunities (Swail, Bell & Ibbotson, 2005). In line with this, Catley and

Hamilton (1998) found that self-employment was not the first choice but in fact a last resort for some women involved in their study. In the same vein Deakins and Whittam (2000) argue that such negative, motivational factors often play an important role in the entrepreneurship of individuals who come from groups in society that face discrimination such as women and ethnic minority groups.

Regardless of their motivations for starting businesses, entrepreneurs assume some risk in deciding to start and manage their own businesses. A discussion of research on risk taking propensity follows in the next section.

2.2 Risk Taking

The recurring theme found throughout entrepreneurship literature is that of risk and how entrepreneurs are prone to risky situations and how they should manage risk (Busenitz, 1999). When new businesses are formed in new markets with the goal of attaining growth and good performance, risk forms an unavoidable part of such an undertaking.

The ability to take risks has been cited in the literature as the most critical trait of entrepreneurs and as such the concept of risk taking forms an important part of many definitions of an entrepreneur (Bowen & Hisrich, 1986; Venter et al., 2008). Risk taking plays an important role in entrepreneurship because entrepreneurs find themselves starting and operating businesses in increasingly turbulent and uncertain situations and often have to take decisions with financial implications in these situations (Rauch & Frese, 2007). Similar to entrepreneurship, risk has been studied by researchers from a variety of disciplines and as a result subsequent definitions of risk have reflected the fields from which they have emerged (Brindley, 2005). Risk is also important in entrepreneurship because in becoming an entrepreneur individuals devote themselves at a personal level to the venture, and the failure of the venture is viewed as the failure of the person (Brockhaus, 1980). This in turn can have serious emotional consequences for the individual.

Risk has been conceptualised as the probability of suffering a loss (Knight, 1921 as cited in Brindley, 2005), however, it is important to note that in business most decisions that involve some degree of risk are taken with the intention of making a potential gain instead (Blume, 1971). Even though some business decisions are taken to avoid loss, few of these would be

made purely on the basis of avoiding loss. Risk has also been defined as “one’s orientation toward taking chances in a decision making situation” (Sexton & Bowman, 1985, p. 13).

Bird (1989) has distinguished between five types of risk, four of which may be said to be relevant for the entrepreneur; these are economic risk, risk in social relations, risks in career development, psychological risks and health risks. Liles (1974 in Brockhaus, 1980) also postulated about the factors that he considered as being at risk in a new enterprise. He suggested that in becoming an entrepreneur an individual risks financial well-being, career opportunities, family relations as well as psychological well-being. According to Brockhaus (1980) entrepreneurial risk can be classified into three categories namely the risk taking propensity of a potential entrepreneur, the perceived chances of failure for a specific venture, and the perceived outcomes of failure

Risk taking propensity, has been the category of entrepreneurial risk that most entrepreneurship studies have tended to focus on (Mcgrath, MacMillan & Scheinberg, 1992). The current study follows suit in examining this aspect of entrepreneurial risk. In entrepreneurship research, risk taking propensity has been referred to as one’s willingness to take moderate risks (Begley, 1995; Sitkin & Pablo, 1992). Risk taking propensity is considered as an individual trait that is flexible and can change over time, rather than as a stable and constant personality characteristic (Sitkin & Pablo, 1992; Yordanova & Alexandrova-Boshnakova, 2011). For the purposes of the current study, the propensity for risk taking is defined as the “perceived probability of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequences than the proposed situation” (Brockhaus, 1980, p. 513).

Generally there appears to be a consensus among scholars that risk taking is an important prerequisite for one to be considered an entrepreneur (Macko & Tyszka, 2009). However, research studies have not succeeded in providing conclusive evidence in support of this. Research on risk taking propensity has investigated differences between entrepreneurs and non-entrepreneurs namely managers. As mentioned before managers are excluded from the definition of entrepreneurs as used in this study because they do not own businesses, hence the review of previous research comparing entrepreneurs to managers. One of the earlier studies was conducted by Litzinger (1961) in which he found no differences between motel

owners and motel managers on risk preference (as cited in Shane et al., 2003). In his study of risk taking in which the Kogan-Wallach questionnaire was used to measure the propensity of risk taking in three groups – entrepreneurs, freshly hired managers and managers who just got promoted, Brockhaus (1980) indicated that the level of risk taking propensity does not differentiate entrepreneurs from managers or from the general population. Masters and Meir's (1988) replicated Brockhaus's (1980) research on entrepreneurs and managers using the Kogan-Wallach questionnaire and their findings provided support for Brockhaus's earlier findings of no significant difference between entrepreneurs and managers on risk taking. In other studies comparing firm founders and managers, neither Babb nor Babb (1992) nor Palich and Bagby (1995) found significant differences between the two groups in terms of risk-taking propensity.

On the other hand there is research that presents differences between entrepreneurs and non-entrepreneurs in terms of risk (Macko & Tyszka, 2009). For instance, in the research studies conducted by Begley and Boyd (1987), by Carland, Carland, Carland and Pearce (1995), and by Stewart, Watson, Carland and Carland (1999), where the Jackson's questionnaire was used, the findings indicated that entrepreneurs show a more positive attitudes toward risk than non-entrepreneurs. In his study of 239 New England business executives, Begley (1995) found that risk-taking propensity was the only trait on which founders and non-founders differed. As a result of the contrasting research evidence there is no conclusive evidence pointing to whether there is a difference between entrepreneurs and non-entrepreneurs on risk taking propensity.

In addition to examining differences in risk taking propensity between entrepreneur and non-entrepreneurs, previous research has also investigated differences in risk taking propensity between male and female entrepreneurs.

2.2.1 Gender differences in risk taking propensity

Economic and business research has provided mixed evidence of gender differences in risk propensity and behaviour, yet despite these findings, stereotypical beliefs about gender differences continue to abound (Powell & Ansic, 1997). This mixed evidence will be presented below.

Many research studies have indicated that there is a gender difference with women found to have a lower risk taking propensity and preference than men. Slovic (2000) stated that almost all the studies on risk perception have found that men seem to be less concerned about hazards and tend to make more risky judgements than women. Research data from various studies report that women and men, both in the general population and in specialised groups such as managers, entrepreneurs, and business owners, differ in their risk-taking propensity and behaviour (Hudgens & Fatkin, 1985; Johnson & Powell, 1994; Powell & Ansic, 1997; Watson & Newby, 2005; Watson & McNaughton, 2007). Another study by Sexton and Bowman-Upton (1990) on entrepreneurs reported lower scores amongst female for risk-taking using self-administered psychometric measures, with the strongest effect being for monetary risks. Yordanova and Alexandrova-Boshnakova (2011) also found support for gender differences in their study with the results indicating that gender positively and significantly influences risk taking propensity and men have a higher risk propensity than women.

A study conducted in North Ireland to examine the process of change in women's beliefs brought about as a result of starting a business concluded that women did not display typical entrepreneurial values, and that they reject risk taking and profit motivation in particular (Greene et al., 2003). Gender differences in risk taking have also been found to exist among different cultures (Thomas & Mueller, 2000; Zinkhan & Karande, 2002). There seems to be a lot of support in the research literature for the evidence of gender differences in risk preference in business and financial decision-making. These gender differences in risk behaviour might also come about through situational factors resulting from the kind of opportunities that are presented to women and the advice they are given (Yordanova & Alexandrova-Boshnakova, 2011).

In contrast, there are those studies in the field of business and finance, investigating samples of managers, entrepreneurs, and professionals that have shown men and women to be similar in terms of risk-taking propensity and risk behaviour (Atkinson et al., 2003; Dwyer et al., 2002). This contradictory evidence can somewhat be explained by the fact that researchers have used inconsistent terminology in their studies and that they approach the construct of risk taking from various theoretical backgrounds as well as the way in which the decision tasks have been framed in the studies (Schubert, 2006).

As has been shown in some of the studies on risk, people's likelihood of taking risks is influenced by whether or not the outcome of the action taken depends on their own skill rather than on chance (Macko & Tyszka, 2009). Risk taking propensity in individuals may also be influenced by risk perception. While weighing out the riskiness of a situation, the individual forms beliefs about the future outcomes of his decisions (Macko & Tyszka, 2009). Individuals' perception of a situation as either risky or not is influenced by their experience.

Studies that have examined differences in risk taking have only focused on gender differences or differences between entrepreneurs and managers or between entrepreneurs and the general population. These studies have assumed that these groups are homogenous. As previously mentioned though female entrepreneurs are not a homogenous group and researchers should admit that differences may exist among female entrepreneurs themselves. These studies have measured the risk taking of entrepreneurs but using scenarios that do not apply to the kind of work or risks that entrepreneurs are likely to take in managing their businesses.

Since according to Weber et al. (2002) risk taking is domain-specific the current study measured participant's risk propensity in the business domain. There are no studies that have been conducted to examine risk differences between women. The present study will examine the construct of risk propensity amongst female entrepreneurs. The study explores the relationship between the age and risk propensity of female entrepreneurs. In addition it examines the differences in risk taking in groups of female entrepreneurs according to age, entrepreneurial motivations, level of education and previous work experience.

2.2.2 Risk taking propensity and age

Conventional wisdom suggests that the risk taking propensity of individuals is inversely related to age (Jianakoplos & Bernasek, 2006). Bodie, Merton and Samuelson (1992) in their approach showed that financial risk tolerance will decrease with age. In addition to this, a study investigating individuals aged 70 and over, Bellante and Green (2004) found evidence of a modest increase in risk aversion as the elderly grow older. Another study found support for the hypothesis that risk taking propensity declines with age (Jianakoplos & Bernasek, 2006). In contrast to this, Bellante and Saba (1986) and Wang and Hanna (1997) reported that

risk taking increases with age. The current study therefore investigates the nature of the relationship between age and risk taking propensity by investigating whether there are differences in risk propensity between female entrepreneurs who are 35 and younger and those who are over 35.

2.2.3 Risk taking and entrepreneurial motivations

As mentioned previously, some scholars consider only those individuals who are motivated by pull factors as true entrepreneurs who enter into entrepreneurship and assume the accompanying risks by choice. It is therefore logical to assume that those individuals who are motivated by pull factors will have a higher risk taking propensity than those who are motivated by push factors. In his theory on risk taking, Atkinson (1957) predicted that performance levels will be highest when there is the highest uncertainty about the outcome. He states that this prediction is true regardless of the motivation of the entrepreneur. The current study investigates differences in risk taking according to entrepreneurial motivations.

As also previously stated, people's likelihood of taking risks is influenced by whether or not the outcome of the action taken depends on their own skill rather than on chance (Macko & Tyszka, 2009). Therefore an individual's skills (education and previous experience) influence their risk taking propensity. McClelland (1961) stated that skill level does not make a difference in high risk situation, but has an impact in moderate risks. Walker & Litwin (1961) studied managers of shop operations in manufacturing plants and staff specialists and found that managers in jobs with entrepreneurial skills displayed greater preference for intermediate risks on a risk preference questionnaire than did specialists of comparable age, education and job level. The study therefore seeks to understand the differences in risk taking according to education and previous work experience (number of positions and job category).

The following section presents a summary of research literature on gender role orientation which is one of the classification variables that has been used in the study to investigate the differences in risk taking propensity of female entrepreneurs.

2.4 Gender Role Orientation

In the study of entrepreneurship there is a lot of literature that looks at biological sex and makes comparisons along these lines, and there are very few studies that have gone beyond this to look at gender instead of sex (Marlow & Patton, 2005). Researchers attribute the introduction of the term gender to feminist scholars, as a means of differentiating between biological sex and socially constructed sex (Acker, 1992 as cited in Ahl, 2006). Bruni, Gherardi and Poggio (2004, p. 413) make a similar distinction between sex and gender by referring to “sex as ascribed to biology, anatomy, hormones, and physiology, and gender as constructed through social, cultural, and psychological means and where sex (male and female) is innate and refers to what people are born as, gender is what people do”. Gender or socially constructed sex refers to social practices and representations associated with femininity and masculinity (Acker, 1992 as cited in Ahl, 2006).

Gender (or sex) role orientation refers to a personality trait or attribute that has been brought about as a result of the traditional social system in which men are expected to think and behave as men (masculine) and women are expected to think and behave as women (feminine) (Williams & Best, 1982). This social system allows certain behaviours; roles and occupations to be viewed as masculine while others are viewed as feminine (Williams & Best, 1982). This is evident in our society as some characteristics that have been stereotypically considered as masculine have been found to have an influence on whether various jobs are considered as masculine or feminine and in turn this impacts the aspirations that people will have towards those jobs. Researchers who have studied the relationship between gender and career choices argue that people’s preferences for certain careers are an indication of their identification with masculine or feminine characteristics (gender orientation) (Gupta, Turban, Wasti, & Sikdar, 2009).

In general, masculinity has been associated with entrepreneurship. Several authors have alluded to the notion that entrepreneur and entrepreneurship are concepts that are laden with masculine connotations. This is not only reflected in the frequent use of the male pronoun, but also in the manner in which the entrepreneur is described in the literature (Ahl, 2006). The characteristics which have been thought to be important for the business world have tended to be masculine in nature (Heilman, 2001). For example, evidence suggests that

business is generally seen as a “man’s world” and thus is believed to require characteristics that are masculine, rather than feminine. There tends to be a general perception that the business world “is male, and not only male but lean, hungry, predatory and hostile” (Greer, 1999, p. 299), characteristics traditionally considered inconsistent with the feminine stereotype. From this one can argue that entrepreneurship is not a gender neutral term.

This view of entrepreneurship as masculine could be attributed to the fact that traditionally entrepreneurs have tended to be men, but it has also been argued that women entrepreneurs were neglected in research and in the media, thus making them invisible (Baker, Aldrich & Liou, 1997). The way in which we as a society have come to conceptualise a successful entrepreneur has also been largely impacted on by masculine ideologies and is governed by values such as size, growth and other economic measures of performance (Watson & Newby, 2005). Some researchers have drawn attention to how ideas of the successful entrepreneur are expressed in masculine terms while alternative “female” ways of organising based on values that are considered as feminine are undervalued and disregarded (Singh, Simpson, Mordi & Okafor, 2011).

This is further indicated in research studies where Bem’s (1977) femininity words such as loyal, sensitive to the needs of others, gentle, shy, yielding, gullible, and childlike were found to be in direct contrast to the entrepreneurial words used in most of the literature while some of the femininity words did not appear to feature at all in the entrepreneurship (Ahl, 2006). This prevailing masculine view of entrepreneurship has also influenced SME research examining the psychological antecedents of SME ownership and success. A look at the literature reveals that many of those studies aiming to find psychological differences between entrepreneurial and non-entrepreneurial business owners have focused on personality traits that are masculine in nature (Shane et al, 2003; Watson & Newby 2005).

Entrepreneurship literature also suggests that differences between men and women’s entrepreneurial activity may be associated with gender orientation (Carter, Anderson & Shaw, 2001; Marlow, 2002). These factors combine to impact on the kinds of businesses men and women entrepreneurs start as well as their later development. For example, women entrepreneurs are said to be more likely than their male counterparts to have businesses (often in the service or retail sector) that are smaller, and less profitable (Carter et al., 2001). This in turn reinforces the stereotypical image of men and women in self-employment (Gupta, Turban, Wasti, & Sikdar, 2009). Men own a larger share of businesses, as well as

overwhelmingly outnumber women in industries like high technology sectors that get the most notice from media, public, and policy makers (Marlow, 2002). Women entrepreneurs are concentrated in low-growth and low-skilled business sectors such as retailing and service, (Gupta, Turban, Wasti, & Sikdar, 2009).

Bowen and Hisrich (1986), conducted research evaluating female entrepreneurs' career development and reported little difference between female and male business owners. They further indicated that female entrepreneurs scored high on those characteristics that are linked to the masculine gender orientation such as aggression, autonomy and leadership whilst scoring low on a number of feminine traits (Smith, Smits & Hoy, 2007). There has also been an increasing amount of research that has focused on women and found that many of them hold "androgynous" or masculine views of themselves such as confidence, a sense of adventure and risk taking (Singh et al., 2011). The present study evaluates the gender role orientation of South African female entrepreneurs along feminine and masculine lines. In order to simplify the interpretation of the results of the current study female entrepreneurs will be classified according to the two categories of masculinity and femininity thus excluding

In addition to gender role differences, the current study also investigated differences based on the entrepreneurial capital factors of level of education and previous work experience. These are factors that have been found in research to have an impact of entrepreneurial success. Some of this research is presented in the following section.

2.5 Entrepreneurial Human Capital

Entrepreneurial human capital is an important aspect of entrepreneurship and concerns itself with the knowledge and experiences of entrepreneurs. Entrepreneurial human capital thus refers to the knowledge and experiential resources that an entrepreneur possess in order to start and manage an enterprise successfully (Venter, Urban & Rwigema, 2008). Human capital theory indicates that knowledge enables individuals to develop increased cognitive abilities thus leading them to more productive and efficient activity (Venter et al., 2008). According to Fiet (2000) human capital comprises a combination of skills, knowledge, and resources. Human capital is not limited to formal education, but also includes non-formal education. The inherent assumption in this theory is that the human capital of the founders increases the survival chances of their entrepreneurial ventures (Bruederl et al., 1992).

Human capital thus makes the founder more efficient and the theory implies that human capital can be trained and developed.

Certain human variables have been consistently identified in research as being related to the success of an enterprise such as the owner's level of education, their industry specific experience as well as management experience (Bruederl et al., 1992; Cooper, Dunkelberg & Woo, 1988). Education and work experience allow entrepreneurs to gain skills that help them manage their businesses successfully. These skills also assist entrepreneurs in taking risks especially if the outcome is dependent on their skills. In study presenting contradictory evidence, Goebel (1995) showed that the business owner's personality explained more variance in success than his human capital. Thus, although there is some support for the human capital hypotheses different studies have shown differing aspects of human capital to be more important for entrepreneurial success.

Based on international measures of human capital development, South Africa's human capital base for entrepreneurship has been found to be consistently weak (Herrington et al., 2009). Human capital might have an impact on risk taking propensity as it involves an entrepreneurs knowledge and skills which can help the entrepreneur when navigating and making decisions under uncertain conditions. The present study examines two human capital variables of female entrepreneurs in South Africa, namely level of education and previous work experience.

2.5.1 Level of education.

Education has been found to have a close relationship to entrepreneurship, in a sense that those in entrepreneurship or those who are self-employed have been reported to have a higher level of education than those who are in salaried employment (Robinson & Sexton, 1994). Education helps individuals in identifying and taking advantage of opportunities in the market and indirectly leads to societal growth. Entrepreneurship education in particular has been cited as playing an important role in stimulating the global economy (Sowmya, Majumdar & Gallant, 2010). Education enables entrepreneurs to bring new ideas to life through innovation, creativity and the desire to build something of lasting value (Volkman et al., 2009).

Higher levels of education increase individuals' chances of first becoming self-employed and second the success of their businesses in the sectors in which they operate in terms of the earnings (Robinson & Sexton, 1994). Policy makers also believe that through increasing the levels of education in a nation, it is possible to achieve increased levels of entrepreneurship and especially entrepreneurship education (European Commission, 2009 as cited in Sowmya, et al., 2010). Education is said to be an important requirement for the development of entrepreneurial attitudes, skills and behaviours in the mind sets of entrepreneurs of all ages (Sowmya, et al., 2010). Thus the possibilities of women becoming entrepreneurs can be increased through exposing them to formal learning experiences and to the tasks involved in managing a business (DTI, 2005).

Higher levels of education have also been found to increase an individual's ability to provide a service to those persons who may desire it; or increase the organisational or managerial skills of workers. Entrepreneurial education is likely to play an important role in any venture support system (Gurol & Atsan, 2006). Botha (2006) has argued that education contributes to entrepreneurial success by nurturing competencies such as innovativeness and ability to acquire resources. These competencies are regarded as vitally important to success in many entrepreneurial ventures (Bird, 1992). Notably, in highly technical industries, a specified amount of education may be required as a prerequisite for employment.

Education level has been found to have a positive impact on entrepreneurship with those individuals with higher levels of education more likely to enter into entrepreneurship and to manage successful businesses (Venter et al., 2008). Vesper (1980) pointed out that the more education an entrepreneur has had in business (especially small business) the more likely the entrepreneur will succeed in the current venture. Vesper (1980, p32) asserts that "prior mental programming in the form of both formal education and experience in the particular line of work of the new venture repeatedly comes up as correlated in generally positive ways with odds of success in studies of start-ups".

In a study investigating the influence of level of education on entrepreneurship performance, the researchers reported generally positive results (Cooper & Cascon, 1992). Thus this indicated that education has a positive impact on entrepreneurship performance.

Female business owners have been generally reported to be well educated, with the majority of them having at least a secondary education (Maysami & Goby, 1999). Breen, Calvert, and Oliver (1995) found that more than 25 percent of the female business owners they

interviewed had a university degree, while another 18 percent also held a higher degree. Only a minority of 15.3 percent had not completed secondary school. In comparison, Tec (1996) reported that the female entrepreneurs from Singaporean have at least 10 years schooling, with 35 percent holding degrees or postgraduate degrees, 15 percent had professional qualifications and 50 percent had completed secondary-level education.

Education has consistently been identified as a primary inhibitor of entrepreneurial activity in South Africa. Due to previous apartheid policies, in 1996 one in four black adults had had no access to formal schooling at all and only 6% of all South Africans had a tertiary qualification. The educational level of most women in this country was found to be equal to or lower than Grade 12 (Herrington et al., 2009). This may influence the manner in which female entrepreneurs operate, “such as their tendency to become involved in opportunities that do not require a high level of expertise” (Herrington et al., p. 41, 2009).

Moreover, education plays a crucial role in opportunity entrepreneurship (Venter et al., 2008). Opportunity entrepreneurship results from when individuals become entrepreneurs because they have spotted a gap in the or an opportunity in the market and establish a business to take advantage of that opportunity. In high income countries (such as the United States, the United Kingdom and Australia), 57% of the entrepreneurs have a post-secondary education, suggesting that in these countries the education systems tend to build a suitable skills base for entrepreneurs. (Venter et al., 2008).

In South Africa, entrepreneurial education forms part of academic offerings at several higher education institutions. In industrialised countries, entire schools exist for entrepreneurship (Venter et al, 2008). In South Africa this trend is gaining momentum. In the past decade entrepreneurship has increasingly been taught as a stand-alone module or as a major subject. Thus more and more entrepreneurs in South Africa are getting exposed to entrepreneurial education which could assist them in running their businesses better and growing them to be successful. Differences in levels of entrepreneurship can be explained in that individuals with more education and from households with higher incomes are more likely to pursue opportunity entrepreneurship (high-growth ventures), than those with less education and from poor households who are more likely to pursue survivalist venture (Venter et al, 2008).

The current study investigated education because of the role it plays in improving entrepreneurship. Through education entrepreneurs acquire skills that help them understand the complex environment in which they operate as well as take calculated risks to achieve

success. The study in particular investigates the differences in risk taking propensity in female entrepreneurs according to their level of education.

The ability to demonstrate previous experience in the related field also plays an important role in entrepreneurship. The relevance of previous experience for entrepreneurship is presented in the next section.

2.5.2 Previous experience.

Work experience plays an important role in entrepreneurship because it allows potential entrepreneurs the opportunity to transfer the skills that they have learnt and practiced through employment to managing their business ventures. Further, professional experience is considered by researchers to be an important factor that has a big influence on women's ability to start a business and to improve their business performance (Hisrich & Brush, 1988). Previous experience is included as a variable in the current study because of its close link to education and because it has been found to share a similar relationship as education with entrepreneurship (Robinson & Sexton, 1994). Educational level has been shown to have a positive impact on initial entry and future business performance, and there is a strong causal link between experience (industry and managerial), formal education and successful performance (Hisrich & Brush, 1988).

Previous experience has been described as the number of years that an individual has been able to spend in employment after completing their formal education (Robinson & Sexton, 1994). In the current study previous work experience has been operationalised in two ways, first as the number of positions held in previous employment as this gives an indication of the depth of experience and also demonstrates the ability to transfer skills learnt from one position to another. The second way in which this variable has been operationalised in this study is in the category of the last job held, whether professional, managerial or operational.

Literature indicates that entrepreneurs who are most likely to succeed are those who possess after school training and previous work experience as this enables them to identify entrepreneurial opportunities from an employment base (Nieman & Nieuwenhuizen, 2003). Previous work experience is important in venture creation because it enables the entrepreneur to "demonstrate business knowledge and work experience towards possible stakeholders, and that they should be able to prove that they have supplemented their general qualifications with industry specific experience as well as functional education and experience" (Venter et

al, 2008, p. 45). Previous work experience also gives entrepreneurs more confidence as they engage in entrepreneurship because they have acquired the necessary management skills and have gained an understanding of the industry in which they have worked.

Several empirical studies reveal that women entrepreneurs have had less experience than male entrepreneurs in managing employees, less years of corporate experience, less experience working in similar firms or helping to start new businesses (Carter, Anderson & Shaw, 2001). Stevenson (1986 in Winn, 2005) indicates that men and women come to the domain of entrepreneurship from different backgrounds in terms of educational and business experience. Men usually establish businesses in which they have acquired experience previously and their decisions to become entrepreneurs have been said to follow some logical progression (Winn, 2005). Women on the other hand usually gain their first experience in management through running their own businesses and come from employment in traditional fields such as teaching and nursing (Winn, 2005). In a study of women's work experience, 42% of the entrepreneurs were found to have held at least four previous jobs (Buttner, 1993). Successful female business owners have also been reported to have previous experience in the field in which they operate their businesses (Buttner, 1993). Results from both Collette and Aubury (1991) and Teo (1996) report that before starting their own businesses most female entrepreneurs had gained previous work experience. The type of experience women had gained before setting up their own ventures was not found to be consistent across countries (Maysami & Goby, 1999). Burdette (1990) found that the majority of American female entrepreneurs had experience in a business similar to their current one while the opposite was found for Australian female entrepreneurs.

The current study investigates the influence of previous work experience on risk taking by assessing the differences in risk taking according to the number of positions held as well as job category. Those entrepreneurs who have held more positions in their previous employment have demonstrated the ability to transfer skills that they have acquired and learnt from one position to another. These entrepreneurs will also be able to transfer managerial and other skills to running a business and might be more likely to take risks because they are confident in the skills that they have acquired in previous employment. The study also considers the type of job that was held in previous employment because those entrepreneurs who held management positions had the opportunity to practice entrepreneurial skills that they can transfer to managing a business. There is also a degree of risk taking inherent in the managerial function, therefore entrepreneurs who have held management positions previously

might be more comfortable taking risks because it is something that they have encountered in the previous experience.

2.6 Rationale and aims of the current study

Women entrepreneurs are an important driving force in today's modern economy. They shape and redefine the workplace, business networks, financial institutions and culture (DTI, 2004). As more and more women enter the ranks of business owners, it is important to develop an understanding of female entrepreneurs in this country. Understanding women's experiences and characteristics can help us better understand the education and training needs of potential women entrepreneurs (Anna, et al., 1999).

Moore and Buttner (1987) maintain that until the beginning of the 1980s almost nothing was known about women entrepreneurs and that entrepreneurship studies concerned themselves almost entirely with men. It was therefore during the 1980s that scientific discourse in women entrepreneurs and women-run organisations businesses began to gain ground (Botha, 2006). Yet despite the growing number of women entrepreneurs we still know surprisingly little about women entrepreneurs' business practices, survival and growth strategies and their perceptions of their entrepreneurial careers (Botha, 2006). This lack of information on female entrepreneurs might also be attributed to the fact that cases of business ownership by women have usually been those in which the woman inherited a business from her father or husband (Stevenson, 1986). It was seldom that a woman started a business. Because of the scarcity of women entrepreneurs until relatively recently, information and knowledge about women as business owners or entrepreneurs has been limited (Stevenson, 1986).

There is a scarcity of empirical studies on women entrepreneurs in South Africa, in spite of the recognition that it is one of the important sectors of the economy with great potential to contribute to economic growth, economic development and employment generation (DTI, 2004). Therefore one of the aims of the current study is to provide a descriptive profile of female entrepreneurs in South Africa using variables that have been derived from entrepreneurship research.

Although entrepreneurship had been studied quite extensively; there is little literature comparing women entrepreneurs with each other. Brush (1992) suggests that few studies

have looked at differences in individual characteristics between groups of women. More often the focus has been on looking at similarities and differences between men and women. Therefore this study aims to explore differences in groups of women with regards to risk taking propensity which is the most cited trait in research as important for entrepreneurship. Research has found differences and similarities among men and women on risk taking propensity; the study aims to discover whether female entrepreneurs among themselves differ in their risk taking propensity. Differences will be investigated in the risk taking propensity of female entrepreneurs according to their age, gender role identity, entrepreneurial motivations, level of education, number of positions held in previous employment as well as the type of job held in previous employment.

2.7 Research Questions

1. What is the demographic profile of the female entrepreneurs participating in the current study?
2. Is there a significant difference in risk taking propensity between female entrepreneurs who are 35 years and younger and those who are over the age of 35 years?
3. Is there a significant difference in risk taking propensity between female entrepreneurs with a masculine gender identity and those with a feminine gender identity?
4. Is there a significant difference in the risk taking propensity of female entrepreneurs in relation to entrepreneurial motivations?
5. Is there a significant difference in the risk taking propensity of female entrepreneurs in relation to level of education?
6. Is there a significant difference in the risk taking propensity of female entrepreneurs according to number of positions held in previous employment?
7. Is there a significant difference in the risk taking propensity of female entrepreneurs according to the type of the jobs held in previous employment?

CHAPTER 3

Methodology

The previous chapter provided a review of the literature on entrepreneurship and female entrepreneurship as well as on the variables of interest in the present study. The purpose of this study is to provide a profile of female entrepreneurs participating in the current study as well as investigate differences in their risk taking propensity.

The purpose of this chapter is to describe the procedure that was followed in collecting and analysing the data for the purposes of this research study. In addition the chapter will also provide a discussion on how the variables in the current study were operationalised and measured. In doing this, the research design adopted, the sampling method, the procedure undertaken, the instruments used, as well as the statistical procedures used to analyse the data will be discussed.

3.1 Research Design

In order to be able to address the research questions a quantitative, non-experimental and cross-sectional design was adopted in the current study. The quantitative method allows the data to be expressed in numerical value and as a result was found to be appropriate for the current study because it employs numerical representation and manipulation of observations for the purpose of describing and explaining phenomena (Babbie & Mouton, 2001).

Rosenthal and Rosnow (2008) state that the strength of a quantitative study lies in its ability to aggregate and summarise information.

Since the aim of the present study is to describe and investigate the relationship between variables and employs measures that have been taken at a specific point in time, the current research is a non-experimental, cross sectional, design (Bailey, 1994). The study is considered as a non-experimental research design in nature as the requirements for causality are not met, there was no control group, no random assignment or manipulation of any independent variables (Rosenthal and Rosnow 2008). Non-experimental research can be

described as the form of inquiry whereby the researcher does not have direct control of the independent variables, either because they are inherently not manipulated, or because their manifestations have already occurred (Babbie & Mouton, 2001). One advantage of this design lies in the fact that research is conducted in a natural setting thus avoiding the criticism associated with artificial environments (Rosenthal & Rosnow, 2008).

3.2 Sampling Procedure

This section undertakes to describe the methodology utilised in terms of data collection. The sample was drawn from a population of female entrepreneurs operating in South Africa and who are currently listed on the Linked in networking site. No permission was thus required from any organisation as participants were approached online using details listed by the participants themselves on a public domain. Convenience sampling was undertaken to survey the research respondents. Convenience sampling refers to a situation in which the researcher collects data from whoever is available (Huck, 2009). Participation in the current study was voluntary, as availability and willingness to respond were used as criteria for selecting participants into the sample. While this sampling method is deemed suitable for the current study, it has some disadvantages that are associated with it such as the failure to control for extraneous variables and the unequal probability of everyone in the population to be in the sample. Sampling was undertaken with a view to achieving as representative a sample as much as possible, within the constraints of convenience sampling. Entrepreneurs from across the country and from across the different racial groups in South Africa were invited to participate in the study.

Purposive sampling was also used to select people to invite to participate in the present study. Purposive sampling refers to when the researcher predetermines some inclusion criteria before recruiting participants (Huck, 2009). In the proposed study, the researcher is interested in independent female entrepreneurs only who currently own and manage businesses. As a result, only those females who indicated that they currently own and manage a business were invited to participate in the study. The sample is deemed as a volunteer sample because the participants are not forced to take part in the research but they volunteer to be part of the research.

The researcher joined multiple linked in groups created for entrepreneurs as well as working professionals in South Africa in order to gain access to entrepreneurs who are currently operating businesses. Those individuals who had identified themselves as current owners of businesses were considered for participation in the current study. A search was conducted in each group in order to find those members who indicated that they own and run businesses and who are female. Only those members of groups who indicated that they currently own or manage a business were invited to participate in the study through completing the electronic questionnaire.

After female business owners were identified, they were then sent an inmail from the researcher inviting them to participate in the study and providing a brief description of the present study. The mail also contained a link to the electronic survey that the participants had to follow in order to be able to complete the questionnaire online. Inmails were sent to over 600 female entrepreneurs listed under the groups that the researcher joined on LinkedIn. Only 145 responded by following the link indicating a response rate of 24%. Of the 145 responses 23 questionnaires had to be discarded due to incomplete and insufficient data and as a result they were unusable, and therefore the current study consists of final sample of 122 participants (20%).

The data was collected by means of online self-report questionnaires on survey monkey. Each participant was sent an invitation to participate in the study containing a link to the online questionnaire. When participants followed the link they were first led into a participant information sheet describing the purposes of the study and assuring them that the information they provide would be treated as confidential. The information sheet also informed the participants that they had the right to withdraw from the study at any time or could refuse to answer any question without suffering any negative consequences. The participant information sheet also outlined that participation in the study was voluntary, and that completing and submitting the completed questionnaire online was regarded as consent to be part of the study.

Participants could fill in the questionnaire at a time of their convenience and submit it online using survey monkey. The completed responses were then downloaded by the researcher from the website.

3.3 Sample

The sample was composed of 122 female entrepreneurs operating in various parts of South Africa. Of the 122 female entrepreneurs surveyed, 1 did not state her age and the majority of the participants were over the age of 35 (68%) and only 32% were aged 35 and younger. Therefore the sample predominantly reflects the responses and perceptions of older female entrepreneurs.

In terms of population group, a significant majority of the participants were white (70%), with the rest of the population groups reflected as follows 18% classified as black, 8% classified as coloured and the remaining 4% being Indian and Asian. The reason the sample is skewed this way in terms of race may be due to the medium of the internet that was used to collect the data. Most of the female entrepreneurs in the sample were married (46%), 27% indicated that they were single and never been married, 21% were divorced and only 6% were either widowed, engaged, co-habiting or separated.

In terms of level of education, the majority of the women in the sample had a tertiary education with 31% having diplomas, 18% having university degrees and 23% having a postgraduate education level. Only 8% indicated that they have a high school level education or lower, with 15% of the sample having attained matric as the highest level of education. The remaining 5% indicated that they have obtained higher certificates after completing matric. The sample is therefore a highly educated sample as indicated by the proportion of participants having a formal tertiary qualification. With the exception of only 2% of the participants, 98% of the female entrepreneurs profiled in the study possessed previous working experience.

The rest of the biographical information collected on the sample will be used in the next chapter to provide a further description as well as a profile of the sample. This includes information on the number of years the entrepreneur has been operating their business, the industry in which the business is operated, the location of the business, the number of positions held in previous employment, the industry of previous employment, motivations to start their own business etc.

Table 1: Biographical details of the sample

Variables	Categories	Number	Percentage
Age	<= 35	39	32%
	>35	82	68%
Population Group	Black	22	18%
	White	84	70%
	Coloured	9	8%
	Indian and Asian	5	4%
Education	High School and lower	10	8%
	Matric	18	15%
	Diploma and Certificates	43	36%
	Degree	22	18%
	Postgraduate	28	23%
Marital Status	Single	32	27%
	Married	56	46%
	Divorced	25	21%
	Widowed, engaged, co-habiting or separated	8	6%
Work Experience	Worked Before	119	98%
	Never worked before	2	2%

N = 122

3.4 Measuring Instruments

In terms of the measuring instruments employed in the study the section below will discuss the elements of reliability and validity pertaining to each instrument.

As already stated online self-report questionnaires were utilised in the study to collect data from participants. The questionnaire consisted of three sections namely a biographical questionnaire, Bem's Sex Role Inventory as well as an instrument to measure the risk taking propensity of participants.

3.4.1 Biographical information.

The biographical information section (see appendix B) was intended to elicit certain background information about the sample. Participants were asked to provide some demographic information; namely current age, age at which they founded the business, whether this is their first business, population group, level of education, how the entrepreneur came to own the business, home language, description of business, location of business, motivations for starting the business, business industry, number of children, number of dependants and marital status. The demographic information obtained in the questionnaire was used for descriptive as well as statistical purposes to help the researcher better understand the research participants and provide a profile of their characteristics. The questionnaire contained no identifying information such as participant's name or identity number.

3.4.2. Gender Role Orientation

Gender role orientation was assessed using the Bem's (1977) Sex-roles inventory (see appendix C). Bem developed the Bem Sex-Role Inventory (BSRI) which classifies twenty male, twenty female, and twenty neutral items in terms of socially desired characteristics – these are based on gender items which society believes are desirable for females and those which are appropriate for males (Bem, 1977; Lubinski, Tellegen & Butcher, 1981).

This instrument contains 20 items for each dimension measured on a 7-point Likert-type scale ranging from 1 (never or almost never true) to 7 (always or almost always true).

According to the results, participants are normally classified into four groups, namely androgynous (High masculinity, high femininity); masculine (high masculinity, low femininity); feminine (low masculinity, high femininity) and undifferentiated (low masculinity, low femininity). The possible values for masculinity and femininity range from 20 to 140. The current study only classified participants as masculine or feminine in order to enable the easy interpretation of results and also because the researcher was only interested in the constructs of masculinity and femininity, thus androgyny was considered as lying outside the scope of the current research study, hence it was excluded from the study. Those participants who scored higher on masculinity were classified as having a masculine gender orientation and those with a higher score on femininity were classified as having a feminine gender orientation. In their study, Watson and Newby (2005) found Scale reliabilities, of $\alpha = 0.84$ for masculinity and $\alpha = 0.90$ for femininity.

3.4.3 Risk taking propensity

Risk taking propensity was measured using an instrument combining the risk taking propensity subscale of the entrepreneurial orientation scale designed by Callaghan (2009) as well as Pennings and Smidts's, (2000) Psychometric risk attitude scale (see Appendix D). The scales both consisted of three items each which were combined into the 6 item risk propensity scale that was used in the current study. The scales were combined because the length of each scale was deemed too short in terms of stability to use alone (3 items each) and both scales measured risk taking propensity from a financial perspective with both asking different questions regarding taking financial risks and taking chances with money thus addressing risk taking propensity in the financial domain.

Items 1, 3 and 5 were adapted from Callaghan's risk taking propensity scale. The propensity for risk taking scale is a 5 point likert type scale (1= strongly disagree and 5 = strongly disagree) A Cronbach Alpha of 0.65 was obtained by Callaghan for the risk taking subscale. Items 2, 4 and 6 were taken from Pennings and Smidts's (2000) risk attitude scale. Items on this scale were also measured on a likert-type scale from strongly agree to strongly disagree. In the current study this was a 5 point scale with 1 being strongly disagree and 5 being strongly agree. In developing the scale, Pennings and Smidts first generated a large pool of items from previous research and then tested these items for clarity and appropriateness in

pre-tests with 40 managers. Based on the feedback received some of the items were eliminated and some were modified and additional items developed. The final scale consisted of three items as used in the current study (see appendix C) with a construct validity of 0.72 (Pennings and Smidt, 2000).

In the scale used in the present study a higher score indicates higher risk taking propensity. Two items in the scale were negatively worded statements. The scoring on these items was reversed so that higher scores on all items reflected higher risk taking propensity. A reliability coefficient of 0.74 was found for the current study.

3.4.4 Entrepreneurial Motivations

Entrepreneurial motivations were measured by asking participants in the study for the reasons why they decided to start their own businesses. The responses to this question were then coded into nine categories according to themes that have come up in previous research and were named using the verbatims provided by the participants in the current study. These categories are flexibility, independence and autonomy; seizing market opportunities; financial independence; entrepreneurial aspirations; dissatisfaction with job or the corporate world; family circumstances; natural progression; to help others or to make a difference; and finally retrenched or unemployed.

3.5 Statistical Analysis

This section of the report will focus on the discussion of statistical methods that were employed to analyse the collected data. Thus the discussion will centre on internal reliabilities, descriptive statistics, summary statistics, correlations, t-tests, and ANOVAs.

3.5.1. Internal reliability.

In order to provide a sufficient measure of an attribute, a measure has to “at least assign scores in a constant fashion” to represent reliability (Murphy & Davidshofer, 2004, p. 79). Thus before engaging in any statistical analysis of the data and establishing results it was

important to assess the reliability of the scales of measure that have been employed in the current study. The assessment of the reliability of a measuring instrument involves the examination of the instrument's credibility as a measuring instrument.

When the reliability is assessed and found to be too low, this is indicative that the scale is not a credible measure of the construct (Breakwell, Hammond & Fifer-Schaw, 2006). According to Rosenthal and Rosnow (2008), reliability plays an important role, because without being reliable a scale cannot be valid. Coefficient alpha or Cronbach's alpha was used in the study as a measure of reliability and for the Bem Sex Role Inventory it was used to determine the reliability of the whole scale as well as the feminine and masculinity subscale. A Cronbach alpha of 0.60 as a minimum level is deemed acceptable (Azrilah, Azlinah, NoorHabibah, Sohaimi, Azami, Hamza & Mohd, 2008; Berthoud, 2000).

3.5.2. Descriptive statistics.

Descriptive statistics refer to the statistical methods used to summarise, describe and organise quantitative data in a convenient way (Howell, 2007). Summary statistics were calculated on the data and these included means, frequencies and percentages as appropriate for all the biographical data collected. These statistical procedures are useful in describing various biographical characteristics of data gathered in the current research. This was done in order to classify, describe and provide a complete profile of the sample. Frequencies were calculated and this allows the researcher to represent a number of observations in each category (Howell, 2007).

Averages such as the arithmetic mean were calculated in order to establish the average overall response to the measures. Averages have an advantage in that they offer readers the advantage of reducing the raw data to the most manageable form. A single number can represent all the detail collected with regard to the variable (Murphy & Davidshofer, 2004). Other statistics such as the standard deviations were calculated in order to determine the spread of the data. The standard deviation reflects the dispersion of scores, so that the variability of different distributions may be compared in terms of the standard deviations (Murphy & Davidshofer, 2004).

3.5.3. Independent sample t-tests.

A t-test allows the comparison of the means of two groups of participants. However before carrying out a t-test there are specific assumptions that have to be satisfied first. Firstly, the two groups must be independent of one another. Secondly the population sample must be distributed normally and finally there must be homogeneity of variance between the two groups (Howell, 2007). In order to determine if there is equality of variance between the two groups, Levene's test was conducted. In the present study independent sample t-tests were conducted. These allowed us to investigate the differences in means for different groupings of female entrepreneurs.

T-tests are used to compare data from one group with data from another group to determine if any statistically significant differences exist between the two (Howell, 2007). T-tests were used to assess whether there was significant differences in how feminine oriented or masculine oriented female entrepreneurs differed in their risk taking. Another test was conducted to determine differences in risk taking according to two age categories for entrepreneurs 35 years old and younger and those who are older than 35 years.

3.5.4. Analysis of variance.

In order to analyse differences in risk taking in groups of female entrepreneurs classified according to entrepreneurial motivations, gender role identity, level of education and previous experience a one way analysis of variance was used. Analysis of variance is a statistical method that is used to analyse the way in which the mean of a variable is affected by different types and combinations of factors (Bewick, Cheek & Ball, 2004). One-way analysis of variance is the simplest form of ANOVA.

The one-way ANOVA is premised upon the notion that the variability in a set of data can be divided into different sources, for example into random variability between individuals within groups and variability due to difference between groups (Freeman, 2005). One way analysis of variance is used when there is only one categorical factor which is divided into multiple groups. This is equivalent to comparing multiple groups of data. The following assumptions

must be met in order to perform an ANOVA, the data must be independent, normally distributed and there must be equality of variance.

3. 6 Ethical Considerations

The electronic questionnaires contained a cover letter which was attached detailing and fully explaining the purpose and nature of the present study. The researcher ensured that the questions contained in the questionnaire did not create any discomfort for the respondent, by making sure that the questions asked were not harmful, insulting or unnecessarily intrusive. The participants were also informed in the cover letter that they were not obliged to disclose personal information they were not comfortable with. In the cover letter, the researcher also explained the voluntary nature of the research, allowing the respondents to withdraw from the study at any time they wished. The cover letter also indicated clearly that completing the questionnaire will be considered as permission to use the participants' responses in the present study.

Issues of confidentiality and anonymity are very important to any type of research and particularly this research. Anonymity could not be guaranteed throughout the data collection process, as the researcher was able to identify the participants through their LinkedIn profiles when sending them the link to the online questionnaire, however as the questionnaires were submitted back online, the participants' responses remained anonymous and the researcher had no means of matching these to the LinkedIn profiles of the participants. To protect the anonymity of the participants' responses the questionnaires did not ask any identifying information, such as the name, or identity number of the participants. Information such as the age, gender and race of the participants was only used for biographic groupings of the female entrepreneurs. Confidentiality was guaranteed as results are reported for the whole group and not on individual responses.

CHAPTER 4

Results

First this chapter will discuss descriptive statistics, covering issues such as sample demographics. This will then be followed by the preliminary findings, the Cronbach alpha coefficients, and the summary statistics of the variables used in the study. Subsequently the results from Pearson's correlation coefficient that was used to test the relationships between the variables will be provided. Thereafter the results of the t-tests, chi-squares as well as ANOVAs conducted on the biographical variables, risk taking propensity and gender role identity will be presented.

4.1 Descriptive statistics

4.1.1 Sample demographics.

The sample demographics presented below pertain to those female entrepreneurs in South Africa who responded to the invitation to participate in the current study on LinkedIn by completing the electronic questionnaire. The sample was predominantly composed of white females over the age of 35 with a tertiary qualification, are married and have previous work experience. The additional demographics of the sample are presented below.

4.1.1.1 Number of children and Home Language.

A significant proportion of the participants in the sample indicated that they had no children (36%), while 15% had only one child, 35% had 2 children, 12% had 3 children with only 2% having 4 children. None of the participants indicated that they had more than 4 children, and out of the 122 participants, 4 participants did not provide a response to this question.

The majority of the participants in the current study were English speakers (69%), followed by Afrikaans speakers at 15%. The remainder of the home language classification in the sample is summarised in table 2 below.

Table 2: Number of children and home language

Variable	Categories	Number	Percentage
Number of children	0	43	36%
	1	18	15%
	2	41	35%
	3	14	12%
	4	2	2%
Home Language	Afrikaans	18	15%
	English	84	69%
	SeTswana	3	2%
	IsiZulu	4	3%
	XiTsonga	2	2%
	IsiXhosa	3	2%
	IsiSwati	1	1%
	German	1	1%
	Dutch	1	1%
	Shona	1	1%
	SeSotho	2	2%
	SePedi	1	1%

4.1.1.2 Business location.

Most of the participants in the study indicated that their businesses are located in Johannesburg (43%) and Cape Town (36%). The remaining 21% of the businesses are located in Pretoria, Durban, North West, East London, Nelspruit or nationally. Table 3 below summarises the sample composition in terms of business location.

Table 3: Business location

Variable	Categories	Number	Percentage
Business Location	Gauteng	55	49%
	Kwa-Zulu Natal	11	9%
	Western Cape	42	35%
	North West	2	2%
	Eastern Cape	1	1%
	Mpumalanga	1	1%
	Nationally and across Africa	3	3%

4.1.1.3 Motivations for starting the business and path to ownership.

The female entrepreneurs profiled in the current study indicated various motivations for starting their own businesses. Most of the entrepreneurs surveyed indicated that their main motivation for starting their own business was pursuing a passion and having spotted a gap in the market and recognised the opportunity to go into business (25%). A subsequent 19% and 16% cited flexibility and autonomy as well as entrepreneurial aspirations respectively as their main motivations for becoming entrepreneurs. Another 13% indicated that the reason they became entrepreneurs was because they were dissatisfied with their job and the corporate world with only 6% citing unemployment and retrenchment as their main motivation. Table 4 below summarises the sample composition in terms of motivations.

92% of the participants in the sample indicated that they are the founders of their current businesses, with 4% indicating that they bought the business from the previous owner and another 4% being shareholders in the business.

Table 4: Entrepreneurial motivations and ownership path

Variable	Categories	Number	Percentage
Entrepreneurial Motivations	Flexibility, Independence and Autonomy	22	19%
	Seizing opportunities in the market	29	25%
	Financial Independence	10	9%
	Entrepreneurial aspirations	19	16%
	Dissatisfied with job or corporate world	15	13%
	Family Circumstances	3	3%
	Natural Progression	7	6%
	To help others/ make a difference	5	4%
	Retrenched/ unemployed	7	6%
Path to ownership	Founder	110	92%
	Bought from previous owner	5	4%
	Shareholder	5	4%

4.1.1.4 Business and employment Industry.

Business industry refers to the industry in which the participants are currently operating businesses whereas employment industry deals with the industry in which they were previously employed before becoming entrepreneurs. Over half of the respondents (81%) indicated that they operated in the financial intermediation, insurance, real estate and business services; community, social and personal services and wholesale and retail trade industries each comprising 48%, 22% and 11% respectively. The industries with the least participants were transport and storage and imports and exports each with 1% of the sample operating in those industries. In terms of employment the majority of the participants indicated that they were employed in the financial intermediation, insurance, real estate and business services industry (54%). This is followed by 14% and 10% in the community, social and personal

services and wholesale and retail trade industries respectively. Figure 1 below depicts the proportion of female entrepreneurs according to business and employment industry.

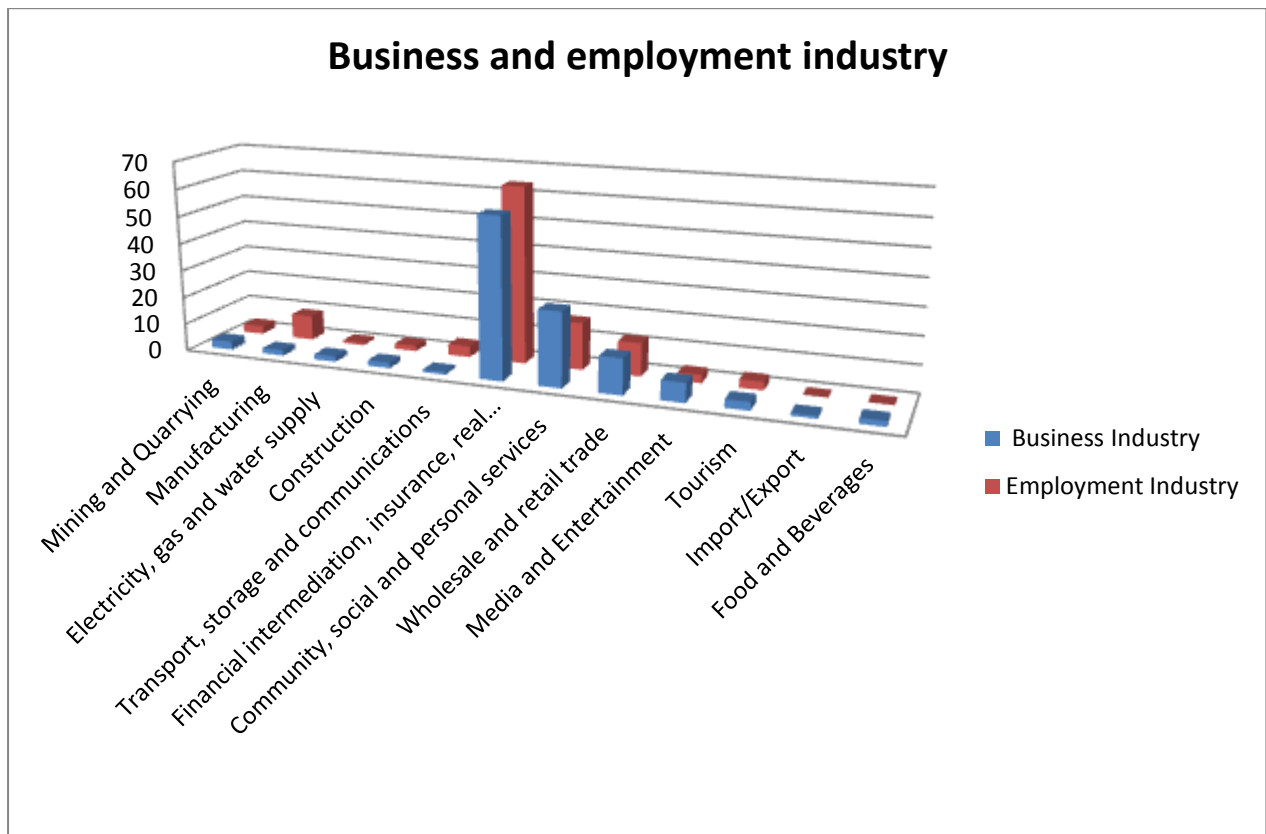


Figure 1: Business and employment industry

4.1.1.5 Number of previous work positions, nature of work and job classification.

Most of the participants indicated that they have held 4 positions or more as part of their previous work experience (56%), with only 13% and 8% having held one and two positions respectively. 42% of the participants classified their previous work as managerial whereas 25% classified it as professional and 8% as operational.

Table 5: Number of positions and job classification

Variables	Categories	Number	Percentage
Number of Positions	1	15	13%
	2	9	8%
	3	26	23%
	4+	64	56%
Job Classification	Managerial	49	42%
	Professional	41	35%
	Operational	27	23%

4.1.1.6 Parents' occupation.

Most of the participants in the study indicated that their parents were not involved in an entrepreneurial occupation with 71% and 86% for father and mother being involved in a non-entrepreneurial occupation respectively. Only 14% indicated that their mother was an entrepreneur and 29% indicated their father was an entrepreneur. This is summarised in the table below.

Table 6: Parents' occupation

Variables	Categories	Number	Percentage
Mother's Occupation	Entrepreneur	15	14%
	Non-Entrepreneur	95	86%
Father's Occupation	Entrepreneur	31	29%
	Non-Entrepreneur	77	71%

4.1.1.7 Province where the entrepreneur grew up and area classification.

The majority of the participants grew up in Gauteng, Western Cape and KwaZulu Natal the with 36%, 19% and 15% respectively. Most of the entrepreneurs grew up in an urban area (77%), with 14% and 9% growing up in peri-urban and rural areas.

Table 7: Province and area classification of where the entrepreneur grew up

Variables	Categories	Number	Percentage
Province	Gauteng	43	36%
	Western Cape	23	19%
	Eastern Cape	8	7%
	KZN	18	15%
	Free State	3	2%
	Limpopo	2	2%
	North West	2	2%
	Mpumalanga	1	1%
	Nationally	3	2%
	Outside SA	43	36%
Area Classification	Urban	93	77%
	Peri-Urban	17	14%
	Rural	11	9%

4.1.2 Summary statistics.

Table 8: Summary statistics for current age, founding age, years in operation and risk-taking propensity

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Current Age	121	41.21	9.96	22.00	68.00
Founding Age	122	35.10	9.25	17.00	65.00
Years in operation	122	6.22	5.92	0.50	30.00
Risk Taking	122	2.71	0.77	1.20	4.80

The summary statistics as indicated in table 8 above show that the mean age for female entrepreneurs in the study is 41.21 years in relation to a minimum of 22 years and a maximum of 68 years. The mean founding age was 35.10 with a minimum of 17 and a maximum of 65. The operating years of the entrepreneurs' businesses is 6.22 in relation to a minimum of 0.5 years and a maximum of 30 years which indicates that most of the entrepreneurs in the study have been running their businesses for many years. Finally risk taking yielded a mean of 2.71 with a minimum of 1.20 and a maximum of 4.8, indicating predominantly low to moderate levels of risk taking in the sample.

Descriptive statistics are not reported for gender role orientation as it was coded to be and was used as a categorical variable in the current study with masculine gender role identity and feminine gender role identity representing the two categories.

4.2 Statistical Analysis

4.2.1. Scale reliabilities.

Before engaging in any statistical analysis of the data, it is useful to consider the reliability of the instruments used. The Cronbach coefficient alpha was used to test the reliability of the scales used in the study. Cronbach coefficient alpha tests for measurement error and hence gives an estimate of the instruments' internal consistency (Rosenthal & Rosnow, 2008).

Table 9: Scale reliabilities

Variable	Observations	Number of items	Cronbach Alpha
Risk Taking Propensity	122	5	0.74
BSRI Masculinity Subscale	122	20	0.82
BSRI Femininity Subscale	122	20	0.81

It is not always possible to avoid or even remove all measurement error, but the assessment of internal consistency enables the determination of the extent of the measurement error. Reliability refers to the accuracy, stability and consistency of the measure (Murphy & Davidshofer, 2005). Reliability was examined on each of the scales and their subscales that were employed in the study to determine their accuracy. For the present research study an alpha of .60 was considered the minimum acceptable alpha.

All of the scales produced an alpha coefficient alpha that was above the acceptable level. The risk taking propensity had a reliability of 0.74. An initial analysis of reliability for this scale yielded a coefficient of 0.68 which was within the acceptable range but this was improved by removing item 3 from the scale and the coefficient alpha increased to 0.74. The Bem Sex role identity subscales of masculinity and femininity yielded Cronbach alphas of 0.82 and 0.81 respectively which means that the scales have very strong reliabilities (refer to table 9 above).

4.2.2 Independent sample T-test.

Previous research has indicated mixed results when examining differences between men and women in risk taking propensity. This study sought to examine differences using socially constructed gender roles instead of biological sex. A two independent sample t-test was used to determine whether there were differences in risk taking propensity between female entrepreneurs with a masculine identity and those with a feminine identity as well as those aged 35 and below and those who are older than 35. Table 11 below provide a summary of the findings.

Since the two-independent sample t-test is a parametric test one first has to make sure that the variables being tested meet the assumptions for a parametric test. One way of doing this is by accessing the equality of variance of the variables being used. Therefore an equality of variance test was conducted, the test showed that all the variables had equal variance; hence it was appropriate to continue using the two independent samples T-test.

Table 10: Independent sample t-tests on age category, gender role orientation and risk taking propensity

t-test for risk taking and age category				
Variable	<i>M</i>	<i>SD</i>	<i>t(119)</i>	<i>p</i>
Entrepreneurs aged 35 and younger	2.94	0.82	2.37	0.019
Entrepreneurs aged over 35 years	2.59	0.72		
t-test for risk taking and gender role orientation				
Variable	<i>M</i>	<i>SD</i>	<i>t(116)</i>	<i>p</i>
Masculine entrepreneurs	2.69	0.77	-0.25	0.801
Feminine entrepreneurs	2.73	0.81		

The t-test results presented in the table above indicate that there is no significant difference in the risk taking propensity of those female entrepreneurs with a masculine orientation to those with a feminine orientation. The table also indicates a significant difference in the risk taking propensity of female entrepreneurs according to age category. Those entrepreneurs are 35 years or younger had a higher mean score for risk taking of 2.94 whilst those who are older than 35 had a mean of 2.59. The difference is significant at the 0.05 significance level.

4.2.4 One way Analysis of Variance

One way analysis of variance was employed to investigate any differences amongst different groupings of female entrepreneurs in risk taking propensity. Research has indicated that one's risk taking propensity is influenced by one's skills, knowledge and experience. It has also been argued that those entrepreneurs who have been 'pulled¹' into entrepreneurship can be considered true entrepreneurs who have made a choice to assume certain risks. The study therefore sought to investigate differences in risk taking according to level of education, number of previous work positions held, job category as well as entrepreneurial motivations.

Before running the ANOVA the assumption of homogeneity of variance was assessed using Levine's test and this assumption was met in all cases.

Table 11: Results for one way ANOVA

Variable	<i>F</i>	<i>DF</i>	<i>p</i>
Entrepreneurial Motivations	0.30	8, 108	0.96
Level of education	0.38	6, 114	0.88
Number of positions	3,11	3, 108	0.52
Job category	0.90	2, 114	0.41

¹ Entrepreneurs who are pulled into entrepreneurship are those entrepreneurs who establish businesses because of the attractiveness of the option (Glancey et al., 1998; Hansemark, 1998). These entrepreneurs are attracted by factors such as financial rewards, preference for independence, need for achievement, innovation, ambition and new challenges, entrepreneurial drive and to gain social standing and recognition (Alstete, 2002; Glancey et al., 1998; Hansemark, 1998).

The results indicate that there is insufficient evidence to suggest differences in risk taking propensity according to entrepreneurial motivations. The results also indicate that there are no significant differences in risk taking according to level of education, number of positions as well as nature of work.

The results of the statistical analyses in the current study yielded results that were not significant, indicating that there are no differences in the risk taking propensity of female entrepreneurs according to entrepreneurial motivations, gender role identity, level of education, number of jobs or nature of work. However, there was a significant difference in the risk taking propensity of female entrepreneurs aged 35 years and younger and those who are older than 35 years with those entrepreneurs 35 years and younger exhibiting a higher risk taking propensity than their older counterparts. The following chapter will present an interpretation and a discussion of the results presented in this chapter. It will also outline the practical implications as well as the limitations of the current study.

CHAPTER 5

Discussion

Thus far this study has presented relevant literature, outlined the methodology that was used and reported all the results obtained. This chapter is hence dedicated to the discussion of the results and will attempt to draw a link between the theoretical argument presented in the literature review and the results in order to illustrate how the aims of the research were met. This will be followed by a discussion of the theoretical implications, the limitations of the study and suggestions for future research.

This study was conducted with two purposes in mind; the first was to provide a profile of female entrepreneurs in South Africa. The second purpose was to investigate differences in risk taking amongst female entrepreneurs in terms of gender role identity, entrepreneurial motivations, level of education as well as previous work experience. The discussion presented below will provide an interpretation of the results that were presented in the previous chapter.

5.1 A Profile of South African Female Entrepreneurs

As the current study was exploratory in nature and the sample was not representative of the population of South African female entrepreneurs, the results presented below represent preliminary findings.

5.1.2 Age, Marital status, number of children and population group

The mean current age of the participants in the study was 41.21 in relation to a minimum of 22 and a maximum of 68 indicating that age is skewed to the right with majority of the sample being older. This shows that women are running businesses from younger ages and are not deterred by lack of working experience. On the other hand the mean founding age is 35.10 with a minimum of 17 and a maximum of 65, indicating that female entrepreneurs tend to start their businesses at an older age. In his study Buttner (1993) found that female entrepreneurs were between the age of 30 and 45 when they initiated their ventures. This pattern was not supported by the data in the current study. The results in the present study indicate that this pattern is changing as more and more women younger than 30 are starting

businesses and even those who are over the age of 45 as evidenced by the minimum and maximum founding ages in the current study. This also has implications for institutions that are aiming to stimulate entrepreneurship in the country as they can target younger females and encourage them to enter into entrepreneurship. As females enter entrepreneurship at younger ages, they may require more support in terms of business skills in order to bridge the gap that may result from a lack of work experience in particular managerial experience.

The majority of participants in the study were found to be married with children. These findings are consistent with those from previous studies. Hisrich and Brush (1984) and Buttner (1993) reported that the typical female entrepreneur is married with children and a supportive spouse who was in a technical or professional occupation. This also indicates that the typical female entrepreneur in the study has a double burden which involves taking care of children and domestic responsibilities as well as managing a business on the side. This relates to the entrepreneurial motivation indicated by 19% of the participants in the study citing a need for flexibility in order to be able to spend time with their children on the one hand whilst being able to make an income on the other.

The majority of the respondents in the study were white with only 18% being black and 4% being Indian or Asian. The majority of the participants were also English speakers at home (69%), followed by Afrikaans speakers (15%) and Zulu speakers comprised 3% of the participants. This is not surprising considering that most of the participants in the study were white females and this might also be attributed to the mode that was used to obtain a sample for the study. This will be discussed in detail later in the limitations of the study. This indicates that the typical female entrepreneur in this sample is a white English speaker.

5.1.3 Industry and business location

The mean years in operation reported for the current sample was 6.22 with to a minimum of 6 months and a maximum of 30 years. This indicates that the businesses that are owned by entrepreneurs in the current study tend to be fairly young. This indicates that most of the participants in this study did not have a lot of experience managing their own businesses and they have only been running these businesses for an average of 6 years. Most of the respondents in the study operated businesses in the financial intermediation, insurance, real estate and business services sector, followed by community, social and personal services and wholesale and retail trade. The industries with some of the lowest participants were mining

and quarrying, manufacturing, construction and transport, storage and communications and these represent traditional male sectors (Anna et al., 1999). This is consistent with previous research findings that female businesses tend to be concentrated in traditional female sectors such as services and retail (Cooper & Goby, 1999; Hisrich & Brush, 1984). This might also be due to the fact that these industries are traditional employment industries for women in South Africa and abroad (Anna et al., 1999). The industries in which the female entrepreneurs were employed also follow the same trend as the industries in which they currently run businesses. The majority of the participants were employed in the financial intermediation, insurance, real estate and business services, community, social and personal services and wholesale and retail trade. The least cited industries for previous employment are mining and quarrying (2%), construction (2%) and electricity, gas and water supply (1%). This is comparable to the industries that the entrepreneurs are operating their businesses, thus providing support to previous research findings that female entrepreneurs establish businesses in industries in which they have obtained previous experience (Buttner, 1993).

In terms of location most of the female entrepreneurs in the study operated their businesses from the three major economic hubs in South Africa namely Gauteng, Cape Town and Durban. Only 1% of entrepreneurs profiled in the study operated from Mpumalanga or the eastern Cape respectively. This might be due to the fact that there are more economic opportunities for women in the big cities found in Gauteng, Western Cape and Kwa-Zulu Natal. However the fact that the sample of female entrepreneurs in the study was not representative of female entrepreneurs in other provinces of the country. Policy implications from these findings could be designing policies that encourage and stimulate female entrepreneurship in other provinces of South Africa. This can lead to increased employment and stimulate economic growth in these provinces especially in the poorer provinces such as the Eastern Cape and Limpopo.

5.1.4 Entrepreneurial motivations and path to ownership

Research studies have indicated that female entrepreneurs are motivated by different factors that can be classified as push or pull (Alstete, 2002; Brush, 1992). The study found that most of the participants were pulled into entrepreneurship by recognising opportunities in the market and the desire to seize these opportunities (25%). The second most cited reason for entering into entrepreneurship was the need to achieve flexibility, independence and autonomy (19%) and followed by entrepreneurial aspirations (16%) and dissatisfaction with their jobs or the corporate world (13%). The least cited reasons were family circumstances

(4%) and the desire to help others or make a difference (4%). This is contrary to previous research which indicates that push factors are more important in women becoming entrepreneurs (Deakins & Whittam, 2000). In this study the most cited reason was a pull factor, although there is a mixture of push and pull factors that mostly motivated women to become entrepreneur. This might be due to the increased support that the government and other organisations are providing for female entrepreneurs, thus creating opportunities for them to become entrepreneurs. Female entrepreneurs are then taking advantages of the opportunities in the economy to set up enterprises.

Previous research indicated that women entrepreneurs are most likely to be motivated by the need to help others and make a social contribution in establishing their businesses (Still & Timms, 2000). The current study failed to find evidence in support of this as only 4% of the respondents in the study indicated that they were motivated by the need to help others in becoming an entrepreneur. This might also be due to the composition of the sample, that they might be living in areas and communities where there are fewer social needs. This might also be due to the fact the sample in the study is not representative of female entrepreneurs in all communities across South Africa.

The majority of entrepreneurs in the present study have founded the businesses that they are currently running (92%), while 4% have bought their businesses from the previous owner and 4% are shareholders in the business. Thus the female entrepreneurs in the current study are pulled into entrepreneurship by the opportunities they perceive in the market and the need for flexibility and autonomy and tend to be the founders of the businesses that they own and manage.

5.1.5 Level of education and previous work experience

Previous research has indicated that female entrepreneurs are well educated, with the majority of them having at least a secondary education (Maysami & Goby, 1999). The present study found support for these previous findings as the majority of entrepreneurs profiled in the study indicated that they held post high school qualifications with 36% holding diplomas and certificates, 23% holding postgraduate degrees and 18% having degrees. This is also due in part to the composition of the sample the majority of which are white women. White women in this country had more access to educational opportunities as well as the financial means to pursue higher education than their black counterparts. In terms of work experience 98% of the participants indicated that they had worked before. This might be

related to the high level of education in the sample, that as the results of the knowledge and skills that the participants had acquired they had access to job opportunities. This is also related to the fact that women had started their businesses at relatively older ages with an average founding age of 35.1, thus it is logical to assume that before starting their businesses they were previously employed.

The South African female entrepreneurs profiled in this study indicated that they have worked in various positions during their time of employment. Most of these entrepreneurs held 4 or more positions during their employment (56%) and only 13% having held only one position. This supports the findings of Buttner (1993) that female entrepreneurs had held at least four job positions in their previous employment. This also indicates that female entrepreneurs have acquired various skills in their time of employment and are able to transfer these skills from one job to another. Thus the number of positions held gives us a sense of the depth of experience that these female entrepreneurs have.

The study also investigated the classification of the jobs that the participants performed as managerial, professional or operational. It is assumed that managerial jobs involve some entrepreneurial skills such as decision making and managing resources. The majority of the respondents indicated that they held managerial positions (42%); 35% indicated they held professional jobs and 23% held operational positions. These results are consistent with the high level of education possessed by the participants in the study but they do not support results from previous research studies indicating that women usually gain their first management experience in their own businesses (Winn, 2005).

5.1.6 Parents' occupations.

Most of the entrepreneurs indicated that their parents were not involved in entrepreneurial ventures - 86% and 71% for mothers and fathers respectively. Only 14% of entrepreneurs have mothers who were entrepreneurs and 29% have entrepreneur fathers. One explanation for this may be that at the time their Also, the fact that the participants indicated that more fathers were entrepreneurial compared to mothers can also be attributed to the unequal opportunities afforded to men and women in the past – such as the fact that according to women could not enter into financial arrangements unless they had the consent of their

spouses, or the fact that they did not own property that they could use as collateral when taking out loans (Simbwaye, 2002 as cited in Botha, 2006).

5.1.17 Profile summary.

Thus the South African female entrepreneur as profiled in the current study may be described as white, English speaking with an average age of 41. She is married with children and most likely founded her business around the age of 35. She operates a relatively young business which has been in existence for an average of 6 years. Her business is likely to be in the following sectors- financial, intermediation, insurance and business services sector; community, social and personal services; and wholesale and retail trade. These industry sectors also represent the sectors in which she was employed before becoming an entrepreneur. Her business is most likely situated in Gauteng, Western Cape or KZN which is where she grew up, in mostly urban areas of these provinces.

The South African female entrepreneur in this study was mostly attracted into entrepreneurship by perceiving opportunities in the market and the need to seize these opportunities and by the need to gain flexibility over her time as well as autonomy. She is highly educated possessing a diploma, degree or postgraduate qualification and is the founder of the business which she currently owns and manages. She has gained previous work experience and has mostly held 4 or more positions in a managerial capacity. Her parents were mostly not entrepreneurs; however, her father was more likely to be an entrepreneur than her mother.

5.2 Statistical Findings

5.2.31 Age and risk taking propensity.

To be able to address this question an independent sample t-test was used to assess whether there are any differences in the risk taking propensity of female entrepreneurs aged 35 and younger and those who are over the age of 35.

The results from the t-test indicated that there was a significant difference with regard to female entrepreneurs aged 35 and below and those above the age of 35 in terms of risk taking. The results indicated that women aged 35 and younger had a higher risk taking propensity than those who are aged 35 and above. This is consistent with previous research findings that reported that risk taking decreases with age (Bellante & Green, 2004; Merton & Samuelson, 1992). As people get older they have been reported to tend to take fewer financial risks as they perceive themselves as having less time to be able to recover from potential financial losses.

5.2.4 Gender role identity and risk taking.

An independent sample t-test was also used to assess differences in risk taking between female entrepreneurs with a masculine orientation and those with a feminine orientation. The results indicated that there are no significant differences between these two groups of women in terms of risk taking. It was expected that those female entrepreneurs who are masculine in terms of their gender role orientation would have a higher risk taking propensity than those with a feminine gender orientation. This was not supported in the current research and this could be attributed to the way in which risk taking propensity was coded and used in the current study. Participants were classified as having a masculine orientation if their masculinity average was higher than their feminine average and vice versa. Most of the respondents had high scores for both masculinity and femininity and were only classified as either one because one was slightly higher than the other. Another explanation to these results is that the sample size was too small to allow the detection of significant differences in risk taking between these two groups.

5.2.5 Entrepreneurial motivations and risk taking propensity.

To assess the differences in the risk taking propensity of female entrepreneurs according to entrepreneurial motivations, a one way analysis of variance was employed. The results indicated that there are no significant differences in the risk taking propensity of female entrepreneurs according to motivations. The means indicated that those female entrepreneurs who are motivated by the need for flexibility, independence and autonomy which is a push

factor and those motivated by the recognition and pursuit of opportunities in the market which is a pull factor scored the highest on risk taking propensity with a mean score of 2.81 each.

The results are not consistent with what was expected. We expected to find that those female entrepreneurs who are motivated by pull factors such as recognising market opportunities, entrepreneurial aspirations, financial independence and the need to make a difference to have higher risk taking propensity than those entrepreneurs motivated by push factors. This is because some scholars believe that those entrepreneurs who are motivated by pull factors can be considered as true entrepreneurs who willingly and consciously assume risks. These findings might be due to the small sample size in the study which might have made it difficult to find significant differences in risk taking propensity according to entrepreneurial motivations.

5.2.6 Education level and risk taking propensity.

A one way analysis of variance was also used to assess the differences in the risk taking propensity of female entrepreneurs according to education. Again, no significant differences were found in female entrepreneur risk taking propensity according to educational level. It was expected that those entrepreneurs with higher levels of education would have higher risk taking propensity than those entrepreneurs with lower levels of education, because those with higher levels of education have obtained knowledge and skills to help them navigate through uncertain and risky situations. This finding could also be attributed to the sample size which was not large enough to detect significant differences in risk taking with regards to level of education.

5.2.7 Number of positions, job classification and risk taking propensity.

To assess the differences in risk taking in the entrepreneurs in terms of number of positions and job classification, a one way analysis of variance was also used. In terms of number of positions, no differences were found between female entrepreneurs according to the number of previous positions they held. The highest mean for risk taking was for entrepreneurs who

had held two positions and the lowest was found for those with 4 or more positions, indicating that number of positions held in previous employment has no influence on risk taking. It was expected that those entrepreneurs who had held more positions would have a higher risk taking propensity than those who had fewer positions. In addition, no significant differences were found in the risk taking propensity of female entrepreneurs according to job classification, whether managerial, professional or operational. This is not consistent with previous findings where managers were found to have higher levels of risk taking than specialists (Walker & Litwin, 1961). However, the lowest risk taking propensity mean was for entrepreneurs who worked in operational positions (2.54) and the highest was for those with managerial positions (2.790). This lack of a significant results might also be attributed to the small sample size in the current study.

5.3 Theoretical and practical Implications

The findings of this research are important for a number of reasons. Firstly gaining an understanding of who the South African female entrepreneur in the current study is, what is her of education experience will provide a start to help policy makers who are involved in designing programmes to assist female entrepreneurs in design appropriate programs for them and ensure that they are pitched at the right level for their target audience. It will also help those organisations who provide business funding as well as business development assistance to female entrepreneurs to better understand them as clients.

Secondly, the results on women's entrepreneurial motivations and risk taking will provide needed insight into women's career development. By investigating the different reasons why women enter into entrepreneurship, we can gain an understanding of the career development through the choices that the make and the motivation behind these choices. Consultants who work with women considering entrepreneurship would better understand their clients' motivation to enter entrepreneurship and would be better able to help the women make informed career decisions. The research could also help women who seek greater self-awareness about their motivations and how these relate to risk taking propensity.

The findings also contribute to the body of existing knowledge on age and risk taking. A significant difference was found in risk taking between female entrepreneurs who are 35 and younger and those who are over the age of 35. Those who were aged 35 years and younger

had a higher risk taking propensity than their older counterparts. This was consistent with previous research findings.

5.4 Limitations of the Current Research

Various limitations have been identified concerning the present study, which could have an impact on the results that have been obtained and the interpretation thereof. These limitations relate to the data collection methods as well one of the measuring instruments.

5.4.1 Method.

A non-experimental cross-sectional design was used in the current study and this poses the first limitation as no causal conclusions can be made from the statistical results (Neumann, 1997). Therefore this research merely provides a snapshot in time of the whole situation and does not engage all the dynamics and elements that may be present in such a relationship. As a result causal conclusions could not be made regarding the findings in the current study. Longitudinal studies on the other hand allow for more meaningful and holistic results (Amphora, 1993).

The second limitation arose from the use of self-report questionnaires in collecting the data. This method of collection is based on the assumption that participants respond in an honest and accurate manner when completing the questionnaires. However, there is no way to know for sure that the participants understood the questions and responded accurately and honestly. In addition, this method of collecting responses is susceptible to bias as respondents may answer questions in a socially acceptable manner, which may not be congruent with their true views (Christensen, 2007). In addition a limitation of any survey research is the inability to ask follow-up questions and explore in more depth the reasoning behind any finding. Finally this method of data collection is also vulnerable to non-response bias, where respondents chose not to return the questionnaires. This limitation is reflected in the current study's response rate where 600 entrepreneurs were invited to participate in the study and only 145 responded by completing the online questionnaire indicating a response rate of 24%.

The third limitation in the study is provided by the medium that was used to obtain a sample of female entrepreneurs. The internet and LinkedIn were utilised to obtain a sample and this as a result excluded a lot of female entrepreneurs who do not have access to the internet and those who are not registered on LinkedIn. The researcher also identified female entrepreneurs by joining certain groups on LinkedIn; therefore those entrepreneurs who are registered on LinkedIn but did not belong to any of the groups the researcher joined were excluded from the study. Furthermore, the internet as a research tool can be a difficult medium to work with as much of the information is volatile and dynamic as web sites disappear, move or mutate daily. Additionally, as a result of the sampling method, the sample was composed of 70% white female entrepreneurs, and is not representative of the population of South African female entrepreneurs. This might be attributed to the fact many black entrepreneurs might not have access to the internet or might not be aware of business networking sites like LinkedIn. They also could have chosen not to participate in the study or this could be indicative that black female entrepreneurs are in the minority. This has an impact on the generalisability of the findings to the population of South African female entrepreneurs with the findings not being generalisable to the population of South African female entrepreneurs.

Finally, the research only employed a quantitative form of measurement, which may have yielded less about the variable being measured than a qualitative form of measurement would have, which if used would have allowed for a more in depth understanding to be gained. Previous research has suggested that it is difficult to extract experiences of gender impact with quantitative techniques (Carter, 1993). Nonetheless, surveys are a popular research design for studying female entrepreneurship (Brush, 1992).

5.4.2 The BRSI Instrument.

The classification of the socially appropriate roles for males and females in the BSRI was done using American Society values and culture. As a result this poses a potential limitation, specifically in terms of its generalisability to non-western cultures since societies and cultures differ in the behaviours and tasks that are expected to be performed by males and females (Bem, 1974).

The BSRI has also been criticised for the inclusion of female characteristics that appear to be less socially desirable than the male characteristics included in the questionnaire (Pei-Hui &

Ward, 1994). Specifically, the BSRI states that females are perceived as affectionate, sympathetic, compassionate, gentle, gullible and understanding whereas men were perceived to be aggressive, ambitious, analytical, and competitive (Bem, 1974). This could have led the participants in the study to choose those characteristics which are masculine purely because they are socially desirable and not because they truly describe them.

Although there are various limitations indicated by the present study, there are several future research suggestions that can be obtained due to these restrictions. These suggestions for future research will be discussed next.

5.5 Directions for future research

The following recommendations for future research emerged from the findings and limitations of the study.

Future research could investigate how risk taking propensity changes in female entrepreneurs over time. The research should investigate whether increasing experience in running a business over time influences the risk taking propensity of the individual. This should be a longitudinal study where risk taking propensity is measured at the initiation stage of the business venture and then measure again at a later period in time.

Black female entrepreneurs also represent an under researched population of entrepreneurs in South Africa. Future research could investigate black female entrepreneurs to gain insight on who they are and the experiences they are having as entrepreneurs.

In South Africa women faced discrimination in the past; however white women still had access to better educational and other opportunities that women from other races did not have. Women from different races in South Africa bring differences to entrepreneurship. Future research can investigate the differences between white and black female entrepreneurs in terms of risk taking propensity and entrepreneurial motivations – specifically focusing on whether they are motivated by the same push and pull factors.

Finally future research can expand on the current study by profiling South African female entrepreneurs with a representative sample that will enable generalisation to the population of

female entrepreneurs in South Africa. Qualitative methods can be used to gain more in depth and rich data on female entrepreneurs and to understand their experiences.

CHAPTER 6

Conclusion

Female entrepreneurs are an important source of economic growth and their enterprises make an important contribution to the society at large. The present study thus aimed to firstly provide a profile of female entrepreneurs participating in this study in an effort to help us understand the unique characteristics of this group of entrepreneurs. The sample was not however representative of and could not be generalised to the population of South African female entrepreneurs. The results indicated that the typical female entrepreneurs in the current study is well educated, married with children, have an average age of 41 years. This was consistent with results of previous research studies that have been conducted in different countries.

The second aim of the study was to investigate the risk taking propensity of female entrepreneurs in South Africa. The study only found significant differences in risk taking propensity in terms of age which confirmed the findings of previous research that risk taking propensity decreases with age. There were no significant differences in risk taking propensity according to gender role orientation, entrepreneurial motivations, level of education, number of previous positions and type of job held in previous employment. The non-significant results in the study may be attributed to the small sample size.

Even though the results in the study cannot be generalised to the population of South African female entrepreneurs because of the sample they still provide some insight into female entrepreneurs in the current study and their characteristics. An interesting finding in the current study is the high level of education that is possessed by the participants in the study and the fact that most of the participants had previous work experience at a managerial level.

The results provided in the current study can help researchers and policy makers understand female entrepreneurs better and may enable them to design programs to assist them in their entrepreneurial journey that are appropriate to their skills and experience. The results also add to the body of knowledge and to our understanding of the risk taking propensity of female entrepreneurs and the factors that exert influence on this construct.

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APPENDICES

APPENDIX A: Participant information sheet



Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, WITS, 2050

Tel: (011) 717 4500 Fax: (011) 717 4559



Dear Madam

Hello! My name is Khanyisile Sibanyoni and I am conducting research in partial fulfillment of a Master's degree in Industrial Psychology at the University of the Witwatersrand. My area of focus is female entrepreneurs in South Africa and the differences between those in male dominated industries and those in non-male dominated ones.

I would like to invite you to participate in this study. Participation in this research will entail completing the attached questionnaire. Participation is voluntary and no member will be advantaged or disadvantaged in any way for choosing to complete or not to complete the questionnaire. While questions are asked about your personal circumstances for descriptive purposes, no identifying information such as your name or I.D. number is asked for, and as such your responses will remain anonymous. Your completed questionnaire will not be seen by any person at any time, and will only be seen by myself. Your responses will only be looked at in relation to all other responses. This means that feedback that will be given will be in the form of group responses and not individual responses.

If you choose to participate in the study please complete the attached questionnaire as carefully and as honestly as possible. Filling in the questionnaire should take approximately 15-20 minutes. Completion and submission of the questionnaire will be considered to indicate permission for me to use your responses for the study. It would be appreciated if you could complete the questionnaire within two working weeks from receiving it. To maintain anonymity all questionnaires are to be submitted back electronically to the researcher. Should you choose not to participate, this will not be held against you in any way. Should

you choose to participate in the study, please note that you have the right to withdraw your participation at any point as well as the right not to answer any material if you choose not to.

The research study is an independent study which will be conducted under the supervision of an Industrial Psychologist at Wits University. Please contact me or my supervisor should you have any questions. A summary of the results will also be available on request.

Thank you for considering taking part in this study.

Kind Regards,

Researcher: Khanyisile Sibanyoni

Khanyisibs@gmail.com

Signature: _____

Supervisor: Prof. Karen Milner

University of the Witwatersrand

Email: karen.Milner@wits.ac.za

Signature: _____

APPENDIX B: Demographic Questionnaire

Instructions

Answer all the questions below. Please mark the appropriate questions with an X.

1. Current age _____
2. Age when founded the business _____
3. Population Group

BLACK	WHITE	COLOURED	INDIAN	OTHER
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If other, please specify _____

4. Marital Status

SINGLE	MARRIED	DIVORCED	WIDOWED	SEPARATED	OTHER
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If other, please specify _____

5. Number of children _____
6. Do you have any other dependants?

YES	NO
-----	----

If yes, how many? _____

7. Home Language

AFRIKAANS	ENGLISH	seTSWANA	tshiVENDA	IsiZULU	XiTSONGA
-----------	---------	----------	-----------	---------	----------

isiXHOSA	isiNDEBELE	sePEDI	isiSWATI	seSOTHO	OTHER
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If other please specify _____

8. What type of business are you involved in?

9. Where is your business located? _____

10. In what capacity are you involved in the business?

OWNER – NOT INVOLVED IN DAILY OPERATIONS	MANAGE DAILY OPERATIONS	SILENT PARTNER	OTHER
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If other please specify _____

11. If you are the owner, how did you come to own this business?

FOUNDER	BOUGHT FROM PREVIOUS OWNER	INHERITED	SHAREHOLDER	OTHER
---------	----------------------------	-----------	-------------	-------

If other please specify _____

12. In which industry does your business currently operate?

Agriculture, Hunting, Forestry and fishing	Mining and quarrying	Manufacturing	Electricity, Gas and Water Supply	Construction
--	----------------------	---------------	-----------------------------------	--------------

Transport, storage and Communication	Financial intermediation, insurance, Real Estate and Business services	Community, social and personal services	Wholesale and Retail Trade	OTHER
--------------------------------------	--	---	----------------------------	-------

If other please specify _____

13. Have you owned any other business(es) before this current one?

YES	NO
-----	----

If yes, in what industry or industries?

Agriculture, Hunting, Forestry and fishing	Mining and quarrying	Manufacturing	Electricity, Gas and Water Supply	Construction
--	----------------------	---------------	-----------------------------------	--------------

Transport, storage and Communication	Financial intermediation, insurance, Real Estate and Business services	Community, social and personal services	Wholesale and Retail Trade	OTHER
--------------------------------------	--	---	----------------------------	-------

If other please specify _____

14. Previous work experience

14a. Have you worked previously?

YES	NO
-----	----

14b. If yes, please complete the table below:

Nature of work (Entrepreneurial or employed)	If employed position held	Level of work	Number of years worked	Age when started working

15. Level and type of education

15a. What is your highest level of education?

HIGH SCHOOL	MATRIC	DIPLOMA	DEGREE	POSTGRADUATE	OTHER
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If other please specify _____

14b. if you have a tertiary qualification(s), please complete the table below

Qualification – diploma, degree or postgraduate	Field of study – arts, commerce, engineering, sciences, humanities, medical sciences, entrepreneurship etc.	Year attained

APPENDIX C: Bem's Sex-Role Inventory

Instructions

Below you will find a list of personality characteristics. Please indicate on a scale from 1 to 7 how true each of these characteristics is in describing yourself.

1	2	3	4	5	6	7
Never or almost never true	Usually not true	Sometimes but infrequently true	Occasionally true	Often true	Usually true	Always or almost always true

Defend my own beliefs		Adaptable		Flatterable	
Affectionate		Dominant		Theatrical	
Conscientious		Tender		Self-sufficient	
Independent		Conceited		Loyal	
Sympathetic		Willing to take a stand		Happy	
Moody		Love children		Individualistic	
Assertive		Tactful		Soft-spoken	
Sensitive to needs of others		Aggressive		Unpredictable	
Reliable		Gentle		Masculine	
Strong personality		Conventional		Gullible	
Understanding		Self-reliant		Solemn	
Jealous		Yielding		Competitive	
Forceful		Helpful		Childlike	
Compassionate		Athletic		Likeable	
Truthful		Cheerful		Ambitious	
Have leadership abilities		Unsystematic		Do not use harsh language	

Eager to soothe hurt feelings		Analytical		Sincere	
Secretive		Shy		Act as a leader	
Willing to take risks		Inefficient		Feminine	
Warm		Make decisions easily		Friendly	

APPENDIX D: Risk Questionnaire

Please indicate your agreement with the following statements on a scale from strongly agree to strongly disagree.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I like to take chances in my business, I don't like to be careful because I don't need to					
2. I am willing to take high financial risks in order to realise higher average yields					
3. If I am not sure I like to wait and see before making decisions or choices in order not to lose					
4. I like taking big financial risks					
5. I only like to take small chances with money that might lose me small money or give me small money back					
6. I am willing to take high financial risks when selling my products and service, in order to realise higher average yields.					